

Revisiting limits to legal mobilization for global climate justice: Complexity, territoriality, and responsibility

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Abstract

Amidst disproportionate climate-related harms and inadequate responses, affected groups have turned to legal mobilization. This paper analyzes socio-ecological complexity and territorial limits as themes of enduring relevance in official responses to the Inuit Circumpolar Council's and Maldives' foundational legal claims that climate change violates human rights, considering these against the backdrop of evolving understanding of responsibility for climate-related harm in scientific, political, and public discourse. The claims demonstrated that when legal analysis integrates scientific and traditional knowledge, climate change can be seen as violating rights internationally, and identifiable actors as culpable. Respondents disagreed, citing the complexity of climate-related harm, which combines multiple human actors, environmental processes, probability, prediction, and extraterritorial impact. Unresolved gaps between these interpretations raise doubts about law's relevance to growing global inequities of climate change and other processes that mix people, places, and things.

Key words

Legal mobilization; climate justice; international law; environment; human rights

Resumen

Este artículo analiza la complejidad socioecológica y los límites territoriales como temas de importancia permanente en las respuestas oficiales a las reclamaciones legales fundacionales del Consejo Circumpolar Inuit y de las Maldivas, que afirman que el cambio climático viola derechos humanos. Se consideran esas respuestas sobre el trasfondo de la comprensión paulatina en el discurso científico, político y público de la responsabilidad por los daños relacionados con el clima. Las demandas demostraron que, cuando el análisis jurídico integra el saber científico y el tradicional, se puede considerar el cambio climático como violador de derechos internacionales, y a los agentes identificables como culpables. Los críticos se mostraron en desacuerdo, aludiendo a la complejidad del daño relacionado con el clima. Los vacíos

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sin resolver entre esas interpretaciones arrojan dudas sobre la relevancia del derecho en cuanto a crecientes desigualdades globales sobre cambio climático y otros procesos que comprenden a personas, lugares y cosas.

Palabras clave

Movilización legal; justicia climática; derecho internacional; medio ambiente; derechos humanos

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1. Introduction

Over the past two decades the trajectories of science and governance have clarified the realities, heightened the severity, and laid bare the social inequities of climate change. Scientists overwhelmingly agree that the earth's climate is changing, thanks largely to anthropogenic (human-caused) emissions of greenhouse gases. Related environmental impacts pose significant, ultimately existential, threats to human lives and societies (Intergovernmental Panel on Climate Change – IPCC – 2014b). Moreover, climate change impacts are disproportionately distributed: groups least prepared and least responsible through their own current or historical emissions bear the brunt (Gardiner 2011). Governmental responses, however, remain woefully insufficient to arrest climate change (through “mitigation” programs), or ameliorate its ongoing and impending effects (enabling the “adaptation” of affected and vulnerable communities) (Rogelj *et al.* 2016, Lesnikowski *et al.* 2016).

Within the context of worsening disproportionate harm and inadequate coordinated responses it is hardly surprising that affected and vulnerable groups, together with their allies, have sought remedy in law. Legal mobilization, after all, figures among the more widely recognized and well-theorized tools by which minorities and the marginalized seek protection and redress in the face of negative market “externalities” and political oppression (See, e.g., Zemans 1983, McCann 1994). Legal mobilization in response to disproportionate climate-related harm has emerged in tandem, though not always in connection, with wider social and political movements and targeted advocacy for “climate justice” (e.g. Bond 2011, Shearer 2011, Derman 2013, Mary Robinson Foundation – Climate Justice 2017).

This field of legal mobilization includes diverse approaches and venues (Abate 2010, Averill 2010, Werksman 2011, Gloppen and St. Clair 2012). Perhaps because of the broad salience they maintain in governance, policy, and political discourse, however, human rights theories have been particularly prominent in legal advocacy as well as wider activism and scholarship on climate justice (e.g. Sachs 2008, ActionAid *et al.* 2010, Humphreys 2010, McInerney-Lankford *et al.* 2011, Derman 2014, Atapattu 2015, Mary Robinson Foundation – Climate Justice 2017). As Rajamani argued, it was “axiomatic,” by 2010, “that the climate impacts documented by the Intergovernmental Panel on Climate Change are likely to undermine the realisation of a range of protected human rights” (Rajamani 2010, 391, emphasis added). Since then, as climate impacts have proliferated and gained force, climate rights talk has as well. The latter's material significance for affected groups remains doubtful, however, since legal analyses have yet to compel or inspire international remedy, protection, or redress for many forms of climate-related environmental harm.¹ Arguably, rather, official responses to claims of strong responsibility for such harms have undercut the potential for legally mandated compensatory action.

This paper examines some of the central conditions and implications of this situation, using two foundational legal analyses of climate change and human rights. Both tested the question of whether or not causing climate change should be understood as actually *violating* rights, an interpretation which could imply legal responsibility and ultimately compel corresponding redress by identifiable actors. The analyses are the Inuit Circumpolar Council (ICC) petition to the Inter-American Commission on Human Rights (IACHR), together with the Commission's response; and the Maldives submission to a study on human rights and climate change conducted by the UN Human Rights Council (HRC), together with a report synthesizing that study, issued by the Office of the High Commissioner for Human Rights (OHCHR) (*Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States*, 2005, *Human Rights and Global Warming*, 2007, *Submission of the Maldives to the Office*

¹ A human rights case in the Netherlands has recently set a domestic precedent (*Urgenda Foundation v The State of the Netherlands* 2015). It is unclear what implications it may hold for international claims, which are the subject of this analysis.

of the UN High Commissioner for Human Rights, 2008, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, 2009).

Below I analyze the construction of and response to the ICC and Maldives' claims, in the context of their specific fora, and in relation to evolving understandings of responsibility for climate-related harm in scientific, political, and public discourse. The claims demonstrate that, when scientific and traditional knowledges are brought to bear on the interpretation of recognized rights, climate change *can* be seen as violating those rights, and state actors understood as culpable. The responses show, however, that the complexity of climate-related harm, which involves multiple human actors, environmental processes, and global ties can also be understood in legal terms as obscuring responsibility, making claims of rights violations appear insubstantial. I show that the gap between these interpretations highlights law's dependence on foundational analytical and spatial categories ill-fit to novel problems, raising doubt about its relevance to the inequities of climate change and other harms that mix people, things, and places. The OHCHR, in particular, has strengthened its advocacy for rights-based protections from climate harm (e.g. *Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change: Understanding Human Rights and Climate Change*, 2015), but it has not revisited important limiting elements of the analysis it offered in 2009. I argue that reasons exist for it to do so, but that issues of venue and efficacy tied to the political will of powerful high-emitting states would still then remain.

As "cases" – in the analytical rather than the legal sense – the ICC and Maldives' efforts and their outcomes represent significant moments in the emerging legal understanding of climate change, and the longer process defining human rights. They are among the earliest international climate rights claims to entail extensive claimant argumentation as well as official responses. Those claims and responses have also had broad influence, in part because of their settings in international fora (see, e.g., Burger and Wentz 2015).

Moreover, the cases speak to enduring and timely concerns of critical scholarship on law and society. Those concerns center on issues of causality that distinguish legal reason from other ways of knowing; law's dependence on the spatialized construction and expression of social power; and the utility of legal mobilization for groups otherwise marginalized within existing governance, as knowledge and conditions change. To analyze these themes, I combine socio-legal perspectives with approaches from geography and political ecology.

I present those conceptual orientations in their connection with the two cases briefly in the following section. I then introduce the particulars of the cases and the materials on which the present analysis is based, before devoting separate sections to the construction of, official responses to, and wider intellectual context of the Maldives and ICC's claims to human rights violations. I conclude by briefly considering the intellectual and political implications for legal mobilization and the relevance of law more generally for global climate justice.

2. Socio-ecological complexity, interpretive and territorial power, and the conditional promise of legal mobilization

In the official responses to the ICC and Maldives' claims, and others testing legal principles for climate-related harm, the term "complexity" occupies a position of rhetorical prominence (cf. Averill 2010, Gloppen and St. Clair 2012). It is the "complexity" of these harms, though they may be acknowledged as bearing upon rights, that can prevent recognition of legally responsible human actors. Below I show that although climate impacts are indeed complex (in the definitional sense that they can result from multiple identifiable and interacting elements), tracing causality and assigning responsibility for those impacts appears comparatively unproblematic and

increasingly tractable in scientific, governance, and journalistic analyses. Research in legal geographies has identified a pattern of related contradictions between legal and scientific epistemologies, as those different perspectives characterize phenomena. In many instances, non-human entities, combinations of the human and the non-human, and human biology alone readily escape law's categories, often rendering them dubious (e.g. Delaney 2003, Blomley 2008, Herbert *et al.* 2013). When complexity is invoked as a limit to legibility – and by extension responsibility, as in the OHCHR's Report – it marks such points of friction between legal and other ways of understanding the processes by which anthropogenic climate change arises and concentrates impact in human communities.

As mixtures of human and non-human action, and as novelties in relation to rule and precedent, then, climate-related harms present puzzles for legal reason. At one level, this interpretive open-endedness is commonplace: debates over climate change and human rights recapitulate aspects of those pitting formalist against realist legal philosophies, for instance (cf. Bix 2005, Mertz *et al.* 2016). At another level, though, it bears reiteration that legal interpretation is also intimately tied to the construction, extension, and exercise of power (Galanter 1974, Cover 1983). Relatedly, scholarship in political ecology suggests a particularly wary appraisal of interpretation in climate justice cases, since it recognizes that power often operates through the social production or construction of the "natural" (Swyngedouw 1999, Robbins 2007, 2011). These processes, moreover, may go unrecognized: what we call "nature" is both discursively constructed and materially produced through the given categories of dominant forms of knowledge, and the institutionalized practices they underpin. The reproduction of social inequality and risk connected with environmental conditions is thereby frequently naturalized, and misrecognized as "natural" (Castree 2005).

Geographic perspectives also highlight the foundational importance of spatial control in defining and facilitating legal order (Blomley 1994, Blomley *et al.* 2001, Braverman *et al.* 2014). Just as law requires space in which to be "performed," it also produces specific kinds of spaces, with corollaries in entitlement, exclusion, and other status categories for human subjects. Territories, associated with many administrative scales, are primary examples of such legal spaces (Herbert 1997, Delaney 2010). Territorially delimited, state-contractual conceptions of human rights protections present instances of such consequential spatio-legal categories, potentially insulating emitters from legal consequences associated with climate-related harm in foreign places.

On the other hand, legal mobilization offers counter-hegemonic potentiality – albeit conditionally – enabling subaltern claimants to access official power as legal subjects, and channel it toward socially protective, even transformative, ends (Turk 1976, Zemans 1983, McCann 1994). Arguably, recent political trends have impelled an increase in legal mobilization around a wide variety of causes and across political spectra. Climate justice legal mobilization can be seen as one among several such forms of "lawfare," which participate in a wider judicialization of politics that has, at times, transformed legal and social relations (Gloppen and St. Clair 2012). This paper concerns some of the conditionalities that have limited the potential of rights-based climate justice legal mobilization, and the implications of those conditionalities and outcomes for the role of law in addressing the disproportionalities of climate-related harm.

3. Cases and materials

Before underscoring analytically relevant similarities between the Maldives and ICC cases, key differences that capture their particularities bear mention. These include institutional setting, claimant status, specific rights invoked, and non-legal forms of knowledge employed.

The IACHR is a regional forum for the evaluation of human rights claims under the auspices of the Organization of American States (OAS). It is distinct from the OAS'

adjudicative body (the Inter-American *Court* of Human Rights). In 2005, the ICC, a transnational coalition of arctic indigenous groups petitioned the IACHR, charging the United States federal government with violations of Inuit human rights due to the US' continued, unregulated, plurality contribution to global greenhouse gas emissions.² Although it incorporates formal legal analysis, the petitions' main signatory and commentators have described the ICC's effort as a creative blurring of established legal categories, aiming to "initiating dialogue" rather than win an enforceable judgment, which would supersede the IACHR's mandate (Osofsky 2006, Chapman 2010). The inclusion of photographs of arctic people and landscapes, figures visualizing scientific data and concepts, and excerpts (accompanied by online videos) of interviews with several named claimants support this characterization of the petition as communicative in intent. The IACHR's initial response, in contrast, was terse. In a letter to ICC legal counsel, it stated that "the information provided [in the petition] does not enable us to determine whether the alleged facts would tend to characterize a violation of rights" (Dulitzky 2006, 1). Subsequently, in 2007, the Commission hosted a hearing in which ICC representatives responded to questions raised by IACHR commissioners, touching on both climate science and human rights (*Human Rights and Global Warming*, 2007).

The ICC Petition analyzes climate impacts in the Arctic in relation to multiple rights recognized in the OAS' *American Declaration on the Rights and Duties of Man* (Ninth International Conference of American States 1948, *the American Declaration* below), including self-determination, the use and enjoyment of traditional lands, personal property, health, life, physical integrity and security, subsistence, residence, movement, and the inviolability of the home. It places climate-related effects on these rights in the context of prior decisions of the Inter-American Court as well as the *Indigenous and Tribal Peoples Convention* of 1989. Inuit traditional knowledge plays a crucial role in the petition, since it helps to demonstrate how the transformative impacts of climate change on the arctic landscape are having devastating effects on Inuit culture; "culture" being rhetorically central in the Declaration.

The Maldives' intervention took shape through a formal process of international study and reporting under the HRC and OHCHR, though its stated goal was international recognition and compliance under *the United Nations Framework Convention on Climate Change*, 1992 (UNFCCC) (Limon 2009). The OHCHR Report was the centrepiece in a campaign by the Maldives, other members of the Small Island Developing States coalition of UN member countries, and transnational NGOs, to influence the climate treaty through their work in the human rights institutions. Emerging out of the low-lying island nations' dire assessment of their future amidst the halting progress of international climate governance, the group sought to compel stronger international cooperation by framing the existential threat of sea level rise in terms of internationally recognized human rights. The Maldives proposed HRC Resolution 7/24, which requested a formal study of rights and climate change. The proposal passed unanimously, and several member countries and observers submitted briefs as part of the ensuing study, which culminated in 2009. Countries' submissions were then jointly summarized in the OHCHR Report. The Maldives' own extensive submission argued that developed nations bore responsibility for violations of its citizens' rights associated with climate change. The submission utilizes analysis from the Intergovernmental Panel on Climate Change (IPCC) and information on the physical geography, economy, and cultural of the Maldives to link the emissions of industrial nations with a list of affected rights spanning several international human rights conventions.

Because the HRC study process documented analyses of human rights and climate change, as submitted by several states, and the OHCHR report summarizes those

² At the time of the petition, the United States lead all nation states in cumulative, per capita, and gross annual emissions measures.

analyses, the Maldives case exposes differences between countries' views as well as the manner in which those differences were ultimately mediated. Whereas the IACHR commissioners looked to prior decisions and existing official analyses of the substantive meaning of human rights to guide their evaluation the ICC's petition's claim – finding none to adequately support a claim of violations – the HRC/OHCHR process produced an analysis in the Report which could have served that role in future cases, but likewise eschewed the idea of violation.

If the finding against violation status in the two responses was similar, fundamental commonalities also exist in argumentation in the claims and responses. Despite the differences noted above, the ICC and Maldives' claims both depend on substantiating two types of connection as ties of legal responsibility: first between "environmental" and social processes (what I will call "socio-ecological" connections), and second between emitters and affected communities separated by national borders. Articulating those connections as legally legible ties of responsibility constitutes the major argumentative work of the two claims. That work consists, in both cases, of supporting legal reasoning with substantive information from climate science and other non-legal forms of knowledge. These non-legal knowledges play a crucial role: grounding observed and predicted climate change impacts in specific socio-ecological conjunctures of vulnerability in different places and communities, and demonstrating how those situated impacts jeopardize recognized rights.

The logic of the official responses to the two claims also contained fundamental similarities, and these relate directly to the two forms of connection the claims sought to substantiate as implying legal responsibility on the part of high emitters. First, both official responses balked at recognizing the socio-ecological connections of climate change as constituting rights violations, raising the concerns about "complexity" noted above. Second, both responses raised concerns about the international scope of potential human rights impacts, though the OHCHR's report expressed much more circumspection about the claim of violations in relation to this theme than did the IACHR.³

In the following sections I examine how both claimants constructed arguments for ties of legal responsibility that mirror the connections of climate change I described above, how official respondents denied those ties, and what those denials suggest about the potential for legal mobilization in compelling what might be considered just responses to the social disproportionalities between climate-related harm and responsibility for emissions. My analysis is based on the ICC petition (*Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States*, 2005), the IACHR hearing (*Human Rights and Global Warming*, 2007), the Maldives' submission to the HRC study (*Submission of the Maldives to the Office of the UN High Commissioner for Human Rights*, 2008), and the OHCHR report (*Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights (A/HRC/10/61)*, 2009); supplemental material on the two cases (including the US' submission to the HRC study and later statements by both respondents); and a wider set of scientific, policy, advocacy, and journalistic sources characterizing climate change impacts and responsibilities (see section 6). This study of the Maldives and ICC cases is tied to a larger project examining advocacy and activism in response to the social inequalities involved in climate change, in which I seek to understand the framing and fate of such efforts in different institutional and social settings. As part of that project I interviewed key actors involved in the ICC and Maldives cases, among others. Contextual information from those interviews and public statements by those involved in the campaigns helped to inform the textually-based analysis presented here.

³ The OHCHR's analysis of international duties has evolved in significant but still limited ways in subsequent years, as discussed in section 6.

4. Climate change impacts as violations of human rights

4.1. The ICC Petition

The argumentative work of the ICC Petition ("the Petition", in what follows) involves three key moves: explicating the impacts of climate change on Inuit people, framing those impacts as affecting human rights, and linking them with actions and omissions by the US government, which contravene obligations based in human rights agreements and other relevant law. Those moves involve incorporating elements of Inuit traditional knowledge (*Inuit Qaujimaqatuqangit*, or IQ) and what the ICC calls "western" science, in combination with legal sources.

IQ and western science help to substantiate the connections of climate change as ties of legal responsibility. The Petition spends little time on the validity of rights violations that cross national borders, perhaps because many Inuit reside in the US. Ties of responsibility that would encompass Inuit communities elsewhere are inferred from the global extent of climate change (made clear in the scientific studies cited) and the international scope of relevant legal instruments. On the other hand, the Petition explicates in detail the socio-ecological forms of connection by which climate change might be understood as violating rights. In particular, it addresses two facets of these connections: first how environmental impacts associated with climate change are *produced* socially, through human-caused emissions and their effects on the earth's physical systems, and second how those impacts are *re-socialized* elsewhere via their effects on human populations.

To trace the US' responsibility for harm in Inuit communities across the space (and time) of climate change, the Petition mobilizes well-supported and disseminated scientific findings, including reports published by the US government itself. It explains the anthropogenic intensification of the greenhouse effect, to illustrate that "[g]lobal warming is caused by human activity" (*Petition*, 2005, i, 27). Given the persistence of carbon in the atmosphere and the long tail that characterizes its impacts on the earth's climate system, the ICC shows that the great bulk of warming and resulting ecological impacts to date can in fact be associated with emissions from the US. Summarizing historical records compiled by the IPCC, the petition concludes that: "U.S. greenhouse gas emissions between 1850 and 2000 are responsible for 0.18°C (30%) of the observed temperature increase of 0.6°C during that period" (*Petition*, 2005, 68-69), a share that significantly outstrips any other single nation and the European Union as a whole. Finally, the Inuit are subject to the consequences of US emissions by virtue of the global distribution of climate change impact, and particularly so, since, as a raft of scientific studies illustrate, "[g]lobal warming is most severe in the Arctic" (*Petition*, 2005, 33).

The petition frames climate change impacts in the Arctic as human rights violations through an accounting of Inuit peoples' deep connection with and reliance upon what have become unstable ecological conditions in the region. Crucially, these strong, and now eroding, socio-ecological ties are both physical and cultural: their integrity is therefore fundamental to the human rights recognized in the Declaration and elsewhere. To substantiate this claim, the petition first methodically demonstrates the validity and importance of IQ for the continuity of Inuit culture and livelihood, using the testimony of Inuit people, non-Inuit arctic explorers, and health statistics. IQ encodes sophisticated understanding of weather, climate, and the ecological conditions they influence, which in turn supports Inuit practices of hunting, travel, and shelter. These practices are essential for the maintenance of community, health, identity, intergenerational cohesion, and, for some, life itself. It is because of these specifically Inuit imbrications of ecology and society, maintained by IQ, that the Petition argues: "[t]he life and culture of the Inuit are completely dependent on the Arctic environment" (*Petition*, 2005, i, 33). The Petition synthesizes the testimony of community elders, who bear special responsibility for the transmission of IQ, with "western" scientific findings about rapid, dramatic climate change impacts in the

Arctic to substantiate its core claim that “[g]lobal warming harms every aspect of Inuit life and culture” (*Petition*, 2005, ii, 35).

Accordingly, because “the United States is the world’s largest contributor to global warming” (*Petition*, 2005, iii, 68), and by virtue of US acts and omissions neglecting and obstructing the regulation of greenhouse gases in breach of what the *Petition* argues are its legal obligations,⁴ the ICC concludes: “[t]he effects of global warming constitute violations of Inuit human rights, for which the United States is responsible” (*Petition*, 2005, iii, 70).

4.2. *The Maldives’ submission to the Human Rights Council study*

Like the *Petition*, the Maldives Submission to the HRC study (“the Submission”), combines legal and non-legal knowledge to frame the global and socio-ecological connections of climate-related harm as constituting ties of responsibility for rights violations. Whereas culture provides a lynchpin in the ICC’s claim, statehood plays a similar role for the Maldives. Correspondingly, whereas the *Petition* drew on Inuit traditional knowledge to cement crucial logical connections, the Submission employs statistical and numerical data on the Maldives’ physical and economic geography.

The Maldives gives much more consideration than the ICC to the legal bases of extra-territorial rights protection (mirroring global climatic connections). It draws on multiple sources of law to argue that, in the face of anthropogenic sea level rise (SLR), high-emitting countries must protect Maldivians through mitigation and support for adaptation. SLR stands at the center of the Submission’s analyses of socio-ecological impacts on rights: SLR poses an existential threat to the Maldives territory and therefore, it argues, to statehood, with disastrous consequences for the full panoply of its citizens’ human rights (see below).

The Submission provides detailed analysis of social consequences of local environmental impacts resulting from climate change, using these to map current and future climate change impacts identified by the IPCC onto specific rights and international legal instruments, as summarized in Table 1.

⁴ This interpretation is based on the *Petition*’s analysis of US domestic policy and its role in international climate negotiations.

TABLE 1

Climate Impact	Human Impact	Rights Implicated
<p>Sea Level Rise</p> <ul style="list-style-type: none"> Flooding Sea Surges Erosion Salination of land and water 	<ul style="list-style-type: none"> Loss of land Drowning, injury Lack of clean water, disease Damage to coastal infrastructure, homes, and property Loss of agricultural lands Threat to tourism, lost beaches 	<ul style="list-style-type: none"> Self-determination [ICCPR;ICESCR,1] Life [ICCPR, 6] Health [ICESCR, 12] Water [CEDAW,14; ICRC 24] Means of subsistence [ICESCR,1] Standard of living [ICESCR, 12] Adequate housing [ICESCR,12] Culture [ICCPR, 27] Property [UDHR,17]
<p>Temperature Increase</p> <ul style="list-style-type: none"> Change in disease vectors Coral bleaching Impact on Fisheries 	<ul style="list-style-type: none"> Spread of disease Changes in traditional fishing livelihood and commercial fishing Threat to tourism, lost coral and fish diversity 	<ul style="list-style-type: none"> Life [ICCPR, 6] Health [ICESCR, 12] Means of subsistence [ICESCR, 1] Adequate standard of living [ICESCR, 12]
<p>Extreme Weather Events</p> <ul style="list-style-type: none"> Higher intensity storms Sea Surges 	<ul style="list-style-type: none"> Dislocation of populations Contamination of water supply Damage to infrastructure: delays in medical treatment, food crisis Psychological distress Increased transmission of disease Damage to agricultural lands Disruption of educational services Damage to tourism sector Massive property damage 	<ul style="list-style-type: none"> Life [ICCPR,6] Health [ICESCR,12] Water [CEDAW,14; ICRC 24] Means of subsistence [ICESCR,1] Adequate standard of living [ICESCR, 12] Adequate and secure housing [ICESCR,12] Education [ICESCR,13] Property [UDHR,17]
<p>Changes in Precipitation</p> <ul style="list-style-type: none"> Change in disease vectors Erosion 	<ul style="list-style-type: none"> Outbreak of disease Depletion of agricultural soils 	<ul style="list-style-type: none"> Life [ICCPR,6] Health [ICESCR,12] Means of subsistence [ICESCR,1]

Table 1. The Submission includes this summary chart, which ties climate change impacts from IPCC reports to human impacts in the Maldives and internationally recognized rights.
(Source: *Submission, 2008, 18*).

The IPCC finds, for instance, that rising temperatures from climate change impact fisheries (column 1, row 2). Catch has diminished in the Maldives; one among other “Changes in traditional fishing livelihood and commercial fishing” (column 2, row 2), which in turn threatens the right to means of subsistence enshrined in the International Covenant on Economic, Social and Cultural Rights (ICESCR) (column 3, row 2).

Ultimately, the Maldives’ social and economic welfare and its sovereignty are seen to depend upon the integrity of territory and resources within and surrounding its low-lying atoll islands, which are gradually but inexorably being lost to the rising sea. The Submission therefore argues that the possibility of territorial erasure from SLR threatens every right Maldivians hold under international law:

In the long-term, unchecked sea-level rise will inundate the whole of the Maldives. The extinction of their State would violate the fundamental right of Maldivians to possess nationality and the right of the Maldives people to self-determination. Without land or State, the most basic rights to life, liberty, and security of person, to possess property, to work and to leisure, to an adequate standard of living, to participate in the cultural life of the community, cannot be realized. The loss of land and State renders all other rights, political and civil as well as economic, cultural, and social rights, unattainable. (*Submission, 2008, 21*)

The Maldives supports its claim for developed countries’ obligations to protect its citizens’ human rights using the International Covenant on Civil and Political Rights (ICCPR), the ICESCR, and customary law.

The Maldives uses the ICCPR to build an argument for obligations on the part of high-emitting nations by linking its low-lying island geography with a territorial conception of statehood. The Submission cites commentary on and interpretations of the ICCPR’s right to self-determination in particular, which obligate signatories to respect and promote the rights of citizens of other states and beyond their borders, because

territorial sovereignty figures in achieving self-determination. It argues that these obligations imply states are legally required to mitigate greenhouse gas emission to scientifically-agreed safe levels, and that appropriate targets should be legally mandated under the UNFCCC. Here the Maldives' reading of the right to self-determination provides a means of countering objections to cross-border relations of responsibility for rights: it grounds those relations legally as relations among states, pointing to the international system for redress.

From the ICESCR, the Submission highlights provisions specifying that states "take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of [their] available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant (...)" (*Submission*, 2008, 76). It notes that, according to ICESCR Committee interpretation, "[t]he economically developed States parties have a special responsibility and interest to assist the poorer developing States (...)" (*Submission*, 2008, 77). The Maldives argues that therefore "[c]limate change, because of its trans-boundary nature and the acute threat it poses to economic, social, and cultural rights among vulnerable populations, is an issue that implicates the responsibility of all State parties to cooperate" (*Submission*, 2008, 77). It specifies corresponding duties of states and the international community to mitigate greenhouse gas emissions, adhere by the obligations of climate change agreements, and provide aid for adaptation efforts in the Maldives and elsewhere.

Citing the principles of non-discrimination and responsibility to protect, the Maldives argues that customary law also demands developed nations bear responsibility for emissions within their borders inasmuch as those emissions impinge on human rights, "regardless of the location of the beneficiaries of those rights" (*Submission*, 2008, 79). "Customary law," it argues, "emphasizes the protection of human dignity, without limitations based on nationality" (*Submission*, 2008, 78).

Finally, the Submission argues that the UNFCCC and its Kyoto Protocol offer a "good preliminary framework" (*Submission*, 2008, 81) for cooperative action through which states might meet their legal obligations for climate protections. It lauds the Convention's inclusion of the principle of Common but Differentiated Responsibilities (CBDR), the precautionary principle, mitigation targets for developed countries, the requirement of technical and adaptation assistance, and the designation of particularly vulnerable Least Developed Countries as deserving of special consideration. On the other hand, the Submission notes that several states stood in breach of Kyoto commitments, and that spatially-distributed mitigation programs like the Protocol's Clean Development Mechanism entail risk to rights (*Submission*, 2008, 79-82).

Like the ICC, the Maldives constructed a legal argument for interpreting climate change impacts as rights violated by identifiable actors that is based in its own circumstances, but which clearly entails broader implications. The following section examines how, official responses to the two claims did not identify clear, commensurate forms or levels of responsibility amidst the complex socio-ecological and extra-territorial connections of climate-related harm.

5. Official responses to the ICC and Maldives climate rights claims

In 2007 the IACHR heard testimony from Sheila Watt-Cloutier (lead signatory to the ICC Petition) and ICC counsel, expanding on themes from the Petition. A panel of three commissioners then posed questions, to which presenters responded (*Human Rights and Global Warming*, 2007). In addition to inquiring whether petitioners had exhausted domestic legal remedies prior to approaching the IACHR, and what positive responses to climate change existed on which it might base recommendations to the OAS states, the commissioners posed two questions that indicated specific concerns that had led them to dismiss the petition without prejudice. These pertained to the

apportionment of responsibility among multiple states and the violation of Inuit human rights *through* climate change impacts.

Commissioner Paulo Sergio Pinheiro asked “how the commission can attribute responsibility to a whole region or to a state or even to states which are not members of the OAS (...) [h]ow to divide, how to share, this responsibility” (*Human Rights and Global Warming*, 2007, 33, 24). Commissioner Victor Abramovich inquired:

Is there a precise form in which the impact you have described very well on fundamental rights can be tied to the actions or omissions of the particular states? (...) [I]n all cases (...) considered by the Inter-American system, there have existed direct actions (...) or the failure to act by the state in the face of a concrete situation, for example (...) forestry in an indigenous territory. Now, the problem you are laying out, without doubt, links to state and non-state actors, but the relationship is much (...) less direct. So, I would like clarification about how there can be a relationship – not just any relationship, a legal relationship, a relationship of responsibility – of the states for violations of the rights that you have very clearly described. (*Human Rights and Global Warming*, 2007)⁵

ICC representatives responded to Pinheiro’s question by citing the principle of CBDR found in the UNFCCC and other treaties (see below), and argued that human rights law does not actually require such an apportionment among jointly responsible parties. Addressing Abramovich’s concern, they pointed to the ability states already exercise, and should under human rights law, to regulate the actions of private entities within their borders, but did not address the traceability of human action through socio-ecological connections to harmful environmental events. Counsel also noted that no legal remedies are available to individuals who suffer climate change related harm under US or Canadian law, or via the UNFCCC (*Human Rights and Global Warming*, 2007).

In subsequent years the IACHR has addressed climate change from a human rights perspective at least three times. Those statements have progressed from noting the existence of a relation between the two, to reiteration of language from the OHCHR Report, to encouraging OAS members to advocate for robust human rights language in the recent UNFCCC treaty (*Human Rights and Climate Change in the Americas*, 2008, *Annual Report of the Inter-American Commission on Human Rights*, 2011, Organization of American States 2015).

Similar circumspection about the attribution of responsibility proved consequential in the OHCHR Report, albeit amidst a clear acknowledgement and substantive discussion of the implications climate change holds for human rights. Indeed, several themes developed throughout the Report clearly suggest the influence of the Maldives’ and other countries who initiated the study. Most notably, the Report states that climate change poses “implications for the enjoyment of” a wide range of human rights, and that human rights law places duties on states to respond, both domestically and through “international cooperation” (*Report of the Office of the UN HCHR*, 2009, multiple locations). The Report discusses implications of climate impacts for rights to life, food, water, adequate housing, and self-determination. It also notes differential impacts in relation to the rights of women, children and indigenous peoples, and warns that rights may be affected by climate change-induced displacement, conflict, and compromised security, as well as governmental responses.

The Report attributes states’ domestic obligations in connection with climate change to their recognized duties to pursue progressive realization of economic, social, and cultural rights, and promote access to information and participation in decision-making, for their citizens. It also calls on states to incorporate rights as “guiding principles for [climate change] policy-making” (*Report of the Office of the UN HCHR*,

⁵ Abramovich spoke in Portuguese, beginning at 34:30. The translated excerpt here comes from Chapman (2010, 38).

2009, 24-27). In enumerating these duties, and the “implications” for rights described above, the Report provided a new level of institutional affirmation for understanding and responding to climate change impacts in terms of human rights.

At the same time, major facets of the Maldives argument were elided, softened, or rejected in the OHCHR Report. For one, the Report lacks an analysis of international obligations commensurate with its discussion of domestic duties. Rather, it defers specification of international duties to the UNFCCC, arguing that “international human rights law complements the United Nations Framework Convention on Climate Change” (*Report of the Office of the UN HCHR, 2009, 26*, emphasis added) rather, for instance, than compelling the latter to adopt a rights-oriented approach.

The report does ground an obligation of states to international cooperation in multiple sources of law, and follows the Maldives in noting CESCR commentary which specifies that developed countries have “particular responsibility and interest to assist the poorer developing States” (*Report of the Office of the UN HCHR, 2009, 24*). It also states that, “[w]hile there is no clear precedence to follow, it is clear that insofar as climate change poses a threat to the right of peoples to self-determination, States have a duty to take positive action, individually and jointly, to address and avert this threat” (*Report of the Office of the UN HCHR, 2009, 13*). It does not, however, return to that theme when enumerating or summarizing states’ extraterritorial obligations. Nor, relatedly, did the report link the protection of self-determination or other rights in any way with a duty to mitigate greenhouse gas emissions, which would constitute the only means of actually arresting, at some future date, deleterious climate impacts such as sea level rise.

Further, and more expansively than the IACHR commissioners, the OHCHR Report expresses significant doubt about assigning responsibility amidst the complexities of anthropogenic climate change and climate-related harm. Those doubts, together with the prospective character of the most dire climate-related harms, marked an analytical boundary between classifying climate change as posing “implications for” and constituting “violations of” human rights. The report argues:

While climate change has obvious implications for the enjoyment of human rights, it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense. Qualifying the effects of climate change as human rights violations poses a series of difficulties. First, it is virtually impossible to disentangle the complex causal relationships linking historical greenhouse gas emissions of a particular country with a specific climate change-related effect, let alone with the range of direct and indirect implications for human rights. Second, global warming is often one of several contributing factors to climate change-related effects, such as hurricanes, environmental degradation and water stress. Accordingly, it is often impossible to establish the extent to which a concrete climate change-related event with implications for human rights is attributable to global warming. Third, adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred. (*Report of the Office of the UN HCHR, 2009, 20*)

The “difficulties” enumerated in this excerpt clearly overlap with those about which IACHR commissioners asked in the ICC’s hearing, and those raised in other legal discussions (see, e.g. Averill 2010).

Subsequently, Human Rights Council – HRC – Resolution 10/4, which summarized the Report’s content in advance of the landmark 2009 climate negotiations in Copenhagen, moderated the Maldives’ claims still further (*Human Rights and Climate Change (A/HRC/RES/10/4)*, 2009, Cf. Knox 2009). In the event, the Maldives and its allies’ bid to establish a more ambitious agreement there based in part on human rights obligations did not prevail. Rights went unmentioned in the voluntaristic vision of global climate governance that took hold in Copenhagen, and has since recast the

global climate regime in important ways, side-lining both legal obligation and scientific guidance.⁶

6. Revisiting official responses

6.1. Divergent interpretations and limited progress

As described above, the OHCHR's 2009 Report emerged from a joint drafting process reflecting the participation of HRC member states, many of which contributed their own submissions to the Council's study. The availability of those submissions allows for the tracing of elements within the Report to individual countries' statements. That tracing makes clear that the Maldives' was not the only analysis of climate change in the context of human rights to consequentially shape the Report, and that drafters faced a challenge in synthesizing notably different interpretations.

The excerpt quoted above on the difficulty of "[q]ualifying the effects of climate change as human rights violations," for instance, closely followed language in the US' submission to the study (*Submission of the United States to the OHCHR under Human Rights Council Res. 7/23, 2008, 4-5; Cf. Knox 2009*). The US also argued at some length that "the view that an environment-related human right exists (...) does not have a basis in international law" (*Submission of the United States to the OHCHR under Human Rights Council Res. 7/23, 2008, 3*). That view had been prominent in the Maldives' submission (2008, 12-14). Rejecting environmental rights, of course, logically undercuts arguments for rights-based protection against socio-ecological harms. The Report charts a middle ground with respect to this issue, stating that "[w]hile the universal human rights treaties do not refer to a specific right to a safe and healthy environment, the United Nations human rights treaty bodies all recognize the intrinsic link between the environment and the realization of a range of human rights" (*Report of the Office of the UN HCHR, 2009, 7*).

The US also argued for an understanding of human rights in general as obliging states to protect their own citizens within their borders. For this and other reasons, it expressed scepticism about the appropriateness of adopting a human rights framework to address climate change (*Submission of the United States, 2008, 6*).

Knox speculates on the choices of the Report drafters in mediating among such divergent views as those of the Maldives and US, noting that accusing the most powerful states of violating human rights could "distract from the need to win their consent to an effective climate agreement" (Knox 2009, 489-490). The necessity for such calculations underscores the embeddedness of legal interpretation in political processes, which is particularly evident in international law but consequential more generally (see, e.g., Scheingold 1974, Bell 1980, Merry 2006).

In subsequent years, the OHCHR has engaged more directly with the UNFCCC, and its statements about the human rights implications of climate change have become both stronger and more influential. A few specific indicators of change bear mentioning. First, the preface to the UNFCCC treaty negotiated in 2015 includes language on human rights. This is a landmark of sorts, even given that the invocation is probably much too general to exert significant effects on implementation (see Mayer 2016). Second, recent analyses by the OHCHR and other UN bodies specify that mitigation *is* an obligation of signatories to the major human rights conventions, and one which they hold to rights bearers abroad (e.g. *Submission of the Office of the High Commissioner for Human Rights, 2015, Burger and Wentz 2015*). Finally, those analyses now reference violations of human rights, as documented effects of

⁶ Rights were not mentioned in the Copenhagen Accord, and the voluntary commitments it recorded fell far short of a level necessary to save the Island nations. Commitments under the Paris Agreement of 2015, similarly, are inadequate to realize the treaty's founding objective: "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (*United Nations Framework Convention on Climate Change, 1992, 4; see also Copenhagen Accord, 2009, Rogelj et al. 2016, Lesnikowski et al. 2016*).

certain mitigation and adaptation programs, and possible outcomes of relocation and resettlement.

These, however, are not the type of climate-related impacts the ICC sought to substantiate as violations, nor those with which the Maldives was most concerned. Both were interested primarily in harm from environmental change and events. Moreover, the socio-ecological processes and outcomes the ICC and Maldives described as human rights violations are now only more widespread.

Legal claims within states have recently resulted in a few judgements of responsibility on the part of governments to citizens for such climate-related environmental harms, and exploration of potential liability on the part of corporations (Burger and Wentz 2015, 20, 23, *Urgenda Foundation v The State of the Netherlands*, 2015, *Petition Requesting for Investigation of the Responsibility of the Carbon Majors for Human Rights Violations or Threats of Violations Resulting from the Impacts of Climate Change*, 2016). The need remains at the international level, however, for means of protection and redress, if not also the assignment of legal responsibility. Without these, the most vulnerable and lowest emitting states continue to bear ad hoc responsibility for direct climate impacts on their citizens, and displaced populations will have to suffer (and have survived) such impacts before they may benefit from mandated protection in resettlement or relocation. If mitigation is an obligation, as the OHCHR and others now argue, logical questions include who specifies levels and adjudicates compliance, and who has recourse to remedy, where, and from whom when states fail to mitigate adequately? Certainly mitigation commitments entered under the new UNFCCC agreement are inadequate to prevent widespread harm, and the structure of that agreement does little to institutionalize the OHCHR's understanding of international responsibility.

Arguably, an assessment of climate-related harm as obscuring the identification of responsible actors was overly formalistic at the time of the Maldives' and ICC's claims. At this juncture it is surely more so. In light of the unmet need for protection and the increasing legibility of anthropogenic, climate-related harm, the following section revisits the attribution of responsibility amidst the causal complexities enumerated in the HRC report and IACHR hearing.

6.2. The increasing legibility of climatic connections: non-legal analyses of responsibility for climate-related harm

While indeed "complex," the mechanisms of and contributions to climate-related harm are increasingly well characterized by biophysical and social research ranging from atmospheric modeling and emissions accounting, to ecological monitoring and land change mapping, to case studies in affected communities. Such diverse methods and associated findings underpin increasingly confident analyses of attribution common in scientific, policy, journalistic, and political discourse.

In the disclaimer from the OHCHR Report quoted above, three dimensions of socio-ecological complexity are described as legally problematic. These correspond to what I will call aggregative, probabilistic, and prospective aspects of climatic harm.⁷ The aggregative aspect refers to the fact that the actions of any one emitter are combined in their effects on the climate system (and ultimately on places and people) with those of every other emitter. Thus the Report's concern about "linking historical greenhouse gas emissions of a particular country" with impacts from climate change.

⁷ Concerns related to the themes I refer to as "aggregation", "probabilism", and "prospection" appear widely in discussions of legal responsibility for climate-related harms, including those considering legal frameworks other than human rights. For further discussion of related challenges in human rights-based approaches in particular, see, for instance, Bodansky (2010) and Humphreys (2010). Looking beyond human rights-based mobilizations, the Ninth US District Court's dismissal of *Kivalina v ExxonMobile*, while nominally based in Political Question Doctrine, includes discussion of what I term aggregation and probabilism, as well as issues related to international responsibility discussed here. See also the discussion in Herbert *et al.* 2013.

The probabilistic dimension of climatic harm is the subject of the OHCHR's second concern, that "global warming is often one of several factors to climate change-related effects, such as hurricanes, environmental degradation, and water stress." That is, the association of an individual instance of one of these event classes with climatic change (and with anthropogenic climate change more specifically) is probabilistic rather than deterministic. Finally, the prospective aspect of climate harm applies to the OHCHR's concern that "adverse effects of global warming are often projections about future impacts," distinguishing them from the typical judgment about human rights violation, which relies on retrospective analysis (*Report of the Office of the UN HCHR, 2009, 20*).

The first "difficulty" in the OHCHR's list combines aggregative and probabilistic aspects of anthropogenic climate change-related effects, and their rights implications, in a broadly constructed claim against the traceability of harms. Since the rights implications are described elsewhere in the same Report, and expanded in subsequent OHCHR statements, I focus here on the aggregative and probabilistic complexities involved in the claim. Rather than "virtually impossible," when taken independently these two aspects of complexity can be productively analysed. From scientific and economic perspectives then current within policy discussions, atmospherically *aggregated* contributions to climate harm were already considered readily quantifiable and assignable. In those same discussions, attribution in light of the *probabilistic* character of climate harm was less well-settled than it is now, through analyses such as those I summarize further down.

By the time of the OHCHR's Report methods existed and enjoyed wide currency in climate policy circles for characterizing the "historical greenhouse gas emissions of a particular country" in order to allocate nation-states' responsibilities for anthropogenic climate change. Assuming national emissions are known, in fact, the aggregation of multiple contributions to climate change arguably renders the allocation of responsibility easier. As Knox (2009, 489) explained, contrary to the OHCHR's assumption:

It is not necessary to link the emissions of a particular state to a particular harm in order to assign responsibility for the harm; since all greenhouse gases contribute to climate change, wherever they are released, responsibility could be allocated according to states' shares of global emissions of greenhouse gases (...).

On this basis, it would be possible, at least in principle, to conclude that even if all states contribute to climate change and are therefore joint violators of the human rights affected by it, some states are far more culpable than others, and to allocate responsibility accordingly.

Such allocation methods have long been central to analysts' use of the CBDR principle, mentioned by the Maldives and the ICC's legal counsel in the IACHR hearing and now increasingly mobilized in the longer analytical formulation of Common but Differentiated Responsibilities and Respective Capabilities in the light of different National Circumstances (CBDR-RC or CBDR-RC-NC), based again in the original UNFCCC. Moreover, precise allocation may be irrelevant from a human rights perspective, as ICC Counsel argued, since any participant in a violation bears responsibility.

In the same analysis of the OHCHR Report, Knox pointed out that historical responsibility and the vast inequalities in per capita emissions at national scale complicate accounts of differential responsibility for globally aggregated emissions. Yet here, too, methodologically defensible calculation was not a real issue. Nationally aggregated historical and per capita emissions are available from the UN and other sources, and have played a prominent part, sometimes in combination, within international negotiations as well as political and scholarly analyses of climate justice. More nuanced and flexible methods of numerical analyses are available as well, using, for instance, the Greenhouse Development Rights (GDRs) Framework. GDRs, which appeared in a first formulation in 2004, provide a means by which to transparently

allocate burden-sharing based on national levels of responsibility and capability in reference to a threshold level of human development exceeding that of basic needs (Baer *et al.* 2009).⁸ More recently, researchers have demonstrated methods for identifying the proportion of a country's emissions causally tied with consumption and capital accumulation in other countries, supporting a yet more economically rigorous, socially precise allocation of responsibility (Davis and Caldeira 2010, Bergmann 2013).

The probabilistic complexity of climate-related harm incited more reasonable circumspection in the 2009 OHCHR Report, but it too is now tractable to analyses of responsibility. The probabilistic relation between anthropogenic emissions and climate change-related effects still holds, since it extends from the concepts themselves: by definition, "climate" is a statistical abstraction from weather events observed over time within a region.⁹ Because weather varies significantly at shorter time scales than those that define climate regimes, no single weather event can be equated with climatic change. Precisely *because* of the statistical relationship between them, however, recently developed analytical methods and newly accessible data allow scientists to quantify this relatedness, assigning measures of association between specific weather events or patterns and anthropogenic climatic forcing.

A report of the American Meteorological Society (Peterson *et al.* 2013), for example, presents such attribution studies of twelve extreme weather events that occurred in 2012. While "not every extreme event can be measurably attributed to climate change", Bradbury and Tompkins (2013) summarized, the majority could:

For the north-central and northeastern region of the country, the heat wave that resulted in July 2012 being the hottest month on record for the contiguous United States was found to be four times more likely to occur today – as a result of human-induced climate change – than in pre-industrial times. Additionally, due to sea-level rise, extreme flooding along the mid-Atlantic coast on the scale of Hurricane Sandy's impact is more than 30 percent more likely to occur today than it would have been roughly half a century ago. Furthermore, if sea levels at Sandy Hook, NJ were to rise by another 1.2 meters, (a scenario projected by the 2013 National Climate Assessment), the flooding level caused by Hurricane Sandy could be expected roughly once every 20 years by the end of the century.

Similar analyses were not available when the OHCHR report was released in 2009. Still, the attribution of impacts to human life from climate change-related events and processes is nothing new. The World Health Organization, for instance, contributed a study of the health effects of climate change to the first IPCC report, published in 1990 (WHO Task Group 1990). By 2005, the organization had estimated yearly deaths due to climate change at 150,000 (see Ezzati *et al.* 2004, Patz *et al.* 2005, World Health Organization – WHO – 2017). Such tallies depend in part on careful assumptions, of course, and the progression of climate change impact has continued. Accordingly, other more recent studies' methodologies have resulted in far higher estimates of mortality and morbidity.¹⁰

⁸ GDRs (Baer *et al.* 2009) are considered a "framework" because various components of the calculation of responsibility and capacity, including the development threshold are subject to independent and explicit specification (although the presenting authors designate desirable ranges based on climate science and social welfare). The meaning of responsibility under the GDRs framework is based in part on an operationalization of the concept of Climate Debt, at national scale. Climate Debt designates compensation owed to the poor for damages associated with climate change not caused by them, as well as compensation for the occupation of excessive "atmospheric space" - the capacity of the atmosphere to store greenhouse gases at safe levels - by the wealthy (see Roberts and Parks 2009).

⁹ The IPCC (2014a) Glossary states: "Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period ranging from months to thousands or millions of years. The classic period for averaging these is 30 years, as defined by the World Meteorological Organization. The relevant quantities are most often surface variables such as temperature, precipitation and wind. Climate in a wider sense is the state, including a statistical description, of the climate system."

¹⁰ E.g. the Global Humanitarian Forum's 2009 analysis puts the figure at 300,000 annually, noting more generally that 325 million lives are "seriously affected" by climate change. The Development Assistant

Many media and civil society organizations readily tie the social costs of disasters to global warming, in a qualitative reflection of the increased likelihood and growing frequency of those events. Journalists and NGOs have drawn attention to climate-related disasters during UN climate negotiations, for example, linking climate change with a deadly landslide in a poor community outside Durban which coincided with the opening of the 2011 meetings in that city, and with Typhoon Haiyan, which struck the Philippines three days prior to the opening of 2013 meetings in Warsaw. Analyses of severe weather events and other disasters, in the public sphere, that links these phenomena with climate change predictions may indicate (and foster) increasing perception of their association (Layzer 2015).

These quantitative and inferential approaches to probabilistic attribution are possible because climate change is predictable. Using documented climatic conditions from the past, and the record of historical emissions, models of the climate system can predict climate variables up to the present in ways that match remarkably well with observational data. Those successes inspire strong confidence about the same models' abilities to predict the future (See, e.g., Henson 2014, 297-318).

That predictability also underpins the prospective aspect of many claims about climate-related harm, which piqued doubts for some HRC members that were memorialized in the OHCHR's 2009 Report. Those doubts, once again, attached to the contrast between projections of future climate impact and typical analyses of rights violations, which focus on past actions and impacts. That contrast exemplifies the epistemological contradictions, discussed above, that are so common between legal reason and scientific understanding of "nature" (Delaney 2003, Herbert *et al.* 2013). The apparent obscurity resulting from the two perspectives is a consequence, that is, of the very predictability of climate and environmental systems as opposed, at least in liberal humanist philosophies, to human ones.

Fortunately, at least two approaches exist to facilitate legal protection from prospective harm, with relevance in the climate change context. First, the precautionary principle – which implies the need to protect against possible, but uncertain, dangerous, irreversible, or catastrophic future events – is both prominent in national and international environmental law, and an explicitly recognized principle of the UNFCCC (Martuzzi and Tickner 2004, *United Nations Framework Convention on Climate Change Handbook*, 2006).

Second, in 2012 the Convention took initial steps toward a legal mechanism through which to address "loss and damage" from slow-onset as well as extreme climate change-related events, in effect recognizing the certainty of deleterious human impact as part of the predictability of climate change (UNFCCC report FCCC/CP/2013/10/Add.1, 2013). Loss and damage has long been seen by some advocates as promising a crucial "third leg" for the Convention, joining mitigation and adaptation to account for the inadequacy of the former and practical limitations on the latter. The potential for robust realization of redress for climate-harm through a UNFCCC loss and damage mechanism remains unclear, as contentious debate continues over its terms (see Mace and Verheyen 2016). Its establishment and subsequent inclusion in the Paris Agreement, albeit in importantly circumscribed form, do however signal a level of acknowledgement in international law of prospective as well as probabilistic forms of attribution: anticipating the social costs of inevitably more extreme weather and increasing ecological instability tied to global warming. The OHCHR also took up the concept in its analyses of climate change and advice to the UNFCCC, arguing states should "draw upon their human rights obligations" in addressing loss and damage (*Response [of the Office of the United*

Research Associates 2012 report sums deaths due to climate change at 400,000 yearly, and the wider impact of "[o]ur present carbon-intensive energy system and related activities" at 4.5 million lives. See Global Humanitarian Forum 2009, Development Assistant Research Associates – DARA – 2012.

Nations High Commissioner for Human Rights] to the request of Ad Hoc Working Group on the Paris Agreement (APA) (FCCC/APA/2016/2), 2016).

Within human rights law, the operational distinction for evaluating prospective dangers is the point at which those dangers can be judged “imminent”. In 2015 a Dutch court issued such a judgement for the first time, upholding an NGO’s claim demanding the national government set stricter emissions reduction targets (*Urgenda Foundation v The State of the Netherlands*, 2015). Short of this bar, the confidence with which prospective climate harm is now viewed, and the environmental legal approaches established to address it, suggest that at a minimum un- and under-regulated emissions be understood as implying knowing culpability for likely future harm.

With respect to each of these three aspects of complexity that characterize the processes of climate change-related environmental harm, then, the OHCHR’s 2009 analysis hewed decisively to a formal perspective that diverged notably from the assessments then current in influential scientific and policy circles. In subsequent years, the role of human action in climate-related harm has become more legible, and the assignment of responsibility to identifiable actors, including states and corporations, more common, in non-legal analyses as well as some legal ones. It is also worth noting that the accumulating knowledge summarized above does not include more recent contributions from indigenous communities and traditional knowledges, which would help to document disproportionate cultural and ecological impacts more widespread and further advanced than the ICC could in 2005 (see, e.g., Wildcat 2013). Even the OHCHR, however, while strengthening significantly its position on climate change, has not altered its assessment of the claims brought by the Maldives or affirmed those of the ICC, charging major emitters with rights violations from the direct and indirect environmental impacts of anthropogenic climate change. The concluding section addresses some of the implications of such lingering lacunae in analyses of global responsibility for climate-related harms.

7. Conclusion

For geographer of ethics and global change Jeff Popke, “analytical stances are themselves performative, helping to gather up and constitute the social as a potential site of ethical responsibility and political efficacy” (Popke 2009, 85). This is surely true for analyses of climate-related harm. Whether activist, indigenous, scientific, economic, or legal in origin, such analyses impose categorical frames on socio-ecological complexity, defining as they do so the members, relations, and exceptions of a human collective (“the social”) (see also Agamben 1998, Jones 2009). When legal analysis defines relations of causality linking action and harm in terms of unmediated, individual human agency, and interprets obligation to rights bearers as territorially bounded, it negates responsibility for the most profound, widespread, and disproportionate impacts of anthropogenic climate change, exerting interpretive power in materially consequential ways across vast swaths of space and time. It is worth noting, of course, that the authors of country submissions to the HRC process, compilers of the subsequent OHCHR Report, and IACHR commissioners each assessed the relevance of climate change for human rights under differing conditions of familiarity with climate science and in fulfilment of professional roles shaped by distinct mandates. Rather than personal convictions, that is, their interpretative acts reflect institutional positionalities.

In their institutional capacities, the ICC and the Maldives sought to re-constitute the social, or re-make a world, in Delaney’s (2010) terms, with socio-ecologically relational, spatially extensive analyses of responsibility for climate-related harms. Culturally and geographically specific, their analyses were also simply the first framed in the legal language of rights to emerge from a growing number of similarly affected and vulnerable communities who find themselves and their grievances marginalized

in climate governance. The fate of such groups seems to call for legal remedy all the more because it is not, largely, of their own making.

Yet if the Maldives's or ICC's analysis of anthropogenic climate change as violating rights internationally were authoritatively affirmed, what then? The negotiation of divergent interpretations in the OHCHR's 2009 Report underscores that law is itself a social construction; its institutional force backed by states, who host the adjudication of claims in venues they provide. Where, then, might claimants be able to seek redress, beyond their own nations, for a violation of their rights through climate change, and whom might they hold to account? To its credit, the OHCHR has drawn attention to this problem of venue and the importance of the right to remedy in its recent statements on climate change (e.g. *Submission of the Office of the High Commissioner for Human Rights*, 2015). More pithily, legal scholar Stephen Humphreys (2012) has suggested that, in the context of climate change, "the law needs a push." To meet criteria of ethical responsibility or political efficacy, such a push may need to come from outside.

Legal analyses of climate change's effects upon human rights have been elegant, and influential within limits. Whatever the language linking the two terms, a strong relation *is* now "axiomatic" across several discursive communities. But scholars of law and social movements have long known that the recognition of rights is not sufficient for their realization. More generally, legal action typically plays a supporting role in real social change, facilitating, if not merely legitimating, other essential conditions. McCann's (1994) description of this process includes a prominent role for rights consciousness: as outcome of legal action and co-enforcing of collective action. In the case of climate justice, either form of action seems also to require the deepening and broadening of *global, socio-ecological* consciousness, through non-legal knowledge if not lived experience. A range of mechanisms could be deployed, for instance, by which greater and more even familiarity with emerging scientific understanding of climate change and climate-related harm could be brought to bear on adjudication, with attendant challenges as well as possibilities of translation (see Mertz 2011, Klug and Merry 2016). Past claimants have often lead in incorporating scientific methods of attribution in legal argument; and those indeed represent a leading edge of relevant, research-based knowledge worthy of consideration in realist approaches to causation and responsibility.

Again, however, as McCann's (1994) adaptation of "political process" models for legal mobilization studies suggests, changes in more widespread forms of consciousness are crucially related to meaningful legal action (see McAdam 1982). Evolutions in legal reasoning might help foster but would not take the place of a wider social reckoning with the character and magnitude of climate-related harm, and recognition of corresponding human responsibility, particularly within more well-insulated high-emitting polities, like the US, where those uncomfortable realities still sit largely to one side of dominant conceptions of national interest and virtue. Despite official efforts to obscure the long-term impacts of rising emissions (Davenport and Landler 2019), the climate-related shocks of recent years suggest that reckoning is coming. Recognition of responsibility feels further off, and although relevant social movements and leadership are emerging, affirmation of their impulses in legal language could offer additional impetus for collective action (see, e.g. Stuart 2019, Graeber 2019).

That is, to borrow Popke's (2009) terms once more, legal affirmation of climate rights claims like the ICC's and Maldives' would furnish at most "a *potential* site of ethical responsibility and political efficacy" (Popke 2009, 85, emphasis added). Given a confluence of other necessary elements, though, revisiting the question of international rights violations from anthropogenic climate change could matter materially. The increasing legibility of the mechanisms that produce climate-related harm, and the increasing scope of those harms, arguably makes doing so an ethical responsibility. To analyze global issues of human rights and climate change in purely

legal terms, however, would be to perform a kind of mystification: fetishizing the legal in the face of climatic disruptions that challenge some of its foundational categories. In the context of mounting climate-related harm, allowing those categories to limit the purview of legal justice threatens its relevance, along with the lives of innocents.

References

- Abate, R.S., 2010. Public Nuisance Suits for the Climate Justice Movement: The Right Thing and the Right Time. *Washington Law Review* [online], 85, 197–252. Available from: <http://threedegreeswarmer.org/wp-content/uploads/2010/05/Abate-Author-Copy1.pdf> [Accessed 30 May 2019].
- ActionAid *et al.*, 2010. *Climate Justice Briefs #12: Human Rights and Climate Justice* [online]. What Next Forum. Cancún, 10 November. Available from: http://www.whatnext.org/resources/Publications/Climate-justice-briefs_full-setA4.pdf [Accessed 10 November 2017].
- Agamben, G., 1998. *Homo Sacer*. Redwood City, CA: Stanford University Press.
- Atapattu, S., 2015. *Human Rights Approaches to Climate Change: Challenges and Opportunities*. London: Routledge.
- Averill, M., 2010. Getting Into Court: Standing, Political Questions, and Climate Tort Claims. *Review of European Community & International Environmental Law* [online], 19(1), 122–126. Available from: <https://doi.org/10.1111/j.1467-9388.2010.00669.x> [Accessed 30 May 2019].
- Baer, P., *et al.*, 2009. Greenhouse Development Rights: A Proposal for a Fair Global Climate Treaty. *Ethics, Place & Environment* [online], 12(3), 267–281. Available from: <https://doi.org/10.1080/13668790903195495> [Accessed 30 May 2019].
- Bell, D.A. Jr., 1980. Brown v. Board of Education and the interest-convergence dilemma. *Harvard Law Review* [online], 93(3), 518–533. Available from: http://www.kyoolee.net/Brown_vs._Board_of_Education_and_the_Interest-Convergence_Dilemma_-_Derrick_Bell.pdf [Accessed 30 May 2019].
- Bergmann, L., 2013. Bound by Chains of Carbon: Ecological–Economic Geographies of Globalization. *Annals of the Association of American Geographers* [online], 103(6), 1348–1370. Available from: <https://doi.org/10.1080/00045608.2013.779547> [Accessed 30 May 2019].
- Bix, B.H., 2005. Law as an Autonomous Discipline. In: P. Cane and M. Tushnet, eds., *The Oxford Handbook of Legal Studies*. Oxford University Press, 975–987.
- Blomley, N., 1994. *Law, Space, and the Geographies of Power*. New York: Guilford.
- Blomley, N., 2008. Simplification is complicated: property, nature, and the rivers of law. *Environment and Planning A* [online], 40(8), 1825–1842. Available from: <https://doi.org/10.1068%2Fa40157> [Accessed 30 May 2019].
- Blomley, N., Delaney, D., and Ford, R., eds., 2001. *The Legal Geographies Reader: Law, Power and Space*. Hoboken, NJ: Wiley.
- Bodansky, D., 2010. Climate Change and Human Rights: Unpacking the Issues. *Georgia Journal of International and Comparative Law* [online], 38, 511–524. Available from: <https://digitalcommons.law.uga.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1131&context=gjicl> [Accessed 30 May 2019].

- Bond, P., 2011. *Politics of Climate Justice: Paralysis Above, Movement Below*. London: Verso / Pietermaritzburg: University of KwaZulu-Natal Press.
- Bradbury, J., and Tompkins, C.F., 2013. New Report Connects 2012 Extreme Weather Events to Human-Caused Climate Change. *World Resources Institute* [online], 6 September. Blog post. Available from: <http://www.wri.org/blog/2013/09/new-report-connects-2012-extreme-weather-events-human-caused-climate-change> [Accessed 11 December 2017].
- Braverman, I., et al., eds., 2014. *The Expanding Spaces of Law: A Timely Legal Geography*. Stanford University Press.
- Burger, M., and Wentz, J.A., 2015. *Climate Change and Human Rights* [online]. Columbia University Academic Commons. Available from: <https://doi.org/10.7916/D8PG1RRD> [Accessed 10 November 2017].
- Castree, N., 2005. *Nature*. Abingdon / New York: Routledge.
- Chapman, M., 2010. Climate Change and the Regional Human Rights Systems. *Sustainable Development Law & Policy* [online], 10(2), 37-38. Available from: <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1031&context=sdlp> [Accessed 30 May 2019].
- Cover, R., 1983. Nomos and narrative. *Harvard Law Review* [online], 97(4), 4-68. Available from: http://digitalcommons.law.yale.edu/fss_papers/2705 [Accessed 30 May 2019].
- DARA, 2012. *Climate Vulnerability Monitor, 2nd edition: A Guide to the Cold Calculus of a Hot Planet* [online]. Available from: <http://daraint.org/climate-vulnerability-monitor/climate-vulnerability-monitor-2012/> [Accessed 10 November 2017].
- Davenport, C., and Landler, M., 2019. Trump Administration Hardens its Attack on Climate Science. *New York Times* [online], 27 May. Available from: <https://www.nytimes.com/2019/05/27/us/politics/trump-climate-science.html> [Accessed 30 May 2019].
- Davis, S.J., and Caldeira, K., 2010. Consumption-based accounting of CO2 emissions. *Proceedings of the National Academy of Sciences* [online], 107(12), 5687-5692. Available from: <https://doi.org/10.1073/pnas.0906974107> [Accessed 30 May 2019].
- Delaney, D., 2003. *Law and Nature*. Cambridge University Press.
- Delaney, D., 2010. *The Spatial, the Legal and the Pragmatics of World-Making: Nomospheric Investigations*. Abingdon: Routledge.
- Derman, B., 2013. Contesting Climate Justice during COP17. *South African Journal on Human Rights* [online], 29(1), 170-179. Available from: <https://www.tandfonline.com/doi/abs/10.1080/19962126.2013.11865070> [Accessed 3 June 2019].
- Derman, B., 2014. Climate Governance, Justice, and Transnational Civil Society. *Climate Policy* [online], 14(1) 23-41. Available from: <https://doi.org/10.1080/14693062.2014.849492> [Accessed 3 June 2019].
- Dulitzky, A., 2006. Letter to Paul Crowley. *New York Times* [online], 26 November. Available from: <http://graphics8.nytimes.com/packages/pdf/science/16commissionletter.pdf> [Accessed 10 November 2017].

- Ezzati, M., et al., eds., 2004. *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors*. Geneva: World Health Organization.
- Galanter, M., 1974. Why the "Haves" Come out Ahead: Speculations on the Limits of Legal Change. *Law & Society Review* [online], 9(1), 95-160. Available from: <http://www.jstor.org/stable/3053023?origin=JSTOR-pdf> [Accessed 30 May 2019].
- Gardiner, S., 2011. Climate Justice. In: J.S. Dryzek, R.B. Norgaard and D. Schlosberg, eds., *The Oxford Handbook of Climate Change and Society* [online]. Oxford University Press, 309-322. Available from: <https://doi.org/10.1093/oxfordhb/9780199566600.001.0001> [Accessed 30 May 2019].
- Global Humanitarian Forum, 2009. *The Anatomy of a Silent Crisis* [online]. Report. Available from: <http://www.ghf-ge.org/human-impact-report.php> [Accessed 10 November 2017].
- Gloppen, S., and St. Clair, A.L., 2012. Climate Change Lawfare. *Social Research: An International Quarterly*, 79(4), 899-930.
- Graeber, D., 2019. If Politicians Can't Face Climate Change, Extinction Rebellion Will. *New York Times* [online], 1 May. Available from: <https://www.nytimes.com/2019/05/01/opinion/extinction-rebellion-climate-change.html> [Accessed 30 May 2019].
- Henson, R., 2014. *The Thinking Person's Guide to Climate Change*. Boston, MA: American Meteorological Society.
- Herbert, S., 1997. Policing Space: Territoriality and the Los Angeles Police Department. Minneapolis, MN: University of Minnesota Press.
- Herbert, S., Derman, B., and Grobelski, T., 2013. The Regulation of Environmental Space. *Annual Review of Law and Social Science* [online], 9(1), 227-47. Available from: <https://doi.org/10.1146/annurev-lawsocsci-102612-134034> [Accessed 30 May 2019].
- Humphreys, S., 2010. *Human Rights and Climate Change*. Cambridge University Press.
- Humphreys, S., 2012. *Climate Change and Human Rights: Where is the Law?* Address delivered at the 2012 Rafto Prize ceremony, Bergen. (Copy on file with the author).
- Intergovernmental Panel on Climate Change, 2014a. *Climate Change 2014: Annex II: Glossary* [online]. Available from: https://www.ipcc.ch/site/assets/uploads/2019/01/SYRAR5-Glossary_en.pdf [Accessed 3 June 2019].
- Intergovernmental Panel on Climate Change, 2014b. *Climate Change 2014: Impacts, Adaptation, and Vulnerability* [online]. Available from: <http://www.ipcc.ch/report/ar5/wg2/> [Accessed 8 December 2017].
- Jones, R., 2009. Categories, borders and boundaries. *Progress in Human Geography* [online] 33(2), 174-189. Available from: <https://doi.org/10.1177/0309132508089828> [Accessed 30 May 2019].
- Klug, H., and Merry, S.E., eds. 2016. *The New Legal Realism, Volume 2: Studying Law Globally*. Cambridge University Press.
- Knox, J.H., 2009. Linking Human Rights and Climate Change at the United Nations. *Harvard Environmental Law Review*, 33, 477-498.

- Layzer, J.A., 2015. *The Environmental Case: Translating Values into Policy*. Thousand Oaks, CA: Sage.
- Lesnikowski, A., et al., 2016. What does the Paris Agreement mean for adaptation? *Climate Policy* [online], 17(7), 825-831. Available from: <https://doi.org/10.1080/14693062.2016.1248889> [Accessed 30 May 2019].
- Limon, M., 2009. Human Rights and Climate Change: Constructing a Case for Political Action. *Harvard Environmental Law Review* [online], 33, 439-476. Available from: https://www.etoconsortium.org/nc/en/main-navigation/library/documents/?tx_drblob_pi1%5BdownloadUid%5D=58 [Accessed 30 May 2019].
- Mace, M.J., and Verheyen, R., 2016. Loss, Damage and Responsibility after COP21: All Options Open for the Paris Agreement. *Review of European, Comparative & International Environmental Law* [online], 25(5), 197-214. Available from: <https://doi.org/10.1111/reel.12172> [Accessed 30 May 2019].
- Martuzzi, M., and Tickner, J.A., eds., 2004. *The precautionary principle: protecting public health, the environment and the future of our children* [online]. WHO Regional Office for Europe Copenhagen. Available from: http://www.asser.nl/media/2227/cms_eel_96_1_book-precautionary-principle-protecting-public-health-the-environment.pdf [Accessed December 8 2017].
- Mary Robinson Foundation – Climate Justice, 2017. *Principles of Climate Justice* [online]. Available from: <https://www.mrfcj.org/principles-of-climate-justice/> [Accessed December 8 2017].
- Mayer, B., 2016. Human rights in the Paris agreement. *Climate Law* [online], 6(1–2), 109-117. Available from: <https://doi.org/10.1163/18786561-00601007> [Accessed 30 May 2019].
- McAdam, D., 1982. *Political Process and Black Insurgency, 1930-1970*. University of Chicago Press.
- McCann, M.W., 1994. *Rights at Work: Pay Equity Reform and the Politics of Legal Mobilization*. University of Chicago Press.
- McInerney-Lankford, S., Darrow, M., and Rajamani, L., 2011. *Human Rights and Climate Change: A Review of the International Legal Dimensions* [online]. Report. Washington, DC: The World Bank. Available from: <http://documents.worldbank.org/curated/en/903741468339577637/pdf/613080PUB0Huma158344B09780821387207.pdf> [Accessed 30 May 2019].
- Merry, S.E., 2006. *Human Rights and Gender Violence: Translating International Law into Local Justice*. University of Chicago Press.
- Mertz, E., 2011. Undervaluing Indeterminacy: Translating Social Science into Law. *DePaul Law Review* [online], 60, 397-412. Available from: <http://via.library.depaul.edu/law-review/vol60/iss2/7> [Accessed 30 May 2019].
- Mertz, E., Macaulay, S., and Mitchell, T.W., eds., 2016. *The New Legal Realism: Volume 1: Translating Law-and-Society for Today's Legal Practice*. New York: Cambridge University Press.
- Organization of American States, 2015. *IACHR Expresses Concern regarding Effects of Climate Change on Human Rights* [online]. Press release, 2 December. Available from: http://www.oas.org/en/iachr/media_center/preleases/2015/140.asp [Accessed 26 June 2017].

- Osofsky, H.M., 2006. The Inuit Petition as a Bridge? Beyond Dialectics of Climate Change and Indigenous Peoples' Rights. *American Indian Law Review* [online], 31(2), 675-697. Available from: <https://doi.org/10.1017/CBO9780511596766.014> [Accessed 30 May 2019].
- Patz, J.A., et al., 2005. Impact of regional climate change on human health. *Nature* [online], 438(7066), 310-317. Available from: <https://doi.org/10.1038/nature04188> [Accessed 30 May 2019].
- Peterson, T.C., et al., eds., 2013. Explaining extreme events of 2012 from a climate perspective. *Bulletin of the American Meteorological Society* [online], 94(9), S1-S74. Available from: <https://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-13-00085.1> [Accessed 30 May 2019].
- Popke, J., 2009. Geography and ethics: non-representational encounters, collective responsibility and economic difference. *Progress in Human Geography* [online], 33(1), 81-90. Available from: <https://doi.org/10.1177%2F0309132508090441> [Accessed 30 May 2019].
- Rajamani, L., 2010. The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change. *Journal of Environmental Law* [online], 22(3), 391-429. Available from: <https://ssrn.com/abstract=2469783> [Accessed 30 May 2019].
- Robbins, P., 2007. *Lawn People: How Grasses, Weeds, and Chemicals Make Us Who We Are*. Philadelphia, PA: Temple University Press.
- Robbins, P., 2011. *Political Ecology: A Critical Introduction*. 2nd ed. Malden, MA: Wiley-Blackwell.
- Roberts, J.T., and Parks, B.C., 2009. Ecologically Unequal Exchange, Ecological Debt, and Climate Justice: The History and Implications of Three Related Ideas for a New Social Movement. *International Journal of Comparative Sociology* [online], 50, 385-409. Available from: <https://doi.org/10.1177%2F0020715209105147> [Accessed 30 May 2019].
- Rogelj, J., et al., 2016. Paris Agreement climate proposals need a boost to keep warming well below 2 °C. *Nature* [online], 534(7609), 631-639. Available from: <https://doi.org/10.1038/nature18307> [Accessed 30 May 2019].
- Sachs, W., 2008. Climate change and human rights. *Development* [online], 51(3), 332-337. Available from: <https://doi.org/10.1057/dev.2008.35> [Accessed 30 May 2019].
- Scheingold, S.A., 1974. *The Politics of Rights*. New Haven, CT: Yale University Press.
- Shearer, C., 2011. *Kivalina: A Climate Change Story*. Chicago, IL: Haymarket Books.
- Stuart, T., 2019. Sunrise Movement, the Force behind the Green New Deal, Ramps Up Plans for 2020. *Rolling Stone* [online], 1 May. Available from: <https://www.rollingstone.com/politics/politics-features/sunrise-movement-green-new-deal-2020-828766/> [Accessed 30 May 2019].
- Swyngedouw, E., 1999. Modernity and Hybridity: Nature, *Regeneracionismo*, and the Production of the Spanish Waterscape, 1890-1930. *Annals of the Association of American Geographers* [online], 89(3), 443-465. Available from: <https://doi.org/10.1111/0004-5608.00157> [Accessed 30 May 2019].
- Turk, A.T., 1976. Law as a weapon in social conflict. *Social Problems* [online], 23(3), 276-291. Available from: <https://doi.org/10.2307/799774> [Accessed 30 May 2019].

- Werksman, J., 2011. The Challenge of Legal Form at the Durban Climate Talks. *World Resources Institute* [online], 28 November. Blog post. Available from: <http://www.wri.org/blog/2011/11/challenge-legal-form-durban-climate-talks> [Accessed 11 December 2017].
- WHO Task Group, 1990. *Potential health effects of climatic change* (WHO/PEP/90/10) [online]. Report. Geneva: World Health Organization. Available from: <http://www.ciesin.org/docs/001-007/001-007.html> [Accessed 30 May 2019].
- Wildcat, D., 2013. Introduction: Climate Change and Indigenous Peoples of the USA. *Climatic Change* [online], 120, 509–515. Available from: <https://doi.org/10.1007/s10584-013-0849-6> [Accessed 30 May 2019].
- World Health Organization, 2017. *Climate change* [online]. WHO. Available from: <http://www.who.int/heli/risks/climate/climatechange/en/> [Accessed 11 December 2017].
- Zemans, F.K., 1983. Legal mobilization: The neglected role of the law in the political system. *The American Political Science Review* [online], 77(3), 690–703. Available from: <https://doi.org/10.2307/1957268> [Accessed 30 May 2019].

Cases Cited

- Native Village of Kivalina v ExxonMobil Corp.* F. Supp. 2d 663, 863 (Dist. Ct., ND California, Oakland Div. 2009).
- Petition Requesting for Investigation of the Responsibility of the Carbon Majors for Human Rights Violations or Threats of Violations Resulting from the Impacts of Climate Change.* CHR-NI-2016-0001 (Republic of the Philippines Commission on Human Rights, Quezon City. 2016).
- Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment)*, C/09/456689 / HA ZA 13-1396 (Dist. Ct., The Hague. 2015).

Legal sources

- American Declaration on the Rights and Duties of Man* [online]. Adopted by the Ninth International Conference of American States, Bogotá, Colombia, 1948, 30 March–2 May. Available from: <https://www.cidh.oas.org/Basicos/English/Basic2.American%20Declaration.htm> [Accessed 11 December 2017].
- Annual Report of the Inter-American Commission on Human Rights, 2011* [online]. Available from: <http://www.oas.org/en/iachr/docs/annual/2011/toc.asp> [Accessed 26 June 2017].
- Copenhagen Accord* (FCCC/CP/2009/L.7) [online]. United Nations Framework Convention on Climate Change, 7–18 December 2009. Available from: <https://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf> [Accessed 30 May 2019].
- Human Rights and Climate Change* (A/HRC/RES/10/4) [online]. UN Human Rights Council, 12 May 2009. Available from: <https://www2.ohchr.org/english/bodies/hrcouncil/docs/10session/A.HRC.10.L.11.pdf> [Accessed 30 May 2019].
- Human Rights and Climate Change in the Americas* (AG/RES. 2429) [online]. General Assembly of the Organization of American States. Adopted at the fourth plenary session, held on June 3, 2008. Available from: https://www.oas.org/dil/AGRES_2429.doc [Accessed 26 June 2017].

- Human Rights and Global Warming* [online]. Audio clip. Organization of American States, 2007. Available from: <http://www.oas.org/es/cidh/audiencias/Hearings.aspx?Lang=en&Session=14> [Accessed 26 June 2017].
- Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States* [online]. Inuit Circumpolar Council Canada, 7 December 2005. Available from: http://earthjustice.org/sites/default/files/library/legal_docs/petition-to-the-inter-american-commission-on-human-rights-on-behalf-of-the-inuit-circumpolar-conference.pdf [Accessed 7 December 2017].
- Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. Addendum. Part two: Action taken by the Conference of the Parties at its nineteenth session* (FCCC/CP/2013/10/Add.1) [online]. Available from: <https://undocs.org/FCCC/CP/2013/10/Add.1> [Accessed 30 May 2019].
- Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, 2009* (A/HRC/10/61) [online]. UN Human Rights Council, 15 January. Available from: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?OpenElement> [Accessed 30 May 2019].
- Response [of the Office of the United Nations High Commissioner for Human Rights] to the request of Ad Hoc Working Group on the Paris Agreement (APA)* (FCCC/APA/2016/2) [online]. Geneva, 1 November. Available from: <https://unfccc.int/sites/default/files/722.pdf> [Accessed 29 May 2019].
- Submission of the Maldives to the Office of the UN High Commissioner for Human Rights. Human Rights Council Resolution 7/23 "Human Rights and Climate Change"* [online]. 25 September 2008. Available from: https://www.ohchr.org/Documents/Issues/ClimateChange/Submissions/Maldives_Submission.pdf [Accessed 10 November 2017].
- Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change: Understanding Human Rights and Climate Change, 2015* [online]. Geneva, 27 November. Available from: <http://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf> [Accessed 11 December 2017].
- Submission of the United States to the OHCHR under Human Rights Council Res. 7/23: Observations by the United States of America on the relationship between climate change and human rights, 2008* [online]. Available from: <http://www2.ohchr.org/english/issues/climatechange/docs/submissions/USA.pdf> [Accessed 10 November 2017].
- United Nations Framework Convention on Climate Change* [online]. New York, 9 May 1992. Available from: https://treaties.un.org/doc/Treaties/1994/03/19940321%2004-56%20AM/Ch_XXVII_07p.pdf [Accessed 3 June 2019].
- United Nations Framework Convention on Climate Change Handbook, 2006* [online]. Bonn: Intergovernmental and Legal Affairs, Climate Change Secretariat. Available from: <https://unfccc.int/resource/docs/publications/handbook.pdf> [Accessed 11 December 2017].