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# Entangled harms: A reparative approach to climate justice

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**Abstract**

Transnational climate litigation has become a strategic tool to press state and non-state actors into action. An analysis of international and domestic cases shows how rights and obligations are being materially, subjectively, spatially and temporally stretched in judicial proceedings. This article focuses on three distinct grammars of climate justice activated in climate litigation. The analysis exposes a shift from a *traditional* to a *progressive* grammar that moves from *actual* to *potential* climate harms, from *human* to *nonhuman* rights, from *territorial* to *extra-territorial* obligations, and from *present* to *future* generations. Beyond a traditional liberal framing of rights-based approaches to climate justice, we witness here a progressive critical grammar that broadens the scope of who can be considered legally affected by climate change, where, and how. A more radical understanding of climate justice, however, exceeds the capacity of these registers to confer structure, order, and meaning to climate harms across matter, subjects, space and time. Against this backdrop, a *reparative* grammar of climate justice is envisioned, which reconfigures the material boundary from *potential* to *entangled* harms, the subjective boundary from *nonhuman* victims to

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**The publication of this article has been significantly delayed. It was accepted for publication in July 2024 and was supposed to be published in December of that year. On December 4, 2024, however, LJIL published an article on postwar development of the Gaza Marine gas field. The profound issues raised by this article generated concerns regarding the editorial process of its publication. I therefore requested that the publication of my article be suspended, until CUP and LJIL completed their evaluation of these concerns. In September 2025, LJIL published its response, which consisted of offering a transparent account of how the Gaza Marine article came about, the steps taken to (re-)review it, and the sharing of the internal and external (peer-)review and corrections brought by the authors (which, unfortunately, remain minor and continue to disregard the ongoing context of genocide and scholasticide in Gaza, thereby contributing to the silencing and erasure of Palestinian voices). Against this backdrop, LJIL also published a response article by three Palestinian scholars and experts on the topic (Mutaz M. Qafisheh, Jinan Bastaki, and Victor Kattan), and self-critically modified its editorial decision-making process to structurally address and change its internal functioning by adding a procedural 'safety net' to prevent such situations in the future. I appreciate the steps taken by the journal – especially at times of rising workloads and diminishing resources, with journal work undertaken vocationally, without remuneration, and on top of other institutional demands and service commitments – and see them as acts of commitment and care for the (critical) community the journal holds together, as one of the few venues in international law that facilitates critical space and conversations, especially for ECRs. The delay of publication of my article by almost a year, however, explains why key developments in the field – such as the ICJ Advisory Opinion on climate change issued in July 2025, or the dismissal of the RWE case in May 2025, which I refer to as 'pending' in my article – are not addressed herein. I apologise to the reader for the factual errors and, at times, the sense of a temporally disjunct reading that results from this.

*more-than-human* care, the spatial boundary from *extra-territorial* to *terrestrial* spatiality, and the temporal boundary from *future* to *enduring* temporalities. In doing so, the analysis opens up a register of political thought for climate justice that starts in the law yet vastly exceeds and disrupts it.

**Keywords:** climate justice; climate litigation; reparative justice; responsibilities; rights

## 1. Introduction

Climate change litigation has grown in popularity. Courts are being seized by individuals, collectives and NGOs across jurisdictions to hold state and non-state actors accountable for their obligations and responsibilities to tackle climate change. Distinct grammars of climate justice underpin various litigation strategies, which condition different orders of legality, legitimacy, and liveability. Pointing to the limits of traditional and progressive grammars of climate justice in international law, this article articulates an alternative grammar of reparative justice that widens attention to and engagement with climate harms.

I refer to 'grammars' of climate justice by thinking with and against the materiality of their effects. By materiality I mean the forces and implications, structures, and power relations at stake in the enactment of certain phenomena. I am interested in the discursive-material conditions that make certain claims possible and enact particular worlds with specific distributions of agency, protection, wealth, and institutional arrangements. The distinct grammars of climate justice I explore do not follow a linear temporal evolution. Fundamentally, one grammar does not replace another over time, but 'layer[s itself] alongside'.[1] These grammars overlap and are used strategically and instrumentally by different actors, with different means, and for different ends. What is more, these grammars are not fixed structures '*in* the world', but singular enactments '*of* the world' – they make the world come forth in a particular way, as one 'proper order of things'.[2]

Against this background, I trace what 'type of assumptions, of familiar notions, of established, unexamined ways of thinking',[3] each grammar of climate justice reveals. I am interested in understanding what happens in the confluence of incommensurable grammars, which reconfigurations of existence are unleashed in the collision of grammars, when how we (have been formed to) think as lawyers clashes with the thinking we struggle to engage on our own terms in the quest for climate justice. The article diagnoses and problematizes strategies developed in climate litigation to reconfigure the material, subjective, spatial, and temporal scope of climate harms, which appear as main 'pressure points' that litigants are activating to release new energy for climate justice.

The three grammars of climate justice I elaborate are the following. First, a *traditional* liberal grammar where climate justice is conceived and articulated in terms of *actual* harms of *human* victims that falls within the *territorial* jurisdiction of states and mostly affects *present* generations. Second, a *progressive* critical grammar of climate justice that reconfigures the material boundary from *actual* to *potential* harms, the subjective boundary from *human* to *nonhuman* rights, the

[1]In this sense, the article does not offer a *genealogy* but a *geology* of climate justice grammars. As Weiler puts it: 'whereas the classical historical method tends to periodize, geology stratifies … Thus, geology allows us to speak not so much about transformations but of layering, of change which is part of continuity, of new strata which do not replace earlier ones, but simply layer themselves alongside'. J. H. H. Weiler, 'The Geology of International Law – Governance, Democracy and Legitimacy', (2004) 64 HJIL 547, at 549, 551.

[2]As Barad would have it, grammars are 'not situated in the world' but 'worlding in its materiality', since phenomena, including grammars, are not '*in the world, but rather … of the world in its dynamic specificity*'. K. Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter* (2007), at 180–1, 377 (original emphases).

[3]This is a reference to Foucault's definition of critique, according to whom: '[a] critique does not consist in saying that things aren't good the way they are. It consists in seeing on what type of assumptions, of familiar notions, of established, unexamined ways of thinking, the accepted practices are based'. M. Foucault, 'So Is It Important to Think?', in J. D. Faubion (ed.), *Power: Essential Works of Foucault 1954–1984 Vol 3* (1994 [1981]), at 456.

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spatial boundary from *territorial* to *extra-territorial* obligations, and the temporal boundary from *present* to *future* generations. Third, a *reparative* grammar of climate justice is envisioned, which reconfigures the material boundary from *potential* to *entangled* harms, the subjective boundary from *nonhuman* rights to *more-than-human* care, the spatial boundary from *extra-territorial* to *terrestrial* space, and the temporal boundary from *future* to *enduring* temporalities. While the traditional grammar of climate justice is evident in existing strategies employed in climate litigation, the progressive grammar of climate justice is increasingly taken up in claims brought by litigants as well as critical scholarship on climate litigation. In light of the expansive nature of climate harms across matter, subjects, space, and time, however, a reparative grammar of climate justice helps making sense of these entangled harms. This is so because, whereas the traditional grammar of climate justice merely transposes a traditional justice framework onto the climate problem, the dispersed, diffused, and deferred nature of climate harms – as physical phenomena – require stretching the traditional justice frameworks when dealing with climate change, thereby giving rise to a more expansive and progressive grammar of climate justice. Yet, a broader understanding of climate change – not just as a physical but as a social, political, and ecological phenomenon – which intersects with, reproduces, and intensifies existing hierarchies and marginalizations, underscores the necessity to promote a more encompassing reparative grammar of climate justice that climate movements, litigants, activists, and scholars should adopt. What is more, many strategies articulated in climate litigation draw on different yet intersecting grammars at once.[4] My point is not to seek analytical purity, but to think about particular grammars of international law and their world-claiming, world-making, and world-ordering effects when pushing for climate justice. While acknowledging the struggle it has been and continues to be for the traditional and progressive grammars of climate justice to be given effect by courts, and noticing how climate cases keep being dismissed when litigants make narrow claims about actual harms to presently-alive human subjects within a territorial jurisdiction – as the recent striking down of the *Juliana* and *Sharma* cases illustrate[5] – the structural and intensifying injustices to which the traditional and progressive grammars cannot speak require working with a stretched demand for climate justice. I therefore problematize the semantic registers of legality deployed in these grammars, which determine a particular way of articulating in/justices and make specific harms il/legible. The issue is not merely that the traditional and progressive grammars do not allow for reparative claims to be articulated, but that reparative claims are made illegible by and through the traditional and progressive semantics and meanings of those grammars.

Rather than looking at each grammar in turn, the article develops the argument in four sections by analysing the categories of (i) legal harm, (ii) legal subjectivity, (iii) legal spatiality, and (iv) legal temporality, and assesses the conceptual innovations that inform the shifts observed (see Figure 1 below). Ultimately, the analysis aims to foreground and think with 'strategies of rupture' that both use and contest the legal system in a way that is best captured by the logic of immanent – rather than internal – critique.[6] Tactics of legal resistance are here neither reducible to nor co-optable by

[4]Indeed, the analysis *stratifies*, rather than *periodizes*, grammars of climate justice. See Weiler, *supra* note 1.

[5]D. Noor, 'Court Strikes Down Youth Climate Lawsuit on Biden Administration Request', *Guardian*, 2 May 2024; K. Pender, 'In the Sharma Decision the Federal Court Says: We See the Climate Risk but Cannot Act', *Guardian*, 16 March 2022.

[6]Christodoulidis borrows the term 'strategy of rupture' from the French anticolonial defence lawyer Jacques Vergès, who in his defence of Klaus Barbie (among others), deployed tactics that consisted in a 'maximal use of the "*tu quoque*", in a way that would bring the French in direct confrontation with their hypocritical denunciation of a crime that Vergès claimed underpinned their own colonial legacy—and particularly the national policy during the Algerian War'. E. Christodoulidis, 'Strategies of Rupture', (2009) 20 *Law and Critique* 3, at 5. As Vergès holds: 'La rupture bouleverse toute la structure du procès. Les faits passent au deuxième plan ainsi que les circonstances de l'action; au premier plan apparait soudain la contestation brutale de l'ordre publique.' ('The rupture upsets the entire structure of the trial. The facts take second place, as do the circumstances of the action; what suddenly appears in the foreground is the brutal contestation of the public order.' Translation by the author). J. Vergès, *De la stratégie judiciaire* (1968), at 86–7. See also *L'avocat de la terreur* (dir. B. Schroeder, 2007).

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| | Traditional Grammar of Climate Justice | Progressive Grammar of Climate Justice | Reparative Grammar of Climate Justice |
|---|---|---|---|
| MATERIALITY | From ***actual*** harms … Limitations: Strict causality for bounded harms | … to ***potential*** / ***foreseeable*** harms … Limitations: Differentially distributed harms | … towards ***entangled*** harms. Openings: Reckoning with structural harms |
| SUBJECTIVITY | From individual ***human*** rights … Limitations: Modernist anthropocentrism | … to ***non-*** / ***not-yet-living-human*** victims … Limitations: Liberal subjectivity / autonomy / representation | … towards ***more-than-human*** care. Openings: Reckoning with nonhuman harms |
| SPATIALITY | From ***territorial*** jurisdiction … Limitations: Fixed / bounded / colonial maps | … to ***extra-territorial*** jurisdiction … Limitations: Static / delineated territorial space | … towards ***terrestrial*** spatiality. Openings: Reckoning with planetary materialization of harms |
| TEMPORALITY | From ***present*** generations … Limitations: Post-harm / imminent risks | … to ***future*** generations … Limitations: Linear progress / near future given in advance | … towards ***enduring*** temporalities. Openings: Reckoning with ancestral and deep harms |

**Figure 1.** Grammars of Climate Justice – Reconfiguring the Material, Subjective, Spatial and Temporal Boundaries of Climate Justice

the order they seek to resist.[7] As such, the analytical framework I propose is best understood as a set of disruptive or 'disordering' legal actions.[8] In its broad empirical and conceptual scope, this is a synthetic and speculative contribution: its aim is to identify domains of law where our 'established, unexamined ways of thinking' are falling short, and explore disruptive strategies for reparative legal action and climate justice in the Anthropocene.

## 2. Reconfiguring climate 'harms'

Climate harms largely result from the globalization of industrial and urban ways of living. Anthropogenic disruptions of ecological processes triggered by the global fossil fuel economy and its resulting steep rise of greenhouse gas (GHG) emissions over time can arguably be viewed as a failure at planetary magnitude of the 'no-harm' rule.[9] This rule, recognized as an expression of customary international law, set out that a state is bound to 'prevent, reduce and control the risk of environmental harm to other states',[10] in addition to having an obligation to protect the environment within its own territory and jurisdiction. First enshrined in Principle 21 of the 1972

[7]As Christodoulidis reckons, the crux of a 'strategy of rupture' is when the story of rupture unfolds in a way in which 'an act of resistance registers without being absorbed, integrated or co-opted into the system against which it stands'. See ibid., at 5.

[8]My intervention thereby aligns with the process of 'disordering international law' put forward by Kelsall, who invites critical international lawyers to 'let go of liberal vocabularies in order to re-imagine how order might be constituted anew'. A focus on international legal disordering (i) 'departs from liberal vocabularies in which institutions and state practice, the rule of law and the universal, rational subject remain central to critique', so as to (ii) 'reconstitute norms, conventions and principles determined with reference to a multiplicity of spatial orders existing over time, including the orders of communities whose knowledge has thus far remained largely outside international law', while also (iii) 'resist[ing] the desire to frame any new, alternative grand narrative for international law'. M. Staggs Kelsall, 'Disordering International Law', (2022) 33 EJIL 729, at 731–2, 755. On this 'disordering' approach see also M. Petersmann, '"Re/de/composing" International Law', *Völkerrechtsblog*, 31 July 2024. https://voelkerrechtsblog.org/re-de-composing-international-law/.

[9]See A. Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (2016).

[10]*Trail Smelter Arbitration, United States v. Canada* (where Canada had to pay compensation for cross-border air pollution due to sulphur dioxide emissions from a smelter causing environmental damages to the US). The customary nature of the

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Stockholm Declaration on the Human Environment – which provides that states have 'the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction'[11] – it has since been reinscribed in multiple instruments, including the preamble of the United Nations Framework Convention on Climate Change (UNFCCC).[12]

Yet, in contrast to traditional cases of cross-border pollution, climate change is a phenomenon the causes and effects of which exceed full appreciation, thereby challenging but not evading the attribution of legal liability. Indeed, climate harms are best conceived as a permanent flow of entangled actions and reactions vastly spread across matter, subjects, space, and time. This physical reality is employed as a shield behind which actors hide their responsibilities and is used in court as salient tactic of de-responsabilization. In the *Torres Strait Islanders* petition, for example, the Australian representatives defined climate change as 'a global phenomenon arising from myriad acts committed by innumerable private and State entities over decades that are unquestionably beyond the jurisdiction and control of [one] State'.[13] The Australian government invoked this argument against the Torres Strait islanders to contest the alleged violation of their right to life and right to live on their islands in accordance with their traditional culture. As the case instantiates, the dispersed, diffused, and deferred nature of climate harms is being instrumentalized today by those historically most responsible in order to dilute their obligations towards those bearing the impacts. For example, in the *Torres Strait Islanders* petition the Australian representatives asserted indeed that the causal pathways involving anthropogenic climate change are 'intricate and diffuse' and that, consequently, 'a threat that is not attributable to a State cannot be ensured or protected by that State where such protection cannot be achieved by the State alone'.[14] As Angela Last puts it, while acknowledging being 'geophysically active', responsible actors attempt to evade their obligations by remaining 'politically passive'.[15]

To handle the complexity of climate harms as transboundary by nature, regimes of international regulation worked on turning the 'climate' into a governable 'object' – to ensure commitments from states and co-ordinate a global response to prevent and mitigate its causes and effects. As Stephen Humphreys reckons: '[a]ny claim to "governance" must presumably make an initial assumption that the thing to be governed may become a viable object of law—that it is, in short, governable'.[16] The governance of climate harms was facilitated by standardizing different GHGs and translating abstract units into 'objects' of governance and regulation, such as the 'tonne of carbon dioxide equivalent' (tCO2e)'.[17] This legal scaffolding was built to govern and regulate climate harms in ways similar to other environmental harms, based on a system of causality and

principle was recognized in the ICJ Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion of 8 July 1996, [1996] ICJ Rep. 226, para. 29.

[11]Stockholm Declaration of the United Nations Conference on the Human Environment, Principle 21.

[12]1992 United Nations Framework Convention on Climate Change, Recital 8 of the Preamble. See also 1992 Rio Declaration on Environment and Development, Principle 2; Convention on Biological Diversity, Art. 3.

[13]UNHRC, *Daniel Billy and others v. Australia*, CCPR/C/135/D/3624/2019 (2022), para. 6.7 [*Torres Strait Islanders* petition]. The petition was submitted against the Australian government to the UN Human Rights Committee (UNHRC) in 2019 by a group of Torres Strait islanders and their children. The UNHRC found that Australia's failure to take timely and adequate measures to protect the Indigenous islanders against adverse climate change impacts led to the violation of their rights to enjoy their own culture and to be free from arbitrary interferences with their private life, family, and home. It asked Australia to compensate the Indigenous islanders for the harm suffered, engage in meaningful consultations with their communities to assess their needs, and take measures to continue to secure the communities' safe existence on their respective islands.

[14]Ibid., para. 6.9.

[15]A. Last, 'We are the World? Anthropocene Cultural Production between Geopoetics and Geopolitics', (2017) 34 *Theory, Culture and Society* 147, at 163.

[16]S. Humphreys, 'Ungoverning the Climate', (2020) 11 TLT 244, at 244.

[17]J. Dehm, 'One Tonne of Carbon Dioxide Equivalent (1tCO2e)', in J. Hohmann and D. Joyce (eds.), *International Law's Objects* (2018), 305.

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attribution that organizes states' historical responsibilities for GHG emissions and other climate change-contributing activities.[18] This system of causality and attribution helps to concretize and make intelligible climate harms that, by their very nature, can never be reduced to a single perpetrator nor to a single victim.[19] Yet, since a causal link between a particular harm and a specific human rights violation must always be established for an 'actual interference' to exist – and hence for an applicant to be 'distinguished individually' and be admitted before a human rights mechanism – only few climate cases have fulfilled these admissibility criteria to date.[20] Whereas domestic constitutional and tort law-based litigations have so far been more successful in overcoming the challenges of causality to establish victimhood,[21] recent international litigations have also managed to fulfil these conditions. In the *Torres Strait Islanders* petition, for instance, the UNHRC indeed recognized that 'the risk of impairment of those rights, owing to alleged serious adverse impacts that have *already occurred* and are *ongoing*, is more than a theoretical possibility'.[22]

The causal nexus requirement has thus become an important point of contestation and a strategic site of transnational legal mobilization to loosen the link between individuated perpetrators and victims of climate harms. In both domestic and international settings, climate policies and legislations show a move from public to private perpetrators; from individual to aggregated or collective victims – whether 'elderly women', 'children' or 'future generations' – and from *actual* to *potential* or *foreseeable* harms.[23] Activists are pushing for environmental NGOs to be granted more scope and standing to legally challenge the actions and omissions of states and transnational corporations that disproportionately contribute to climate harms and differentially affect people vulnerable to their effects.[24] The involvement of NGOs to represent collective claims is

[18]See S. Mason-Case and J. Dehm, 'Redressing Historical Responsibility for the Unjust Precarities of Climate Change in the Present', in B. Meyer and A. Zahar (eds.), *Debating Climate Law* (2021), 170.

[19]As Latour remarked, 'causality is a highly peculiar *staging* of the procedures of thought to render understandable a tiny number of traits, and render totally incomprehensible a vastly greater number'. B. Latour, '*Onus Orbis Terrarum*: About a Possible Shift in the Definition of Sovereignty', (2016) 44 *Millenn. J. Int. Stud.* 305, at 318.

[20]By way of illustration, on 25 March 2021, the CJEU rejected the appeal by Mr. Carvalho and others against the inadmissibility of the '*People's Climate Case*' for lacking standing grounds: the 'victims' were not sufficiently and directly affected in a manner that is 'peculiar to them or by reason of circumstances in which they are differentiated from all other persons, and by virtue of these factors distinguishes them individually'. *Carvalho and Others v. Parliament and Council*, C-565/19 P, ECLI:EU:C:2021:252, paras. 46, 49.

[21]In a civil proceeding, the Urgenda Foundation was successful in obtaining standing to represent 886 Dutch citizens. *Urgenda Foundation v. The Netherlands* [2015], paras. 34, 37. The case was won on appeal in 2019. In a similar vein, in 2021, the German Constitutional Court ruled that Germany' Federal Climate Protection Act violated the human rights of a group of German youth under the German constitution and held that protecting the 'natural bases of life' obligates the state to protect its citizens from climate harms. *Neubauer et al. v. Germany* [2020]. Most recently, in 2023, a Montana state court decided in favour of 16 young Montanans ranging in age from five to 22 who brought the nation's first constitutional and youth-led climate lawsuit, claiming the state violated their right to a 'clean and healthful environment' by promoting the use of fossil fuels. Note, however, the recent striking down of the *Juliana* and *Sharma* cases, note 5, *supra*.

[22]UNHRC, *Torres Strait Islanders*, *supra* note 13, para. 7.10. In the recent *KlimaSeniorinnen* case too, the ECtHR found a violation of the right to effective protection by the state from serious adverse effects of climate change on the lives, health, well-being and quality of life of the applicants. *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*, ECHR, no. 53600/20. So too, in the *Sacchi* petition, although ultimately inadmissible due to lack of exhaustion of domestic remedies – the UN Committee on the Rights of the Child (UNCRC) found that the applicants 'have personally experienced a real and significant harm in order to justify their victim status'. UNCRC, Communication No. 104/2019, CRC/C/88/D/104/2019 (2021) [*Sacchi* petition], para. 9.14.

[23]This trend is embedded in broader policy developments. See The Maastricht Principles on the Human Rights of Future Generations (2023).

[24]In the EU, an amendment to the Regulation transposing the Aarhus Convention was adopted to ease the access of private parties and NGOs before courts in environmental issues. Regulation (EU) 2021/1767 of the European Parliament and of the Council of 6 October 2021 amending Regulation (EC) No 1367/2006 on the Application of the Provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community Institutions and Bodies, L 356/1.

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observable in the *KlimaSeniorinnen* case, brought before the European Court of Human Rights (ECtHR) by an association representing nearly 200 elderly women, while the *Greenpeace Nordic* case was brought by six young climate activists along with two environmental NGOs.[25] In domestic proceedings too, big corporations – from Royal Dutch Shell, to Exxon Mobile, RWE, and Holcim – are being sued for their historical actions and omissions to reduce their global carbon footprint.[26] These developments all *stretch* the understanding and scope of what constitutes climate 'harms', who is considered affected by them, and how this can be evidenced in court.

Indeed, aside from an in/direct representation of victims of climate harms before courts, NGOs and social movements for climate justice played a key role in concretizing the differential nature of climate harms in their historical origins and their material manifestations. This extension of climate harms and who is mostly affected by them is central to what some have identified as a 'decolonial turn' in climate litigation, following the 'rights turn' a decade earlier.[27] This is reflected in the increased attention paid to the intricate relations between colonialism and climate change, and expressed in how litigants from the global periphery and (post)colony demand accountability for (post)colonial forms of extractivism by actors located in the historic metropoles and industrial core.[28] A vast literature has established how climate harms are globally distributed alongside racial capitalist structures built throughout a European colonial history of trans-Atlantic slavery and plantation economies – or what Olúfẹ́mi Táíwò refers to as the 'global racial empire'.[29] The former UN Special Rapporteur on contemporary forms of racism, Tendayi Achiume, articulated this in her last report on 'Ecological crisis, climate justice and racial justice' by highlighting 'the racially discriminatory and unjust roots and consequences of environmental degradation, including climate change'.[30] Achiume deplored the consistent lack of visibility granted to regimes of imperial extraction that generated 'racial sacrifice zones' – or 'the ancestral lands of Indigenous peoples, territories of the Small Island Developing States (SIDS), racially segregated neighbourhoods in the Global North and occupied territories facing drought and environmental devastation'.[31] As Achiume warns: 'there can be no meaningful mitigation or resolution of the global ecological crisis without specific action to address systemic racism, in particular the historic and contemporary racial legacies of colonialism and slavery'.[32] What Achiume and others point out is the necessity to consider the structurally racialized nature of climate harms.

These new approaches to climate politics and litigation testify to a conceptual stretch from a narrow category of *actual* climate harms to a broadened recognition of *potential* or *foreseeable* harms, which expands the causality nexus. This reconfiguration of the material boundary of climate harms speaks, I contend, to a shift from a *traditional* to a more *progressive* grammar of

[25]See *KlimaSeniorinnen* case, *supra* note 22, para. 497; *Greenpeace Nordic and Others v. Norway*, ECHR, no. 34068/21.

[26]In 2021, the District Court in The Hague ordered Royal Dutch Shell to reduce its global carbon emissions from its 2019 levels by 45% by 2030. *Milieudefensie et al. v. Royal Dutch Shell*. On 12 November 2024, however, the Dutch Court of Appeal overturned parts of the case, ruling that no concrete reduction obligation can be imposed on Shell, neither for Scope 1-2 nor Scope 3 emissions. In 2022, 16 municipalities in Puerto Rico brought a lawsuit against Exxon Mobil to hold it liable for losses resulting from storms during the 2017 hurricane season. *Municipalities of Puerto Rico v. Exxon Mobil Corp*. In 2023, four inhabitants of the Indonesian island of Pari formally lodged a lawsuit against the Swiss-based major buildings materials company Holcim with the Cantonal Court of Zug in Switzerland. *Asmania et al. v. Holcim*.

[27]See J. Auz and P. Paiement, 'The Decolonial Turn in Climate Litigation: Towards a Political Ecology of Subaltern Strategies' (on file with author); J. Peel and H. M. Osofsky, 'A Rights Turn in Climate Change Litigation?', (2018) 7 TEL 37.

[28]Auz and Paiement's study is based on *Lliuya v. RWE*, *Union Hidalgo v. EDF*, *Daniel Billy et al. v. Australia*, and *Inclusive Louisiana et al. v. St James Parish et al.*

[29]O.O. Táíwò, *Reconsidering Reparations: Worldmaking in the Case of Climate Crisis* (2022), at 10–11.

[30]UN Doc. A/77/549 (2022), at 2.

[31]Ibid., paras. 2–3. Achiume draws on the concept of 'sacrifice zone' that the UN Special Rapporteur on human rights and the environment, David Boyd, ascribed to 'toxic environments' as 'extremely contaminated areas where vulnerable and marginalized groups bear a disproportionate burden of the health, human rights and environmental consequences of exposure to pollution and hazardous substances'. Report on Non-toxic Environment, A/HRC/49/53 (2022), para. 2.

[32]Ibid., at 2.

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climate justice by including possible harms in addition to those already actualized (as illustrated by the passage from the first to the second column in the first row of Figure 1). This progressive grammar, however, encounters two important limitations that inhibit claims for repairing climate harms: first, it is unable to reckon with longer lineages of colonial injustices that tie climate harms back to their historical origins and attend to a fuller spectre of their enduring effects over time (as I will further elaborate in Section 5); and second, it cannot recognize harms across 'species barriers' (as I will further elaborate in Section 3). It is on this level of *entangled* harms across space and time, across human and nonhuman species, that a *reparative* grammar of climate justice appears essential (as illustrated by the passage from the second to the third column in the first row of Figure 1). A reparative grammar of climate justice reconfigures the current boundaries of traditional rights-based approaches to climate harms in terms of subjectivity (i.e., who is affected by climate harms, as I elaborate in Section 3 and in the second row of Figure 1), spatiality (i.e., what is the territorial scope of climate harms, as I elaborate in Section 4 and in the third row of Figure 1), and temporality (i.e., how far in the past and future do climate harms stretch, as I elaborate in Section 5 and in the fourth row of Figure 1). As such, a *reparative* grammar of climate justice works with a reconfigured notion of *entangled* harms, that makes visible and legible the effects of climate change across distinct subjectivities and spatio-temporalities.

To illustrate my point, let us return to the *Torres Strait Islanders* petition where the Australian government invoked the nature of climate harms as a 'global phenomenon arising from myriad acts committed by innumerable private and State entities over decades that are unquestionably beyond the jurisdiction and control of [one] State'.[33] Instead of serving as a justification for *inaction* and a perpetuation of *injustice*, the diffused nature of climate harms could serve instead to ground a notion of *entangled* harms to be translated into specific places and peoples. A grammar attuned to dislocation and diffusion – with a vocabulary detached from the confines of causality that narrowly attribute *actual* and *potential* or *foreseeable* harms to single, individuated perpetrators and victims – enables reconfiguring and broadening the material boundary of climate justice. In this sense, the dispersed nature of climate harms would not be weaponized *against* vulnerable victims, but used *by* them to widen their claims for repair across the multiple spatio-temporalities through which they have been harmed. The *entangled* nature of climate harms enacts a shift in sensibility, in reckoning and in healing, that recognizes the history and multiplicity of 'transversal' and 'continuing' harms.[34] This shift, I argue, goes hand in hand with reconfiguring the boundaries of subjectivity, spatiality, and temporality of harm. It is to these intertwined points I turn next.

## 3. Reconfiguring the 'subjects' of climate harms

Who constitutes a 'subject' of rights in a climate-changed world is a question that has attracted much attention over the past decades. On the one hand, the category of *human* victims of environmental and climate harms has been broadened through a recognition of a self-standing human right to a healthy environment and a safe climate. This was concretized with resolutions

[33]See *Torres Strait Islanders*, *supra* note 13, para. 6.7

[34]The notion of 'transversal harm' refers to socio-ecological harms that are 'cross-cutting at the intersection of multiple registers of harmful effects' – both direct and indirect, visible and invisible (or not yet visible), physical and psychological, material and immaterial, human and nonhuman. A. Kotsakis and A. Boukli, 'Transversal Harm, Regulation, and the Tolerance of Oil Disasters', (2023) 12 TEL 71, at 88. 'Continuing harms' refer to 'violations with continuing effects' that usually fall outside the scope of human rights treaties, which only bind parties after an instrument they ratified entered into force. G. Baranowska, 'How Long Does the Past Endure? "Continuing Violations" and the "Very Distant Past" before the UN Human Rights Committee', (2023) 41 *Netherlands Quarterly of Human Rights* 97.

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adopted by both the UN Human Rights Council and the UNGA in 2021 and 2022 respectively.[35] With the recognition of a stand-alone substantive right to a healthy environment and a safe climate, less stringent rules and procedures must now be fulfilled to link environmental and climate harms to violations of justiciable rights. On the other hand, the category of right-holders has also been expanded to *nonhuman* victims, whenever 'rights' are granted to 'natural' entities. After decades of mobilization, the granting of rights to so-called 'nature' is now widely seen as the vanguard of environmental and human rights law. This is evident in domestic jurisdictions – with 39 countries having adopted constitutional, legislative, or policy measures recognizing 'rights of nature' as of 2022[36] – and in regional and international settings, where developments on 'rights of nature' are also being proposed.[37] As of today, 'rights of nature' have been recognized by many domestic courts,[38] while international human rights mechanisms such as the Inter-American Court of Human Rights (IACtHR) have done so in a declaratory form or as part of Indigenous cosmovisions.[39]

Both trends – of recognizing a self-standing human right to a healthy environment and a safe climate as well as nonhuman 'rights of nature' – are often articulated in relation to rights of 'future generations', thereby further extending the category of climate harms to both living and not-yet-living human and nonhuman subjects. By way of illustration, in the *Torres Strait Islanders* petition, the applicants argued that '[f]uture generations, including the [Aboriginal] children named in the complaint, have a fundamental right to a stable climate system capable of sustaining human life, based on the right of the child to a healthy environment'.[40] They also invoked an 'intergenerational element of cultural transmission' to safeguard their 'ability to transmit their culture across generations'.[41] In the *Sacchi* petition too, the applicants contended that 'the climate crisis is a children's rights crisis' – a question of 'intergenerational justice for children and posterity'.[42] The applicants stressed that 'the scope of the climate crisis should not be reduced to the harms of a small

[35]UNHRC, The Human Right to a Safe, Clean, Healthy and Sustainable Environment, A/HRC/48/L.23/Rev.1 (2021); UNGA, The Human Right to a Clean, Healthy and Sustainable Environment, A/76/L.75 (2022).

[36]A. Putzer et al., 'Putting the Rights of Nature on the Map: A Quantitative Analysis of Rights of Nature Initiatives Across the World', (2022) 18 *Journal of Maps 89*. The granting of legal personhood to Mar Menor in 2022 made Spain the first European country to formally recognize 'rights of nature'.

[37]M-C. Petersmann, 'The EU Charter on Rights of Nature: Colliding Cosmovisions on Non/Human Relations', in A. Alvarez-Nakagawa and C. Douzinas (eds.), *Non-Human Rights: Critical Perspectives* (2024), 141.

[38]See E. Jones, 'Posthuman International Law and the Rights of Nature', (2021) 12 JHRE 76.

[39]The IACtHR recognized that the right to a healthy environment 'protects the components of the environment ... not only because of the benefits they provide to humanity or the effects that their degradation may have on other human rights, such as health, life, or personal integrity, but because of their importance to the other living organisms with which we share the planet that *also merit protection in their own right*'. IACtHR, Advisory Opinion, OC-23/17 (2017), para. 62 (emphases added). While not necessarily framed as 'rights', the IACtHR also recognized the sacred protection of natural entities for their own interests and those of communities that consider themselves intra-connected with such sacred places. In the *Kichwa* case, the IACtHR observed how '[a]ccording to the worldview of the Sarayaku People, their land is associated with a set of meanings: the jungle is alive and nature's elements have spirits (Supay), which are interconnected and whose presence makes places sacred'. *Kichwa Indigenous People of Sarayaku v. Ecuador*, [2012] IACtHR, para. 57. For a detailed analysis of this case law see M-C. Petersmann, *When Environmental Protection and Human Rights Collide: The Politics of Conflict Management by Regional Courts* (2022).

[40]See *Torres Strait Islanders*, *supra* note 13, paras. 3.4, 3.7. Although UNHRC members differed on whether the right to life had *yet* been breached, the majority found no violation of this right, only of the applicants' right to private and family life and right to enjoy their Indigenous culture. The UNHRC also recognized climate change as constituting 'extremely serious threats to the ability of both present and future generations to enjoy the right to life'. UNHRC General Comment No. 36 on the Right to Life, CCPR/C/GC/36 (2019), para. 62. In 2023, the UNHRC published its General Comment No. 26 on Children's Rights and the Environment, with a special focus on climate change.

[41]Ibid., para. 6.12. Note that this 'intergenerational cultural transmission' also stretches towards the past, since 'upkeeping ancestral graveyards and visiting and feeling communion with deceased relatives is at the heart of their cultures' – ceremonies now threatened by the disappearance of their land due to sea level rise (ibid., para. 5.2).

[42]See *Sacchi* petition, *supra* note 22, paras. 3.2, 3.3.

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number of children' since '[u]ltimately, at stake are the rights of every child, everywhere'.[43] Figuratively, in relation to climate harms, children stand in 'quantum superposition', being both of present and of future generations.[44] A noticeable reconfiguration of the subjective boundary of climate harms is thus broadening its scope from *present* to *future* generations' rights of both *human* and *nonhuman* victims, thereby shifting attention from a *traditional* anthropocentric grammar of climate justice limited to actual human victims, to a more *progressive* grammar that attends to the rights and well-being of human and nonhuman species across time (as illustrated by the passage from the first to the second column in the second row of Figure 1).

I see, however, three main risks with such extensions of legal subjectivity, in particular with an inclusion of nonhumans or natural entities in the category of legal subjects. First, turning natural entities into 'subjects' risks disavowing their relational dynamism and agency, and hence also their inherently de-individualistic nature. The entity being protected, in other words, is cut-off from its milieu as it gets reified as a self-possessed, autonomous, and individualized 'subject' of rights. Rather than focusing on the rights of an abstract autonomous entity, what matters are the relational and symbiotic processes that sustain its living ecology. Attending to the cyclical, metabolic, and flowing dynamics of ecological processes – instead of the protection of delineated or bounded entities in isolation from the milieu in which they thrive – demands a grammar attuned to *more-than-human* concerns and care for liveable conditions. Liveable conditions – or what Achille Mbembe describes as conditions of 'planetary habitability' – are cared for when the agency of nonhumans, which both enables and constrains that of humans, is attended to.[45] This is precisely what is at stake with the invitation to think of human and nonhuman agency as *entangled*.[46] Against a re-inscription of liberal ideals of autonomy and individuality, *more-than-human* approaches to human-nonhuman relations emphasize the constitutive and disruptive role that nonhuman agency plays in enabling human agency (and vice versa).[47] What matters from a more-than-human perspective, then, are the living – emergent, dynamic, immanent – ecologies that bind and unfold from human and nonhuman relations across matter, space, and time. In contrast, granting rights to 'nature' or 'natural entities' risks pushing in the opposite direction, by insisting on the autonomous legal status of nonhumans – a status that often only appears for nonhumans with a particular functional, aesthetic, or sentimental value to humans themselves.

The second risk I sense with an expansion of legal subjectivity is the reification of the human being *itself* as an autonomous and individualized subject of rights – an image now projected onto nonhumans. This original 'subject' of law and of rights is grafted on an ideal-type figure of a free, self-possessed, and autonomous human being. In the modern legal tradition, this subject was contrasted to nonhuman objects of law that could be owned and appropriated – not only *non*-human lands, natural resources, and animals, but also *in*-human chattel slaves, Native, and Aboriginal peoples once considered *less-than*-human. As Sylvia Wynter noted: '[t]he indigenous, the unchosen, was to be transformed from the *human subject* of his own culture into the *inhuman object* of the European culture'.[48] The liberal category of the legal 'subject' cannot be disentangled from these lineages. Including nonhumans into this category risks therefore disavowing – rather than confronting – these underpinnings, and cast a shadow on the constitutive exclusion of 'non-

[43]Ibid., para. 3.7. Although the petition did not reach the merits stage, the UNCRC noted that 'the authors have prima facie established that they have personally experienced a real and significant harm in order to justify their victim status', ibid., para. 9.14.

[44]In quantum physics, 'quantum superposition is when two contradictory properties are, in a certain sense, present together. An object could be here but at the same time elsewhere'. C. Rovelli, *Helgoland: The Strange and Beautiful Story of Quantum Physics* (2022), at 65.

[45]See 'Reflections on Planetary Habitability. A lecture by Achille Mbembe', 2023.

[46]This understanding draws on Barad's notion of 'intra-action', which signifies the 'mutual constitution of entangled agencies'. See Barad, *supra* note 2, at 33.

[47]On the distinctions between 'more-than-human' theories in relation to and against 'rights of nature' see M-C. Petersmann, 'Life Beyond the Law – From the "Living Constitution" to the "Constitution of the Living"', (2022) 82 ZaöRV 769.

[48]S. Wynter, *Black Metamorphosis: New Natives in a New World* (1970s), at 10.

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White' subjectivities from this category.[49] As Zakiyyah Iman Jackson warns: a hasty 'move beyond the human' presents the risk of 'mov[ing] beyond race, and in particular Blackness'.[50] An expansion of legal subjecthood that does not reckon with and desediment the ontological assumptions that underlie this apparatus might conceal the racialized foundations of the modernist ordering of relations between 'subjects' and 'objects' of law.

Finally, I see a risk in overlooking unequally distributed harms when speaking of 'future generations' as unqualified 'climate victims' (a point to which I return in Section 5). With human rights mechanisms now recognizing not only *actual* but also *potential* and *foreseeable* climate harms as valid grounds of admissibility, so too are the victims of such harms shifting from strictly *living* to *non-* or *not-yet-living*-human subjects and right holders (as illustrated by the passage from the first to the second column in the second row of Figure 1). Yet, by expanding the scope of victims of climate harms when invoking the rights of 'future generations', these projected 'subjects' tend to be framed in abstract and homogenous terms. As Stephen Humphreys observes: '[f]uture generations rhetoric calls up a pair of unfeasible trans-historical subjects – a concrete populace in its global entirety facing an abstract multitude across eternity – and posits a relationship between them that is neither feasible nor even plausibly imaginable'.[51] In addition to this trans-historical abstraction, a 'fetish of unity' – to borrow a term Claire Colebrook uses in reference to victimhood in the Anthropocene more generally[52] – lingers when speaking about 'victims' of climate harms of present or future generations, which disavows the inequalities that affect some beings more than others (both now and tomorrow). Speaking of unqualified 'climate victims' risks therefore turning a blind eye to broader and intersectional issues of climate justice, and notably the problem of race. As Axelle Karera warns indeed, a universalizing narrative of climate victims erases racially driven forms of victimization between 'climate privileged' and 'climate precarious' beings along specific lines of colonial geography.[53] At the domestic level, racial biases and blind spots underpin even successful climate litigations, as evidenced by the neglect in the Dutch *Urgenda* case to even mention the distinctive vulnerabilities to climate change that Dutch Caribbean island(er)s suffer from.[54] On 11 January 2024, eight inhabitants of the Dutch Caribbean island of Bonaire filed a case with Greenpeace Netherlands against the Dutch government, accusing it of violating their human rights and demanding it does its 'fair share' to limit global temperature rise to 1.5°C by

[49]M. Petersmann, 'In the Break (of Rights and Representation): Sociality Beyond the Non/Human Subject', (2023) *International Journal of Human Rights*. A whole tradition of TWAIL focuses precisely on this point. See U. Natarajan, 'Who Do We Think We Are? Human Rights in a Time of Ecological Change', in U. Natarajan and J. Dehm (eds.), *Locating Nature: Making and Unmaking International Law* (2022), 200; S. Abdelkarim, 'Subaltern Subjectivity and Embodiment in Human Rights Practices', (2022) 10 LRIL 243; R. Kapur, 'In the Aftermath of Critique We Are Not in Epistemic Free Fall: Human Rights, the Subaltern Subject, and Non-liberal Search for Freedom and Happiness', (2014) 25 *Law and Critique* 25.

[50]Z. I. Jackson, 'Outer Worlds: The Persistence of Race in Movement "Beyond the Human"', (2015) 21GLQ 215, at 216; Z. I. Jackson, *Becoming Human: Matter and Meaning in an Antiblack World* (2020).

[51]S. Humphreys, 'Against Future Generations', (2022) 33 EJIL 1061, at 1063. Humphreys' concern with 'future generations' language stems not merely from the imprecision of its rhetorical appeal, but also from the risk that it slides into nationalism: in practice, when hard choices arise, one might expect 'local' future generations to be preferred in any given context (a slippage that begins with an implicit appeal to 'our children', as I elaborate in Section 5).

[52]C. Colebrook, 'What is the Anthropo-Political?', in T. Cohen, C. Colebrook and J. H. Miller (eds.), *Twilight of the Anthropocene Idols* (2016), 81, at 82.

[53]A. Karera, 'Blackness and the Pitfalls of Anthropocene Ethics', (2019) 7 *Critical Philosophy of Race* 32, at 34. Karera develops this argument in relation to climate refugees, in reference to N. Tuana, 'Climate Apartheid: The Forgetting of Race in the Anthropocene', (2019) 7 *Critical Philosophy of Race* 1. On climate migration and its relation to claims of reparative justice, see C. G. Gonzalez, 'Migration as Reparation: Climate Change and the Disruption of Borders', (2020) 66 *Loyola Law Review* 401.

[54]The UNFCCC, Kyoto Protocol, and Paris Agreement are only applicable to the European Netherlands, not in the most vulnerable Dutch Caribbean Islands. See D. Misiedjan, 'Separate but Equal in the Protection against Climate Change? The Legal Framework of Climate Justice for the Caribbean part of the Kingdom of The Netherlands', (2023) 189 *Geographical Journal* 613. While France ratified the Paris Agreement on behalf of its overseas territories, Ferdinand highlights similar (neo)colonial dynamics in tackling environmental issues. See 'The Masters' Chemistry (Martinique and Guadeloupe)', in M. Ferdinand, *Decolonial Ecology: Thinking from the Caribbean World* (2022), 106.

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reaching net-zero by 2040, and helps its most vulnerable territories adapt to the impacts of climate change.[55] At the international level too, the *Torres Strait Islanders* petition is a case in point, where the state's neglect in climate adaptation and mitigation programmes for the region and its inhabitants – who constitute only 0.14 per cent of the total population of Australia, yet count among its most vulnerable people – also results from a distancing, invisibilization, and 'othering' of remote climate victims, in comparison to the 'homeland'. Tellingly, while the petitioners invoked their *particular* vulnerabilities as Aboriginal inhabitants of a low-laying island that risks being inundated and hence uninhabitable in the coming decade due to the inaction of the state, the latter invoked a colour-blind defence of its commitment 'to protect Australian children'.[56] But a generic reference to 'Australian children' erases the historical and material differences between settler Australians and Aboriginal communities on whose land the former live. No attention was paid, in other words, to the colonial history that binds the Torres Strait region to Australia in particular ways, which should in theory trigger a different set of obligations towards the islanders.[57] These problems are far from new. The invocation of a generic universal 'human' referent is recurrent in human rights law, and today widely underpins discourses on the *Anthropos*-cene. Taken together, what these three sets of risks reveal is that a shift from a *traditional* to a *progressive* grammar of climate justice articulated in relation to *living* and *not-yet-living human* and *nonhuman* subjects and right holders, risks entrenching endemic inequalities that determine who is forced to move and who has the privilege of keeping their homes and nations.[58]

What is more, as Dipesh Chakrabarty reminds us, whether climate harms are blamed on states and transnational corporations that are 'retrospectively guilty' or those that are 'prospectively guilty' – considering that China has now surpassed the US as the largest emitter of carbon dioxide – is a question that is 'tied no doubt to the histories of capitalism and modernization'.[59] But Chakrabarty also invites us to critically investigate how the 'global' inequalities of 'globalization' differ from the 'global' inequalities of 'global warming'. If the former demand to 'zoom in to the details of intrahuman injustice' to refuse the category of 'the human as potentially the same everywhere', the latter demand to 'zoom out of that history – or else we do not see the suffering of other species and, in a manner of speaking, the suffering of the planet'.[60] Indeed, climate harms also affect nonhuman beings who must cope with changing patterns of in/habitability and un/liveability due to sudden or slow-onset events like shifting temperatures, droughts, floods, extinctions, and infrastructural barriers. As of 2022, it was estimated that half of all species were already on the move because of land degradation and climate change.[61] Both nonhuman animals and plants are migrating due to changing climates.[62] Ultimately, the ability to live is threatened both by a warming globe and by material and immaterial infrastructures that unequally distribute a right to move. A *reparative* grammar for climate justice should therefore account for such historical intra- and inter-species injustices, to 'care for each other

[55]A study commissioned by Greenpeace found that sea-level rise could cause permanent flooding on parts of the island by 2050 and submerge one-fifth of it by 2100. As one of the plaintiffs held: 'It shouldn't matter whether you live on Bonaire, on Ameland, or in Valkenburg. It's the Dutch government's duty to protect all of us from the consequences of the climate crisis . . . There are plans in place to protect the European Netherlands against sea-level rise and other consequences of the climate crisis, but for Bonaire this is not yet the case'. C. Vlavianos, 'The courageous people demanding climate justice for Bonaire', *Greenpeace*, 11 January 2024 available at www.greenpeace.org/international/story/64732/bonaire-climate-justice-lawsuit.

[56]See *Torres Strait Islanders*, *supra* note 13, para. 4.12 and note 4.

[57]In important ways, the claim I make here is distinct from the call for *extra*-territorial jurisdiction I address in the next section, since we are here within the 'territorial' jurisdiction of states with regard to their overseas territories, as former colonies now formally incorporated within their territorial boundaries.

[58]A. Baldwin, *The Other of Climate Change: Racial Futurism, Migration, Humanism* (2022).

[59]D. Chakrabarty, 'The Climate of History: Four Theses', (2009) 35 *Critical Inquiry* 197, at 218.

[60]D. Chakrabarty, *The Climate of History in a Planetary Age* (2021), at 137.

[61]R. Matthew et al., 'Species on the Move: Environmental Change, Displacement and Conservation', (2022) 112 *Annals of the American Association of Geographers* 654.

[62]J. Bridle, 'The Speed of a Tree: How Plants Migrate to outpace Climate Change', *Financial Times*, 1 April 2022.

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across generations, borders and other barriers', including 'species barriers', as Alexis Pauline Gumbs puts it.[63]

Against this backdrop, thinking with the notion of *more-than-human* care – rather than human and nonhuman rights – might enable better articulations of reparative climate justice claims (as illustrated by the third column in the second row of Figure 1). Against the first risk of separation and re-inscription of autonomy elaborated above, the more-than-human insists on relationality, dynamism, and entanglements. It conceives of humans and nonhumans not as strictly independent, but recognizes humans and nonhumans' agency as emerging from and enacted through their encounters and asymmetrical power relations. Against the second risk of reification of an autonomous, individuated, and self-possessed 'subject' – whether human or nonhuman – as elaborated above, the more-than-human insists on a displacement of this modern ideal-type figure. It suspends and refuses liberal forms of subjectivity to open up a stronger sense of care for those historically excluded from the category of the 'subject'. Finally, against the third risk of generic *victimhood* elaborated above, the notion of more-than-human *care* insists on situated placements of entangled harms attentive to uneven distributions of suffering and power to (re)act across and between species.[64] Yet, to make sense of such situated placements and give flesh to a reparative grammar of climate justice, the notion of 'territoriality' needs to be reconfigured too, as I argue in the next section.

## 4. Reconfiguring the 'spatiality' of climate harms

While climate harms are planetary, they manifest at localized spacetimes. The spatial expression of climate harms only acquires social meaning through their taking place in local, situated, and embodied materializations.[65] At first glance, rights-based approaches to climate harms can therefore seem particularly appropriate to bridge the planetary predicament of climate change with the everyday lived experience of its harms. Indeed, alleged violations of rights are inherently 'event focused, time bound, and body bound'.[66] As such, rights-based approach can strategically 'scale down' the planetary nature of climate harms and relate them to particular individuals and places.[67] Yet, a rights-based approach is also cabined by static, fixed, and often colonially inherited delimitations of states' territories. As with other regimes of international law, jurisdictional space in environmental and human rights law is circumscribed by cartographic co-ordinates that delimit states' sovereignty as well as the reach of rights and responsibilities.[68]

Confronting these traditional *territorial* limitations, the push towards *extra-territorial* obligations appeared as a progressive strategy deployed in climate litigation.[69] In light of the

[63]A. P. Gumbs, *Undrowned: Black Feminist Lessons from Marine Mammals* (2020), at 151.

[64]A focus on 'victimhood' perpetuates a disabling logic that disempowers 'victims' by categorizing them as damaged and voiceless. A 'damage-centred' narrative identifies legal practitioners, litigants and scholars as powerful 'experts', and those they represent as powerless 'victims'. E. Tuck, 'Suspending Damage: A Letter to Communities', (2009) 79 *Harvard Educational Review* 409. On the construction of victimhood and its politics, see R. Krystalli, *Good Victims: The Political as a Feminist Question* (2024). On 'more-than-human care', see M-C. Petersmann, 'Response-abilities of Care in More-than-Human Worlds', (2021) 12 JHRE 102.

[65]'Materializing Climate', in A. M. Bauer and M. Bhan, *Climate without Nature: A Critical Anthropology of the Anthropocene* (2017), 1, at 19.

[66]Characteristics that Nixon attributes to 'conventional assumptions about violence as a highly visible act that is newsworthy'. R. Nixon, *Slow Violence and the Environmentalism of the Poor* (2013), at 2–3.

[67]On law as a medium for 'upscaling' an idea of human justice and 'downscaling' climate science, see H. Y. Kang, 'What if All we can See are the Parts, and There is not a Whole: Elements and Manifestations of the Making of Law of "Climate Justice"', (2019) 23 *Law, Text, Culture* 138.

[68]On how particular perceptions of 'nature' are embedded in thinking about 'jurisdiction over territory', see K. Mickelson, 'The Maps of International Law: Perceptions of Nature in the Classification of Territory', (2014) 27(3) LJIL 621.

[69]The difficulty of establishing *extra*-territorial obligations is evidenced, however, by the recent inadmissibility of the *Duarte Agostinho* application before the ECtHR. Six young Portuguese had filed a complaint against 33 member states of the Council

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inherently transboundary nature of climate harms, human rights mechanisms like the IACtHR and the UNCRC recognized both 'domestic and cross-border contributions to climate change and the carbon pollution knowingly emitted, permitted, or promoted by [a] State party from within its territory', as sufficient grounds to establish jurisdiction.[70] This entails an extra-territorial obligation of states and private entities to protect the rights of those beyond their territory in relation to environmental matters. But the extra/territorial binary at work here reinforces the centrality of territoriality as jurisdictional space.[71] Yet, the dichotomy of what harm registers as *either* extra- *or* territorial sits uncomfortably with phenomena like climate harms, since changes in the biogeochemical cycle of carbon inevitably exceed and disrupt this binary logic.[72] As Péter Szigeti argues, such cycles 'evade and transcend not only property boundaries and national boundaries, but also the boundaries between living organisms, organic matter and inorganic minerals; and between solid, liquid, and gaseous forms of matter'.[73] In contrast to a *traditional* territorial grounding of jurisdiction, a *progressive* extra-territorial one expands state and non-state actors' responsibilities and obligations to adapt to and mitigate climate harms. Both of these grammars of climate justice, however, are unable to account for impacts of global warming that transcend a direct cause-and-effect rationality. If multiple and overlapping jurisdictions can be recognized for harms enacted through the actions and omissions of several states and/or non-state actors, direct causality and attribution remain determined by a territorial spatiality based on where the harms took place and materialized.

Fundamentally, I am not suggesting here that causality and attribution do or should not matter. They are and must remain essential, in order to hold actors accountable for harms enacted across subjects, space, and time. What I argue instead is that the 'direct' causality that activates and conditions attribution based on the territorial emplacement of harmful activities should be and in fact already are reconfigured in ways more attuned to the dynamisms of biogeochemical cycles today. These developments are reconfiguring the jurisdictional doctrine from the *ground* up, by *de*-territorializing and re-*terrestrializing* it. Let me take two examples from domestic tort law-based litigations to illustrate my point. In 2015, Saúl Luciano Lliuya, a Peruvian farmer who lives in Huaraz in the Peruvian Andes, filed claims with the support of NGO Germanwatch for declaratory and injunctive relief as well as damages in the District Court of Essen (Germany)

of Europe, who fail to reduce their GHG emissions in a way to keep temperature rise to 1.5 degrees Celsius, as demanded by the Paris Agreement. With respect to extra-territorial jurisdiction, the ECtHR found no grounds to expand the judicial application as requested by the applicants. Territorial jurisdiction was only established in respect of Portugal, but deemed inadmissible due to the fact that domestic remedies had not been exhausted. *Duarte Agostinho and Others v. Portugal and 32 Other States*, ECHR, no. 39371/20, paras. 127, 145, 155, 168–214.

[70]See *Sacchi* petition, *supra* note 22, paras. 9.2, 9.5. The UNCRC referred (in paras. 9.5 and 9.7) to the IACtHR, which recognized the extra-territorial jurisdiction of states in relation to environmental harms. See *Advisory Opinion OC-23/17*, *supra* note 39, paras. 119, 133, 174.

[71]On the boundary-reinforcing terminology of extra-territoriality, see S. Seck, 'Moving Beyond the E-word in the Anthropocene', in D. S. Margolies et al. (eds.), *The Extraterritoriality of Law: History, Theory, Politics* (2019), 49. On how 'the *extra*-ordinary element [of extra-territoriality] can be eliminated given that the "ordinary" [the territorial] has the capacity to explain the spatial strategy for the exercise of power regardless of where it is', see G. Lythgoe, 'Eradicating the Exceptional: The role of Territory in Structuring International Legal Thought', (2024) 37(2) LJIL 305, at 320.

[72]In contemporary cartography, 'moving' and 'potential' – rather than fixed and delimited – maps are being designed to make sense of the spatial implications of climate change materializations. See F. Aït-Touati, A. Arènes and A. Grégoire, *Terra Forma: A Book of Speculative Maps (2022)*; M. Ferrari, A. Pasqual and A. Bagnato (eds.), *A Moving Border: Alpine Cartographies of Climate Change* (2019).

[73]P. Szigeti, 'A Sketch of Ecological Property: Toward a Law of Biogeochemical Cycles', (2021) 51(1) *Environmental Law* 41, at 65. As Szigeti states: '[t]he well-known cause of climate change is the conversion of the carbon cycle into a "carbon line": taking carbon (the "C" in CO2 and CH4) from the Earth's crust and pumping it into the atmosphere [by] extracting and burning coal, oil, and gas' (ibid., at 56). Elsewhere, Szigeti calls into question the extra/territorial foundation of jurisdiction in international law more broadly. P. Szigeti, 'In the Middle of Nowhere: The Futile Quest to Distinguish Territoriality from Extraterritoriality', in Margolies et al., *supra* note 71, at 30.

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against RWE – Germany's largest electricity producer.[74] Lliuya alleged that RWE, having knowingly contributed to climate change by emitting substantial volumes of GHGs throughout time, bore *some* responsibility for the melting of glaciers near Huaraz, thereby threatening the glacial lake of Palcacocha located above Huaraz to overflow and partially destroy his home. The district court dismissed Lliuya's requests, arguing that 'no "linear causal chain" could be discerned amid the complex components of the causal relationship between particular [GHG] emissions and particular climate change impacts'.[75] In 2017, however, the Higher Regional Court of Hamm recognized the complaint as admissible. This appeal court is currently tasked to review the expert opinion on RWE's $CO_2$ emissions and assess its 'contributory share' of responsibility in relation to the climate harms at stake. The determination of this 'contributory share' is worth quoting in full for its remarkable terrestrial or 'planetary' approach and understanding:[76]

a) The $CO_2$ emissions released by the defendant's power plants rise into the atmosphere and, due to physical laws, lead to a higher density of [GHG] throughout the earth's atmosphere.
b) The compression of [GHG] molecules results in a decrease in global heat radiation and an increase in global temperature.
c) As a result of the resulting increase in average temperatures, also locally, the melting of the Palcaraju glacier accelerates; the glacier loses extent and retreats, the water volume of Palcacocha Lagoon increases to a level that can no longer be maintained by the natural moraine. Both overflowing and breaching of the natural moraine and/or the two artificial dams must be considered.
d) *The contributory cause of the defendant in the chain of causation shown under a) to c) is measurable and calculable. It amounts to 0.47% to date. A possibly deviating determined causation share is to be quantified accordingly by the expert.*[77]

Consequently, the compensation should amount to 0.47 per cent of the total costs – the 'same percentage as RWE's estimated contribution to global industrial GHG emissions since the beginning of industrialization (from 1751 onwards)' – amounting to a $20,000 contribution to a government project to stabilize the lake.[78] This argument was justified by the reasoning that the parties stand in a 'global neighbourly relationship' despite living more than 10,000 kilometres apart. The concept of 'neighbourly relationship' – which is based on a property interference provision under Section 1004 of the German Civil Code – is usually invoked to seek relief from direct neighbours for actual or potential harm to their property. This can involve a nuisance relating to environmental pollution if claimants can prove their neighbour's responsibility. In this case, however, the lawyers 'expand[ed] the legal conception of neighbourliness to encompass relations across the planet: as climate change connects RWE and Saúl, it makes them neighbours'.[79] As Noah Walker-Crawford holds: the 'claim against RWE stretches Section 1004 [of the German Civil Code] across a planetary scale'.[80] While the case is still pending and it

[74] *Luciano Lliuya v. RWE AG* (2015), Case No. 2 O 285/15, Essen Regional Court.

[75] Ibid., para. 45 (translated from German).

[76] The 'terrestrial' is related to the 'planetary' – a concept used in critical Anthropocene studies to convey a sense of interconnectedness that decentres humans from traditionally anthropocentric understandings of global affairs, and acknowledges the entangled agencies between humans and nonhumans across space and time. See Chakrabarty, *supra* note 60; N. Clark and B. Szerszynski, *Planetary Social Thought: the Anthropocene Challenge to the Social Sciences* (2020). On the 'planetary' and its distinction from an Earth system approach see also M-C Petersmann, 'Sympoietic Thinking and Earth System Law: The Earth, its Subjects and the Law', (2021) 9 ESG 100114, especially at 3–4.

[77] Order of Higher Regional Court of Hamm (2021), at 3 (emphases added).

[78] See *Lliuya v. RWE*, *supra* note 74. See also N. Walker-Crawford, 'Climate Change in the Courtroom: An Anthropology of Neighbourly Relations' (2023) 23 *Anthropological Theory* 76, at 77.

[79] Ibid., at 78.

[80] Ibid., at 88. Walker-Crawford addresses the methodological and theoretical challenges of studying a phenomenon that draws connections across the planet, whilst allowing for an ethnographically grounded understanding of global warming.

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remains uncertain how the German judges will address these evidentiary questions, they conducted a site-visit in the Andes in May 2022 to assess the level of risk posed by the melting glaciers and possible overflow of Lake Palcacocha to Lliuya's home.[81] What this case shows is therefore a transformation in establishing jurisdiction by reconfiguring the *extra-territorial* boundary of climate harms through a *terrestrial* lens. A reparative grammar of climate justice articulated along those lines can hold major contributors to climate change accountable by *re-pairing* their responsibilities and the harms incurred across a 'planetary' scale.

In a similar vein, in July 2022, four inhabitants of the Indonesian island of Pari lodged a lawsuit against the Swiss-based cement producer Holcim – the world's largest manufacturer of building materials.[82] In *Asmania et al.* v. *Holcim*, the plaintiffs' demands are threefold: that Holcim reduces its $CO_2$ emissions by 43 per cent by 2030 (to align with the 1.5° degree target); that it co-finances adaptation measures on Pari (such as mangrove plantations); and that it pays 'loss and damages' for its role in the climate crisis, the amount of which was calculated as proportional to Holcim's contribution to overall climate damages (namely a total of 0.42 per cent of all global industrial $CO_2$ emissions since 1750, and of 0.48 per cent between 1950 and 2021).[83] Like in *Lliuya* v. *RWE*, a move from an *extra-territorial* approach to a 'planetary' or *terrestrial* one is observable in this case, since it is not Holcim's direct activities *in* Pari that matter to establish extra-territorial jurisdiction, but the implications of Holcim's general activities and its overall role in the accumulated stock of carbon in the atmosphere over time, which serves to account for its responsibility. Holcim's obligations, like RWE, are here located on the scale of the biogeochemical cycle of carbon and its planetary or terrestrial dynamism, rather than based on the extra/territorial activities of transnational corporations, as observed for example in litigations involving the Bille and Ogale communities against Shell's activities *in* the Niger Delta.[84] Far from diluting the responsibilities of state and non-state actors across space and time, what this analysis shows is that the dynamisms of ecological processes across planetary scales demands different ways of conceptualizing and articulating climate justice claims. A move from a traditionally *territorial* to a progressive *extra-territorial* grammar of climate justice is now supplemented by a more radical, transformative, *reparative* grammar of climate justice expressed in terms of the *terrestrial* (as illustrated by the third row of Figure 1).

This jurisdictional extension is one way of *grounding* a planetary sensibility and terrestrial understanding by reconfiguring legal concepts and actions. This is, more generally, a conceptual confrontation with law's inability to account for the dynamic, cyclical, and agential processes of ecological concerns, of which transboundary climate harms are only one example. This blind spot has long been deplored by Indigenous scholars who drew attention to how Euro-Western legal frameworks erased Indigenous cosmologies where such relational perceptions on spatiality are prevalent.[85] In an attempt to overcome the territorial cuts of traditional cartographic and jurisdictional constraints, today a revitalized materialist turn in terrestrial theorization highlights the relational and more-than-human dynamisms of 'terrains'.[86] A growing interest in non-static, vertical, and volumetric qualities of ecological processes across new spatial heights and depths –

[81]S. Steininger and J. C. Herrera, 'Travelling Courts and Strategic Visitation: A German Court went to Peru', *Verfassungsblog*, 1 June 2022. https://verfassungsblog.de/travelling-courts-and-strategic-visitation/.

[82]*Asmania et al. v. Holcim*, available at climatecasechart.com/non-us-case/four-islanders-of-pari-v-holcim.

[83]L. Duarte Reyes and N. Burri, 'Transnational Corporate Liability in the Era of Loss and Damages: The Case of *Asmania et al v. Holcim*', in S. Zirulia, L. Sandrin and C. Pitea (eds.), *What Future for Environmental and Climate Litigation? Exploring the Added Value of a Multidisciplinary Approach from International, Private and Criminal Law Perspectives* (2024), 97.

[84]The Bille and Ogale communities have been engaged in litigation with Shell since 2015, available at www.leighday.co.uk/news/news/2023-news/over-13-000-residents-from-the-ogale-and-bille-communities-in-nigeria-file-claims-against-shell-for-devastating-oil-spills.

[85]V. Watts, 'Indigenous Place-Thought and Agency amongst Humans and Non-humans (First Woman and Sky Woman go on a European World Tour!)', (2013) 2(1) *Decolonization: Indigeneity, Education and Society* 20.

[86]M. Usher, 'Territory *Incognita*', (2020) 44 *Progress in Human Geography* 1019, at 1024–32.

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from the atmosphere to the subterranean – is emerging.[87] In this vein, Bruno Latour called for a displacement of *territorializing* to *terrestrializing* geopolitics through the lenses of the 'critical zone' – or the Earth's crust, outer layer or 'envelope' from vegetation canopy to the soil and groundwater, which supports all discovered life on Earth.[88] If territorial thinking is limited to human affairs, terrestrial thinking relates to more-than-human concerns, where human and nonhuman agencies are entangled in the re/production of un/liveable conditions of in/habitability on Earth. In contrast to territoriality, then, terrestriality 'modif[ies] the very definition of the land on which politics take place' and requires 'another placement for science, another definition of law and sovereignty, another understanding of how entities overlap'.[89]

A reparative grammar of climate justice attuned to such terrestrial dynamics of climate harms could account for harms that exceed direct causality narrowly based on extra/territorial emplacements. This would help materializing connections, links, and relations where law tends to abstract, disavow, and invisibilize them – in the eyes of those who can afford this invisibilization, not being subjected to its violence, and thus ignoring at the attachments that compose it. Attention to how material and immaterial infrastructures – including legal ones – structure life, should also extend to nonhuman lives. This is inherent to a planetary or terrestrial sensibility, and aligns with what Maan Barua calls a 'wider infrastructural ontology' that moves beyond anthropocentric familiars and generates new analytical openings attentive to more-than-human living conditions.[90] Alexis Pauline Gumbs showed, for example, how the lives of marine mammals are entangled within global transport shipping infrastructures, the propellers of ships, their ballast water, and the noise pollution they cause.[91] Attending to the unequal distribution of human and nonhuman life and death as entangled within im/material infrastructures terrestrializes legal thinking across planetary dimensions. If legal infrastructures and regulations aim primarily at governing human in/actions, they also determine those of nonhumans: their migratory routes, their breeding places, their conditions of habitability. Traces of such terrestrial legal frameworks can be found, for example, in EU conservation laws, where legal regimes of protection and conservation move with or follow the movement of endangered species, regardless of territorial boundaries. As Arie Trouwborst argues:

> [t]he protected status that wolves receive under EU law travels along with them across international borders, and Member States where wolves reappear after a long absence are basically expected to receive them with open arms, and focus on enabling renewed coexistence with people.[92]

Such terrestrial reconfigurations of legal concepts and jurisdictional grounds are thus tied to a relational and more-than-human spatiality, and attend to the spatial infrastructural entanglements of the global extractivist economy. As such, a reparative grammar of climate justice attuned

[87] Ibid., at 1035.

[88] 'Critical zones' are sites that humans 'inhabit together with myriads of viruses, bacteria, plants, animals and other life forms', where 'the adjective "critical" itself gets a new meaning: instead of trying to indicate a distance from the situations that require judgment, it points to the effort of gaining a [critical] proximity with the situations that we have to live in'. B. Latour and P. Weibel (eds.), *Critical Zones: The Science and Politics of Landing on Earth* (2020), at 9.

[89] Ibid., at 8, 227.

[90] M. Barua, 'Infrastructure and Non-human Life: A Wider Ontology', (2021) 45 *Progress in Human Geography* 1467.

[91] Gumbs explores what capitalism means on an interspecies level and recalls how 'entanglement is a slow death' for both humans and nonhumans whose lives are entangled with(in) and rhythmed by the pulses of racial colonial capitalism. See Gumbs, *supra* note 63, at 104.

[92] A. Trouwborst, 'Megafauna Rewilding: Addressing Amnesia and Myopia in Biodiversity Law and Policy', (2021) 33 JEL 639, at 652. See also F. de Witte, 'Where the Wild Things Are: Animal Autonomy in EU Law' (2023) 60 *Common Market Law Review* 391.

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to the terrestrial dynamisms of human and nonhuman actions enables to re-establish, re-visibilize, and re-pair relations between 'the land we live *on*' and 'the land we live *from*'.[93]

Terrestrializing claims to climate justice, then, might help shift the perception of the land within which legal obligations take place, by requiring another placement and understanding of harms attentive to how living conditions emerge and get distributed across species and spatio-temporalities. This, I argue in the final section of this article, goes hand in hand with a reconfiguration of the temporality of climate harms.

## 5. Reconfiguring the 'temporality' of climate harms

As perpetually deferred phenomena, the materializations of climate harms fit uncomfortably with the temporality of human rights claims, where violations are usually either established after a harm has already occurred, or there is a real risk of an imminent rights violation. As addressed in Section 2, this has become one of the most contentious points in climate litigation today, since a finding of a rights violation tends to depend on some kind of harm having already materialized. In the *Torres Strait Islanders* petition, for example, the Australian representatives argued that:

> [t]o demonstrate victim status, the authors must show that an act or omission by the State party has *already* adversely affected their enjoyment of a Covenant right, or that such an effect is *imminent* … Relying on the Committee's position in *Teitiota v. New Zealand*, the State party asserts that the authors *invoke a risk that has not yet materialized* … [T]he alleged adverse effects of climate change *have yet to be suffered, if at all*, by the authors.[94]

While rights-based approaches to climate harms serve as a powerful rhetorical device – where 'more and more people … locate themselves amid a progressive temporality marked out in human rights terms to envisage themselves moving away from rights-infringing pasts towards rights-respecting futures', as Fleur Johns puts it[95] – they present difficult hurdles in climate litigation, where violations of justiciable rights could traditionally only be claimed after identifiable victims had directly been harmed.[96] The language of rights thereby offers either a temporality of linear progression, where the present is situated between a troubled past and a desired future, or a temporality of harm on a spectrum between a near past, a measurable present, and a foreseeable future. This is evident in traditional rights-based climate litigation, which aims to intervene here-and-now, responding to harmful past occurrences yesterday, to ensure rights-respecting futures tomorrow.

This traditional grammar of climate justice, however, has significantly shifted towards a more progressive one that considers the rights of future generations (as illustrated by the passage from the first to the second column in the fourth row in Figure 1).[97] This invocation of future generations' rights in relation to climate change, however, tends to express a temporal ideal of

[93]As Schultz puts it: 'The spatial disconnection between the world one lives *in* and the world one lives *off* was always associated with a temporal disconnection between the time one lives *in* and the time one lives *off*. My grandmother's generation lived *in* the present but *off* the future, something made visible today with the endangerment of future generations' material conditions of habitability.' N. Schultz, *Land Sickness* (2023), at 23.

[94]See *Torres Strait Islanders*, *supra* note 13, paras. 4.2, 4.4 (emphases added), in reference to UNHRC, *Ioane Teitiota v. New Zealand*, CCPR/C/127/D/2728/2016 (2020), para. 9.12. Whereas the authors argued that '[i]f the State party's interpretation of imminence were followed, [they] would be forced to wait until their culture and land have been lost in order to submit a claim under the Covenant', the Australian representatives replied that it would be 'perverse if the Covenant were to impose a duty or obligation on the State party – to ensure that climate change does not impair the authors' rights – that the State party could not hope to fulfil'. Ibid., paras. 5.3, 6.7.

[95]F. Johns, 'The Temporal Rivalries of Human Rights', (2016) 23 IJGLS 39, at 56.

[96]C. Hilson, 'Framing Time in Climate Change Litigation', (2019) 9 *Onati Socio-Legal Series* 361, at 364.

[97]On the articulation of future generations' rights in recent climate litigation, see *Torres Strait Islanders* petition, *supra* note 13, paras. 3.4, 3.7; *Sacchi* petition, *supra* note 22, paras. 3.2, 3.3, as analysed in Section 3.

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nearness that seeks to safeguard the rights of the children and grandchildren of today's generations. This bias toward an empathic proximity is evident in the following quote by John Knox, as former UN Special Rapporteur on human rights and the environment:

> [t]o take a personal example, the Special Rapporteur has twin nieces who were born in 2016. The next century will begin before they celebrate their eighty-fourth birthday. Moreover, the line between future generations and today's children shifts every time another baby arrives and inherits their full entitlement of human rights. It is critical, therefore, that discussions of future generations take into account the rights of the children who are constantly arriving, or have already arrived, on this planet. *We do not need to look far to see the people whose future lives will be affected by our actions today. They are already here.*[98]

A dual proximity transpires from such framings: a temporal proximity on the one hand, where future generations' rights are tied to those who are already present today ('our children and grandchildren *who are already here*'), and a kinship proximity on the other hand, where future generations' rights are tied to direct relatives ('*our* children and grandchildren who are already here'). This proximity entails a disconnection from distant 'others'.[99]

While framed as an expression of the temporal ambition of rights-based approaches to climate change, a disjunction between this image of a near or proximate future and the 'deep time' implications of climate harms is evident.[100] The enduring manifestations of climate change are particularly daunting in light of the longevity of $CO_2$ in the atmosphere, considering it would likely take 400,000 years (or 16,000 generations) for atmospheric $CO_2$ to return to pre-industrial levels and possibly 4 million years (or 160,000 generations) for the Earth to recover living conditions preceding the ongoing sixth mass extinction of species.[101] What is more, it has been estimated that if GHG emissions would stop today, their delayed effects and long-term feedback loops would still emerge in 1,000 years from now.[102] These phenomena evidently exceed any legal scheme of responsibility. Clearly, thinking about time at Earth magnitude is utterly uncanny and unintelligible in human timescales, including those of law.[103] Of course, the disorientation that transpires from such temporal concerns cannot – and was never meant to – be addressed in human rights registers. Yet, reckoning with the longevity and durability of climate harms and their implications beyond the human species can shift attention to different registers of care and concern. A rights-based approach to climate harms therefore reveals a form of 'chronocenosis' – or time as conflict – that activates contradictory regimes of temporality: the deep time of geology, extinction, and climate change on the one hand, and the 'presentist' time of legal thought and action on the other.[104]

In addition to this temporal disjunction, an over-emphasis on 'presentist' concerns tends to turn a blind eye to historical events on the basis of which climate harms keep unfolding today. As

[98]See the section 'Future Generations', in Report on 'Children's Rights and the Environment', A/HRC/37/58 (2018), para. 68.

[99]On how the rhetorical figuration of 'our children' in climate change discourse reflects a notion of 'a family-timed future' that inscribes an authority based on a 'heteronormative reproductive futurism', see K. Kverndokk, 'Talking About Your Generation: "Our Children" as a Trope in Climate Change Discourse', (2020) 50 *Ethnologia Europaea* 145; and 'The Future is Kid Stuff', in L. Edelman, *No Future: Queer Theory and The Death* (2004).

[100]Deep time refers to the timescale of geological events. See D. Wood, *Deep Time, Dark Times: On Being Geologically Human* (2018), at 60–1.

[101]S. Skrimshire, 'Deep Time and Secular Time: A Critique of the Environmental "Long View"', (2019) 36 *Theory, Culture and Society* 63, at 65–6.

[102]S. Solomon et al., 'Irreversible Climate Change Due to Carbon Dioxide Emissions', (2009) 106 PNAS 1704.

[103]T. Morton, *Dark Ecology: For a Logic of Coexistence* (2018), at 35.

[104]D. Edelstein, S. Geroulanos and N. Wheatley (eds.), *Power and Time: Temporalities in Conflict and the Making of History* (2020). 'Presentism' is defined by short-term thinking and a valorization of immediate effects against a backdrop of increasing uncertainties, where principles of responsibility and precaution have become guiding mantras. See F. Hartog, *Regimes of Historicity: Presentism and Experiences of Time* (2015).

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Elizabeth Povinelli puts it, climate change can best be thought of as an 'ancestral catastrophe' that results from violent historical processes forming the present, namely 'the different toxic accumulations of racial and colonial catastrophes'.[105] If the entanglement of existence is embedded in legacies of racial and colonial histories that keep lingering with the living (both human and nonhuman), then the enduring aftermaths of their haunting harms – or, drawing on the work of Christina Sharpe, their 'residence time'[106] – underpin the coexistence of humans and nonhumans.

What would it mean, then, to develop grammars of climate justice in temporal registers attuned to the backdrop of this anti-Black world, where the possibility of existing as a 'subject' in the eyes of the law is only given to some, at the expense and exclusion of those who live 'in oceanic suspension',[107] in places of 'not belonging',[108] whose lives today remain entangled in the 'afterlife of slavery', as Saidiya Hartman puts it?[109] What would it mean, in other words, for the dispossessed to have to act with and against the law, in a world order where one's existence has been refused, made fungible and disposable?[110] Could climate policies and litigation strategies attend to the sustained existence, survival, and healing of those whose very possibility of being and becoming in this 'total climate' of anti-Blackness, has been suspended in time?[111] As it stands, both the traditional and the progressive grammars of climate justice cannot register the historical ancestral harms at stake.

Instead of a linear temporality that stretches the present into a future that is already given, a *reparative* grammar of climate justice would attend to the *enduring* temporality of climate harms (as illustrated by the third column of the fourth row in Figure 1). An enduring temporality works with a paradoxical time of suspension – a time *not* passing, where care extends into ancestral harms and their ongoing afterlives, for a distinct futurity to be opened, and be kept open. As Karen Knop and Annelise Riles have argued, reckoning with grave historical injustices that are spatiotemporally diffused demands a poly-temporal understanding of legal responses, where closure is never brought once and for all, and conflict resolution techniques remain contingent,

[105]E. A. Povinelli, *Between Gaia and Ground: Four Axioms of Existence and the Ancestral Catastrophe of Late Liberalism* (2021), at 16.

[106]In Sharpe's words, 'residence time' refers to everything being always now. Wondering about the residues of captive slaves thrown overboard of slave ships, she asks: 'What happened to the bodies? By which I mean, what happened to the components of their bodies in salt water? Anne Gardulski tells me that because nutrients cycle through the ocean (the process of organisms eating organisms is the cycling of nutrients through the ocean), the atoms of those people who were thrown overboard are out there in the ocean even today … The amount of time it takes for a substance to enter the ocean and then leave the ocean is called residence time. Human blood is salty, and sodium, Gardulski tells me, has a residence time of 260 million years. And what happens to the energy that is produced in the waters? It continues cycling like atoms in residence time. We, Black people, exist in the residence time of the wake, a time in which "everything is now. It is all now"' (Toni Morrison, 1987, at 198). C. Sharpe, *In the Wake: On Blackness and Being* (2016), at 40–1. Gumbs expands this 'residence time' towards nonhumans when noting that 'there is a digestive truth to the idea that the ancestors we lost in the transatlantic slave trade became whales'. See Gumbs, *supra* note 63, at 118.

[107]As Spillers puts it: '[t]hose African persons in "Middle Passage" were literally suspended in the "oceanic" … [R]emoved from the indigenous land and culture, and not-yet "American" either, these captive persons, without names that their captors would recognize, were in movement across the Atlantic, but they were also *nowhere at all*' (original emphases). 'Mama's Baby, Papa's Maybe: An American Grammar Book', in H. Spillers, *Black, White and in Color: Essays on American Literature and Culture* (2003), at 214–15.

[108]On this sense of not belonging, of perpetually living off-ground following the abyss of the Middle Passage, Brand evocatively writes: '[w]e were not from the place where we lived and we could not remember where we were from or who we were … How do we read these complicated juxtapositions of belonging and not belonging, belonging and intrabelonging?'. D. Brand, *A Map to the Door of No Return: Notes to Belonging* (2011), at 5, 71.

[109]The 'afterlife of slavery' refers to the unrelenting violence of the enduring inequalities that keep structuring the world as anti-Black, from limited access to health care and education, to incarceration, premature death and impoverishment of Black people. See S. Hartman, *Lose Your Mother: A Journey Along the Atlantic Slave Trade Route Terror* (2007), at 6.

[110]S. Harney and F. Moten, *All Incomplete* (2021), at 46: 'We have to love our refusal of what has been refused (to us)'. On the fungibility and disposability of Black existence in the aftermath of slavery and colonialism, see also Hartman, ibid.; and Jackson (2020), *supra* note 50; as well as A. Mbembe, *Necropolitics* (2019).

[111]On the 'total climate' of anti-Blackness, see Sharpe, *supra* note 106, at 104.

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particular, and open.[112] The entanglement of harms throughout time displaces a linear, sequential, and progressive notion of temporality, and calls for reparative interventions that can never undo but help heal ancestral harms. If ancestral climate catastrophes and their ongoing unequal distribution of harms are best defined as 'evils beyond repair', then reparative work transpires as 'a demand *now* for what is *owed* for what was taken, morally and materially, symbolically and spiritually'.[113] This demand includes a recognition of unforgivable wrongs that gave rise to a permanent debt – an 'unpayable debt', as Denise Ferreira da Silva calls it[114] – which, 'while it can *never* be finally discharged, has necessarily to be honored *before* any common future of freedom can begin'.[115] If loss and damages differentially experienced among humans and nonhumans across space and time can never be fully repaired, restored, or compensated, then working with a sense of *enduring* temporality of climate harms reckons with the suffering of 'those whose presence never counted, whose absence was never accounted for, their existence unable to be recounted – that which does not even leave a trace'.[116] To account for the ancestral violence and deep time effects that mark the unequal suffering enacted by climate harms, a move beyond the limited and sentimental registers of future generations' rights could open a way towards a grammar of climate justice that makes sense of the enduring temporalities of ancestral events, against the backdrop of which the world of modernity keeps unfolding.

## 6. Conclusion

The transboundary, enduring nature of climate harms poses distinct challenges to international environmental and human rights law. This article explored how different, intersecting grammars of climate justice determine and condition how these harms can be registered and addressed in international law. In doing so, it examined and problematized the material, subjective, spatial, and temporal boundaries of climate harms that we encounter in both traditional liberal rights frameworks and progressive critical interventions. Mapping a salient change in climate politics and litigation, I showed how these critical interventions expanded the scope of attention and accountability from *actual* to *potential* harms, from *human* to *nonhuman* subjects, from *territorial* to *extra-territorial* obligations, and from *present* to *future* generations. Today, this progressive grammar of climate justice is widely celebrated and is entering mainstream legal discourse and practice.

The analysis highlighted, however, what lies outside the lines of sight of both the traditional and critical approaches to climate justice – the multiple cuts, erasures, and forms of violence that remain unaccounted for in international law, thereby pointing to limitations of our current legal vocabulary and frame of action. It revealed how existing modalities of protection set in place to address climate justice do not account for *entangled* harms, *more-than-human* care, *terrestrial* spatialities, and *enduring* temporalities of climate change. What do we do, then, when our registers fall short? By drawing the contours of a different vision for climate justice, I suggested an

[112]K. Knop and A. Riles, 'Space, Time, and Historical Injustice – A Feminist Conflict-of-Laws Approach to the Comfort Women Agreement', (2017) 102 *Cornell Law Review* 853. See also L. Baraitser, *Enduring Time* (2017).

[113]D. Scott, 'Preface: Evil Beyond Repair', (2018) 55 *Small Axe* vii, at x.

[114]D. Ferreira Da Silva, *Unpayable Debt* (2022). Ferreira Da Silva's work attends to the racial dialectic that renders Black persons the owner of a debt that is not theirs to pay – if their existence (as Slave Person) required the existence of another (as Slave Owner) who held the authority to decide on their life and death, then this reminder (that one's life belongs to someone else) is today no longer held by the owner but by the state, that now claims a life-and-death authority over Black persons (ibid., at 93, 155, 168). To attend to the intricate legacies of racial violence in America, Ferreira Da Silva relies on Butler's novel *Kindred*, where Dana has to save her White rapist ancestor in order to save her Black self. O. Butler, *Kindred* (1979).

[115]See Scott, *supra* note 113, at x. As Best and Hartman ask: '[h]ow does one compensate for centuries of violence that have as their consequence the impossibility of restoring a prior existence, of giving back what was taken, of repairing what was broken?'. S. Best and S. Hartman, 'Fugitive Justice', (2005) 92 *Representations* 1, at 15.

[116]A. Culp, 'Afro-Pessimism and Non-Philosophy at the Zero Point of Subjectivity, History, and Aesthetics', in K. Ferguson (ed.), *The Big No* (2021), 105, at 125–6, and 113.

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alternative, reparative grammar that re-orients our legal attention and action from *potential* to *entangled* harms, from *nonhuman* rights to *more-than-human* care, from *extra-territorial* to *terrestrial* spatialities, and from *future generations* to *enduring* temporalities. These conceptual re-articulations, I argued, open distinct ways of making sense of the multiple and enduring injustices of climate change.

By acting as a 'strategy of rupture' that transforms the legal order through immanent rather than internal – practical rather than logical – critique,[117] this reparative grammar of climate justice shifts attention to broader societal and political issues. Immanent and practical critique, as Christodoulidis puts it, generates within institutional legal frameworks 'contradictions that are *inevitable* (they can neither be displaced nor ignored), *compelling* (they necessitate action) and *transformative* in that (unlike internal critique) the overcoming of the contradiction does not restore, but transcends, the "disturbed" framework within which it arose'.[118] It is in its invitation to suspend and transcend current international legal approaches to climate change that the disordering power of this 'strategy of rupture' lies.[119] The juxtaposition of registers and sensibilities I assessed in traditional, progressive, and reparative grammars of climate justice highlighted disruptive contradictions in the international legal order that can only be overcome through radical reconfigurations of its key concepts and categories. Akin to Farhana Sultana's 'critical climate justice' framework as a praxis of solidarity and collective action,[120] the reparative grammar of climate justice I suggested would attend to the ancestral lineages, scattered spatial traces, racialized hierarchies, and more-than-human dimensions of climate harms – concerns that elude the current normative repertoire of international law. In doing so, this reparative grammar enacts a 'strategy of rupture' – a politics of refusal that questions the justiciability of climate harms in international law, and rethinks the terms of relating, acting, and belonging in a changing climate.

[117]See Christodoulidis, *supra* note 6, at 6.

[118]Ibid. As such, the object of immanent critique 'is to generate a contradiction that makes impossible a response *in* and *by* the system' – it 'necessitates in the system a response that at the same time "undoes" its logic'. Ibid., at 8.

[119]B. Bhandar, 'Strategies of Legal Rupture: The Politics of Judgment', (2012) 30 *Windsor Yearbook of Access to Justice* 59, at 67.

[120]F. Sultana, 'Critical Climate Justice', (2022) 188 *Geographical Journal* 118.

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