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Climate Injustice, Racial Capitalism, and the Contradictions of Property

Abstract

This paper examines the legal constitution of racialized climate injustice. This paper examines the racialized dynamics of property in the context of climate change. It explores these examples: firstly, the failure of the international climate regime to contest unjust appropriation of the atmosphere by industrialized countries regarding historical emissions; secondly, the limitations of the "no harm" rule, which is effectively the internationalization of the domestic principles of the tort of nuisance, used to provide full compensation to the racialized harm caused by climate change; and thirdly, how international investment law is allowing fossil fuel companies to seek compensation if governmental actions in response to climate concern impact their investment or hoped for returns.

Keywords: racial capitalism, climate justice, assets, investment law, reparations, carbon markets

I. Introduction

The climate crisis, driven by the rapacious, expansionist tendencies of "fossil capital" (Malm 2016), now threatens our very liveability on this planet (Pörtner 2023). It also makes starkly evident the violent racialized hierarchy of how differently racialized lives are legally valued and protected. This paper builds on scholarship which has foregrounded how "the global ecological crisis is

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simultaneously a racial justice crisis" (Achiume 2022). The causes of the climate crisis, its differentiated effects, and dominant legal responses are structured by racism, defined by Ruth Wilson Gilmore, as the "state-sanctioned or extra-legal production and exploitation of group-differentiated vulnerability to premature death" (Gilmore 2007). As Carmen Gonzalez has shown, both the unequal causes and effects of the climate crisis make visible how "capitalism's profit-making processes create and intensify racial distinctions to facilitate the extraction of wealth and externalization of waste at the expense of marginalized states and communities" (Gonzalez 2024, 484).

The analysis in this article focuses on a key juridical building block of the regime of racial capitalist ecological destruction, namely property rights. Property rights are a central element of the "code of capital" (Pistor 2019): the legal recognition of property rights is what enables "things" to become "assets," and the legal and state protection of property secures the process of capital accumulation. Legal scholars have recognized "the significant role that property plays in contributing to climate change," (Butler et al. 2022, 289) including by facilitating control over and extraction of resources, enabling carbon-intensive production, and fostering unlimited accumulation. As Lynda Bulter writes, "[w]ithout change, the outdated norms and values of modern property systems will continue to promote economic interests and contribute to climate change" (Butler et al. 2022, 294).

Despite these critiques, the logic and structures of property law have shaped — and thereby also constrained — existing international legal responses to the climate crisis. The dominant mitigation approach adopted by international law has been the establishment of emissions trading schemes, themselves premised upon the creation of new, immaterial property rights in carbon (Dehm 2018b). The international community has finally acknowledged that fossil fuels need to be urgently

and equitably phased out. But fossil fuel companies are utilizing international investment law to sue governments for implementing climate policies that threaten their investments and profits, thereby threatening the green energy transition (Kyla Tienhaara et al. 2023; 2022).

The constraints imposed by the logic of property are key to understanding why international law offers only limited avenues for those most harmed by the climate crisis to seek compensation or reparations (Mason-Case and Dehm 2021). A critical examination of property law in the ecological crisis both illuminates property law's role in authorizing climate harm and constraining climate responses, as well as how property is inherently racialized. As critical race scholars have shown, there is an "entangled relationship between race and property" (Harris 1993) given how "property laws and racial subjectivity developed in relation to each other" (Bhandar 2018). Property is thus, "produced by and productive of social differences, including racial categories" (Blomley 2022, xiv). Race has structured what rights and interests can be claimed as proprietary, whose interests are granted the protections of property, as well as what is considered to be an object of property (most overtly in the case of slavery, where racialized people were legal designated as property). These are central to the process of "race-making" or racialization. Thus, I suggest that exploring how the "racial regimes of ownerships" operate in the context of the climate crisis and how they distribute privileges, protections, harms, and liabilities illuminates the way in which the legal regime is deeply implicated in the racialized violence of the climate crisis.

To develop this argument, this paper examines three telling examples of the racialized dynamics of property in the context of the international legal regulation of climate change: firstly, the failure of the international climate regime to contest unjust appropriation of the atmosphere by industrialized countries regarding historical emissions (Section IV); secondly, how international investment law is allowing fossil fuel companies to seek compensation if governmental actions in

response to climate concern impact their investment or expected returns (Section V); and thirdly, the limitations of the "no harm" rule, which effectively internationalized the domestic principles of the tort of nuisance, used to provide full compensation for the racialized harm caused by climate change (Section VI). There are, of course, many other examples of the racialized dynamics of property in the context of climate change that could be examined, but for reasons of space and expertise the analysis in this piece was limited to three examples pertaining to international legal regulation of climate change. To lay the groundwork for this analysis, Section II explains the analytic of "racial capitalism," which is invaluable for understanding the climate crisis and considering strategic pathways of struggle towards more ecologically just futures. Section III provides an overview of the theoretical literature on race and property rights and explains why understanding the racialized construction of property is crucial for engaging and contesting climate change and fossil capital.

II. Racial Capitalism and the Climate Crisis

There is growing attentiveness to how the climate crisis is simultaneously also a racial justice crisis (Achiume 2022; Abimbola et al. 2021; Sealey-Huggins 2018). This has promoted an overdue reckoning with the "racist, colonial foundations of ecological crisis" (Achiume 2019, para 12). As E. Tendayi Achiume writes:

> Systemic racism served as a foundational organizing principle for the global systems and processes at the heart of the climate and environmental crises. Understanding and addressing contemporary climate and environmental injustice alongside the racially discriminatory landscape requires a historicized approach to how "race" and racism have shaped the political economy of climate and environmental realities, as well as the governing legal frameworks and worldviews that these frameworks represent (Achiume 2019, para 12).

There is an extensive body of scholarship on climate injustice as well as the need to be attentive to how climate change, and/or climate mitigation and adaption policies, disproportionately impact upon "vulnerable groups". However, this literature often avoids explicitly engaging with racism, racial discrimination and practices of racialization. Thus, until recently, climate justice analytics often focused on global inequalities, rights of Indigenous communities, and neo-colonialism in a manner that did not explicitly foreground the way in which practices of racialization were central to the production and reproduction of climate injustice. In this section, I briefly discuss some of the key themes in the existing literature before showing how the analytic of "racial capitalism" can help deepen and systematize existing themes in various bodies of scholarship.

The international climate justice movement grew out of the environmental justice movements that organized domestically in both countries of the Global North and the Global South. The environmental justice movements in countries of the Global North exposed how environmental harm was concentrated in communities of colour and low-income communities (Bullard 2018; 1993). In countries of the Global South "environmentalism of the poor" (Guha and Martínez-Alier 2013; Martinez-Alier 2003; Nixon 2011) or "liberation ecology" (Peet and Watts 1996) foregrounded the material interest the poor and peasant communities had in the environment for their livelihoods. Transposing these analysis and ecological distributional conflicts to the global level that international climate justice movement has powerfully illuminated how climate change reproduces and intensifies existing inequalities and marginalizations including through the geographical displacement of sources and sinks (Parks and Roberts 2010; Roberts and Parks 2009). Climate justice scholarship has thus foreground how climate change is "inextricably linked to broader social injustice" and highlighted the distributive, procedural and recognitional injustices of climate change, as well as the need for corrective or reparative justice (Gonzalez 2021, 5).

Within legal scholarship, there has long been attentiveness to the North/South dimensions of the climate crisis (Alam et al. 2015; Natarajan 2012; Mickelson 2009; Dehm 2016). Scholarship orientated towards climate justice has drawn attention to how Indigenous communities are suffering on the frontlines of climate change (Westra 2008), while also leading struggles against both fossil fuel extractivism (Estes 2019) and false solutions to the crisis (Indigenous Environment Network 2009a). The fact that colonialism has exacerbated the effects of climate is increasingly recognized, including by the Intergovernmental Panel on Climate Change (Pörtner 2023), even though there still remains an inadequate acknowledgement of the material and epistemic harms of "climate coloniality" (Sultana 2022).

There is a growing awareness of the need for an intersectional account of the harms of climate change as well as when "developing, implementing, funding, monitoring, evaluating, learning from and reviewing climate action at all levels" (Morgana 2024, para 77). Such an approach recognizes that inequalities do not have "single causes that stand alone" but rather are "caused by a multiplicity of intermeshed causes, leading to structural inequality" thereby enabling a "holistic perspective to situations of injustice" that is informed by "a more complete understanding of the social and political circumstances of such injustices" (De Jong 2024, 744).

Concurrently, there were persistent scholarly critiques of how the positioning of the "Anthropocene" as both a (now formally rejected) geological epoch (Crutzen 2002; Witze 2024) and an analytical frame (Birrell and Dehm 2021), rested on a problematic assumption that it was an undifferentiated "Anthropos" that had become a geological agent without explicitly engaging with the "hierarchical structure of the *anthropos* itself" (Grear 2015), or that it was capitalism as a mode of production that was driving ecological crisis (Moore 2017; 2016). Thus, in the context of a broader political reckoning with the legacy and persistence of structural racism, legal scholarship

on climate justice belatedly began to more explicitly engage questions of race, racialization, and structural racism.

The analytic of racial capitalism can help deepen and systematize existing themes in various bodies of scholarship discussed above by providing a structural and historical account of the *causes* of these injustices and why these injustices are continuously reproduced by an "economic order that systematically exacerbates poverty and inequality while exceeding the limits of the planet's finite ecosystems" (Gonzalez 2021, 5). It recognizes that vulnerabilities, marginalization and inequalities are not simply given, but systematically *produced*, and that populations are continuously being divided, stratified and social hierarchies mobilized as part of "strategies and outcomes of profit-making" (Gonzalez and Mutua 2023, 3). Thus, race is not treated as a "'natural' phenomenon" but rather there is an "account of racialization" (Knox and Kumar 2023, 34–35; Knox 2023, 58) or how ""races" and racial hierarchies are created and perpetuated" (Gonzalez and Mutua 2023, 3).

Carmen Gonzalez and Athena Mutua show how processes profit-making and race-making operate in mutually co-constitutive ways such that "profit-making processes create and reinforce the making of racial meaning, while race-making, underwritten by white supremacy, structures and facilitates the economic processes of profit-making" (Gonzalez and Mutua 2022). Together, a number of processes form a "structured web of racialized extraction," powerfully demonstrating how three processes of profit-making – exploitation, expropriation, and expulsion — are inherently intertwined with three processes of race-making — (racial) stratification, segregation, and sacrifice zones (Gonzalez and Mutua 2022). This focus on "race-making" is crucial, because it recognizes that there are a range of "racial constructs" and that different populations have been racialized in diverse ways to "mark out and reproduce the unequal relationships into which Europeans have co-opted these populations" (Wolfe 2016, 2). In the same way that the analytic of

racial capitalism emerged as "Third Worldist and anti-racist movements … sought to deepen the Marxist tradition through theorizing the conditions in which race and racism came to play a structuring role within a given social formation" (Knox and Kumar 2023, 34), the engagement between those studying and struggling against racial capitalism with climate justice movements could mutually *deepen* existing understandings, including by identifying the systemic drivers and structural causes of the ecological crisis and its differentiated precarities.

Moreover, utilizing the analytic of racial capitalism to understand the climate crisis does not preclude, but arguably facilitates, an analysis of how "[e]nvironmental racism and climate injustice interact with other forms of social exclusion, such as discrimination on the grounds of gender, age and disability" (Achiume 2019, para 47). Carmen Gonzalez and Athena Mutha write that "[t]he concept of racial capitalism provides a structural and historical account of the way in which race are class are linked in the global economy, including how they shape other oppressive structures such as patriarchy" (Gonzalez and Mutua 2023, 3). As Gargi Bhattacharyya argues, racial capitalism "describes a set of techniques and a formation, and in both registers the disciplining and ordering of bodies through gender and sexuality and dis/ability and age flow through what is happening" (Bhattacharyya 2018, x). Nonethless, she suggests it remains valuable to use the term "racial capitalism" given how "these techniques of othering and exclusion utilise the logics of race, regardless of the targeted population" (Bhattacharyya 2018, x). In particular, the recognition that contemporary forms of racial discrimination are rooted in slavery and colonialism (Achiume 2019), draws attention to the intertwined processes of colonialism, capitalist expansion and racialization (Knox 2023). In the climate context, there is growing acknowledgment of how "colonialism, capitalism, and catastrophic climate change are structurally — not just contingently — linked" (Bhambra and Newell 2022). Thus, "inequalities generated and exacerbated by climate change in

the present have longer and connected histories once colonialism is properly acknowledged as a continuous factor" (Bhambra and Newell 2022).

The term "racial capitalism" is arguably best engaged as a "strategic, rather than purely analytical, concept — a concept forged and developed in struggle" (Kelley 2023, 3562). While academic debates continue about its intellectual providence, it's clear the analytic was developed by different thinkers in different ways during the period following formal decolonization in large parts of the world. This was an effort to better understand how capitalist exploitation and expropriation depended upon practices of racialization. The adoption of this concept was "rooted in strategic debates across much of the colonial world" about how anticolonial struggles should focus on anti-capitalist or anti-racism struggles (Levenson and Paret 2023b, 1).

In particular, it was through debates by activist intellectuals about apartheid and its relationship to capitalism in South Africa that many now examine racial capitalism's origins (Levenson and Paret 2023b; 2023a). There are, however, as Marcel Paret and Zachary Levenson argue, "multiple contending – and potentially irreconcilable — theories of racial capitalism" (Paret and Levenson 2024, 25), including a more contingent account of the relationship between capitalism and racism presented by Cedric Robinson in *Black Marxism and the Making of the Black Radical Tradition* (Robinson 2020), as well as a long tradition of Black and anti-colonialism Marxists who "sought to *deepen* the Marxist tradition through theorizing the conditions in which race and racism come to play a structuring role in a given social formation (Knox and Kumar 2023, 34).

In this article, I do not focus on the different ways in which racial capitalism has been theorized. Instead, I adopt the term "racial capitalism" as a "kind of signifier to denote a general relationship

between capitalism and racism" (Knox and Kumar 2023, 29), and to foreground how race and racialization are material processes that need to be understood historically and in their present articulations, and that such processes can — and must be — contested by anti-capitalist struggles (Knox and Kumar 2023, 44). Racial capitalism also provides a means of understanding the different forms of racial stratification and how race is used to divide people, but this structural account of racialization is consistent with acknowledging that some Black and non-White elites do enjoy enormous privilege, especially those who are members of a multiracial "transnational capitalist class" (Chimni 2004).

The work of Carmen Gonzalez has shown how indispensable an engagement with racial capitalism is in examination of climate change and other ecological crises though her analysis of climate migration (Gonzalez 2021), the Anthropocene (Gonzalez 2020) and ecocide (Gonzalez 2024). In considering how race-making and profit-making are central to the dynamics of climate injustice, we need to pay attention to a number of facets of the crisis. Firstly, it is important to pay attention to the way the fossil fuel industry drives the climate crisis, including by creating racialized sacrifice zones and through the colonial appropriation and control of land to enable extraction. As Sarah Riley Case argues, "[c]apital accumulation and ecological damage, then, are intimately bound to one another and to racial ideologies" (Riley Case 2023, 50). Secondly, it is crucial to recognize the way in which the effects of climate change will intensify existing marginalization and inequalities. It is widely recognized that it is the peoples of the Global South and Indigenous communities who are already most economically and socially marginalized that will bear the worst impacts of climate change. Vulnerabilities to climate impacts are shaped by intersectional drivers of inequality such as gender, race, ethnic origin, age, level of ability, sexuality, and diverse gender orientations. Thirdly, it is necessary to pay attention to the way in which legal responses to the climate crisis have been premised upon a racialized and unequal valuation of lives and have thus reproduced

and intensified pre-existing inequalities, marginalizations, and precarities (Dehm 2021). As the global economy transitions from a fossil-fuel intensive form of capitalism to so-called "green capitalism" it will be crucial to map how the structural racial inequalities that characterized fossil-fuel extraction persist, perhaps differently articulated, in the so-called green economy. However, highlighting "how 'race' and racism have shaped the political economy of climate and environmental realities' should not "eclipse the role played by" powerful actors in the multiracial "transnational capitalist class" (Chimni 2004) and powerful countries in the Global South in promoting – and profiting from – climate crisis (Achiume 2022, para 12 and 17).

Much of the analysis on climate justice and racial capitalism has – rightly – focused on the harms to racialized peoples and how they are impacted by processes of exploitation, expropriation, and expulsion. However, in this essay, my focus is showing how the legal architecture is racialized, with a specific focus on the legal form of property. I argue that crucial to understanding the dynamics of racial capitalism, especially the concepts of climate change and climate justice, is interrogating how one of the key legal building blocks of capitalism — property rights — is itself thoroughly racialized. The next section provides an overview of the considerable scholarship about how property is racialized, and how this insight can be applied to understand the production and reproduction of climate injustice in regimes of racial capitalism.

III. Property, Race and Climate Change

Political theorists Jeff D. Colgan , Jessica F. Green, and Thomas N. Hale have developed a "theory of climate change politics based on the present and future revaluation of assets" (Colgan, Green, and Hale 2021). Their analysis offers a powerful insight: "climate change, along with decarbonization policies to mitigate it, will trigger a profound and uneven process of economic re-evaluation of these assets" (Colgan, Green, and Hale 2021). They develop this argument by

attending to two different classes of asset holders: "holders of climate-forcing assets" such as fossil fuel resources and associated infrastructure, as well other industries implicated in climate harm, such as deforestation and industrial livestock cultivation; as well as "holders of climate vulnerable assets" such as coastal properties and fisheries. The insights of the article are powerful and usefully re-shift the way in which we consider climate politics.

However, the analysis is limited in how it takes existing legal constructions of assets, as well as the legal construction and distribution of the underlying property rights, as given. This article thus seeks to build on their analysis and shows how it is crucial to appreciate the racialized construction of property rights and how this shapes the global political economy of climate change and the extreme inequality of its causes and effects.

Underlying all assets is a property right. Assets are inherently "legal constructs, in that ownership and control rest on the state enforcement of property and control rights" (Birch and Muniesa 2020, 5). However, what characterizes an "asset" and distinguishes it from other property rights, is an expectation that future economic benefits will flow from the resource controlled (Birch and Muniesa 2020, 3). An asset is thus, as Lisa Adkins, Melinda Cooper, and Martijn Konings write, "a property title that must be constantly valued as a balance sheet item but often precisely cannot be readily traded" (Adkins, Cooper, and Konings 2022, 19). They identify how an asset has a "particular temporal structure" that "requires an upfront investment in (often borrowed) funds and it is meant to generate returns over a particular future timeframe" (Adkins, Cooper, and Konings 2022, 19). Thus, protecting the value of an asset entails more than simply protecting property rights. It also entails protecting the expectations of future returns. The analysis below shows that both the legal regimes of property and the legal protection of future expectations are highly racialized.

Property rights are central to the legal architecture of capitalism. Given that "[p]roperty institutions are key constitutive elements of socio-economic systems" such as capitalism, they cannot be "understood in abstract from, and without reference to" the broader social and economic systems of which are they part (Ireland 2024, 2–3). Even though the nature of property in contemporary capitalism is changing, so that it is increasingly orientated towards the protection of "property-as-capital" rather than "thing-ownership" (Ireland 2024, 4), in crucial ways, property "remains tethered to the conceptual and material structure of its liberal genesis" (Davies, Godden, and Graham 2021, 11). Feminist and critical theorists have long shown how women, people of colour and Indigenous peoples were excluded from liberal philosophies of property (Davies, Godden, and Graham 2021, 11; Nedelsky 1990; Graham 2010), while the paradigmatic legal subject was "the white, European male property-owner" (Grear 2015, 237). The control of property by men, and women's exclusion from property ownership, has been a key legal mechanism for maintaining patriarchal structures. Marxists accounts suggest that the emergence of private property played a key role in the development of patriarchal societies (Engels 2001; see also Federici 2004).

Critical race theory scholars have highlighted how property rights are inherently racialized and how "processes of racialization are inextricably bound with property as a social form" (Munshi 2021, 1038). In her pathbreaking article, "Whiteness and Property," Cheryl Harris powerfully reflected on "how rights in property are contingent on, intertwined with, and conflated with race" (Harris 1993, 1714). There is, she argues, an "entangled relationship between race and property," and due to this relationship, "historical forms of domination have evolved to reproduce subordination in the present." She shows how racial domination structures the origins of property rights in the United States as well as the ongoing operations of property law. Slavery treated Black people "as objects of property" (Harris 1993, 1716). Concurrently, the "conquest, removal, and extermination

of Native American life and culture were ratified by conferring and acknowledging the property rights of whites in Native American land" (Harris 1993, 1716). It was "only white possession and occupation of land [that] was validated and therefore privileged as a basis for property rights" (Harris 1993, 1716).

Goenpul scholar, Aileen Moreton-Robinson builds on Harris' account to provide an "Indigenous reading of how white property rights are connected to the internal territoriality of patriarchal white sovereignty in the form of the nation-state" (Moreton-Robinson 2015, xix). She reveals "racialization [as] the process by which whiteness operates possessively to define and construct itself as the pinnacle of its own racial hierarchy" and that claims to "white possession" are premised upon the persistent "disavow[al] of Aboriginal sovereignty" (Moreton-Robinson 2015, xxi).

Brenna Bhandar has powerfully described the "racialized regimes of ownership" in various settler-colonial jurisdictions to show how "modern property laws emerged along with and through colonial modes of appropriation" (Bhandar 2018, 3). Her analysis foregrounds how conceptions of property were inherently intertwined with the "formation of the proper legal subject." She writes that "[t]he colonial encounter produced a racial regime of ownership that persists into the present, creating a conceptual apparatus in which justifications for private property ownership remain bound to a concept of the human that is thoroughly racial in its makeup" (Bhandar 2018, 4).

Patrick Wolfe shows how the white, Western discourse of property brings together different racialized "regimes of difference with which colonisers have sought to manage subject populations" (Wolfe 2016, 3). He writes, "[r]acialized distinctions… bespeak different histories, of

different forms of expropriation – in one case of labour, in another of land" (Wolfe 2016, 2). He continues:

> A mutuality between these otherwise antithetical relationships was sealed in the White man's discourse of property. As John Locke provided, in texts that would profoundly influence Euroamerican colonial ideology, private property accrued from the admixture of labour and land. As this formula was colour-coded on the colonial ground, Blacks provided the formers and Indians the latter, the application of Black people's labour to Red people's land producing the White man's property (Wolfe 2016, 3).

These historical dynamics continue to affect juridical form of property and its operations today. K-Sue Park's analysis of US jurisprudence show how historical slavery and conquest continue to "explain aspects of the system — its construction of jurisdictions, property value, ground-level institutions, and organization of force" (Park 2021). Feminist and property theorist, Margaret Davies similarly foregrounds the "racialisation of the property-person nexus" and how "representations of whiteness as a valuable property of self-possession persons and of non-white human being more directly as objects of property or economic instruments" (Davies 2007, 44). Nicolas Blomley writes that:

> The evolution of property law has been articulated through the attribution of value to the lives of those defined as having the capacity, will, and technology to appropriate, racializing those deemed unfit to own property. The justification for property ownership is thus bound to a highly racialized concept of the human. The social powers that property's territorialization accord are also embedded in such racial logics (Blomley 2022, xiv).

The stabilization and protection of future expectations are also enabled by law and highly racialized. Katharina Pistor has shown how forms of legal "coding" have been developed to

protect value including by "extend[ing] the life span of assets and asset pools" or extending priority claims through time (Pistor 2019, 3). In other work, I've drawn attention to the numerous "legal techniques . . . developed to reduce the contingency of the future or make an inherently uncertain future less uncertain, or at least uncertain in a more calculable and predictable way" (Dehm 2023b, 271). Moreover, the way law enables the protection of future expectations is central to Cheryl Harris' analysis of "whiteness as property" — precisely because it is the "persistence" of such racial privilege that is ultimately at stake. She writes, "The exclusion of subordinated 'others' was and remains a central part of the property interest in whiteness and, indeed, is part of the protection that the court extends to whites' settled expectations of continued privilege" (Harris 1993, 1758).

In this context, critical scholars are increasingly turning to dispossession as a "counter-narrative" and "critical framework" used to re-evaluate the role of property within racialist and settler-colonial contexts, and to correct "the abstracting and ahistorical tendencies of political liberalism" by bringing to the foreground the "relational character of private property" (Munshi 2021, 1025). Jodi Byrd et al define "economies of dispossession" as the "multiple and intertwined geologies of racialized property, subjection, and expropriation through which capitalism and colonialism take shape historically and change over time" (Byrd et al. 2018, 2). Thus, an analytic of dispossession foregrounds both the theft from those who have been colonized and dehumanized through processes of racialization, the concurrent ways in which the law protects violent appropriation *as* property, and how the law increasingly protects the investment and interests of capital *as* property through law.

However, as Robert Nichols insightfully identifies, a focus on "dispossession" as an analytical concept raises a "new set of conceptual and practical complications." Firstly, in order to conceptualise dispossession as an "normatively objectionable loss of possession," we require a

"background system of law that could establish the normative context in which a violation (e.g., theft) could be recognised, condemned, and punished" (R. Nichols 2020, 6). Secondly, this focus thus generates a complex double-bind given how the term dispossession "seems necessarily appended to a proprietary and commodizied model of social relations," and thus, there is an inherent — and possibly self-defeating — contradiction in seeking to "leverage this category of dispossession as a tool of radical, emancipatory politics in the critique of extant legal authority and proprietary relations" (R. Nichols 2020, 6). Thus, his analysis shows that the remedy for the violence of dispossession is not necessarily possession, but rather a disentanglement of the proprietary logic which underpins the violence of both dispossession and property.

Despite this vibrant scholarship on property, race and colonialism, there has been only limited scholarly attention on how the racialized nature of property law shapes the international political economy of climate change. Yet, the racialized nature of property and the racialized protection of assets shape various aspects of the climate crisis. They underpin understanding of what forms of appropriation gives rise to new property rights and influence what expectations should be protected by law as well as what sort of harms are deemed worthy of repair.

IV. Historical Emissions, Appropriation of the Atmosphere, and Property in Carbon

This section discusses one telling example of the racialized dynamics of property in the context of the international legal regulation of climate change namely the failure of the international climate regime to contest unjust appropriation of the atmosphere by industrialized countries regarding historical emissions. Climate change is a result of an unequal history of emissions. There remains extreme emissions inequality. Currently, the richest 1% of the global population emits as much

greenhouse gases as the poorest two-thirds of humanity (Ghosh et al. 2023). The richest 1% is responsible for 16% of all consumption emissions, equivalent to the emissions of the five billion people who make up the poorest 66% of humanity (Khalfan 2023). However, these inequalities are compounded if cumulative historical emissions are considered. By the end of 2021, the world had already emitted into the atmosphere 86% of the allowable "carbon budget" for a 50% chance of limiting warming to 1.5°C and a small number of historical emitters have "used up" a disproportionate amount of this limited "carbon budget"(Evans 2021).[i] A recent study quantified each country's share of responsibility for global emissions in excess of a planetary boundary of 350ppm (at the time of writing in 2025 the world was at 425ppm) and found that countries of the Global North were collectively responsible for 92% of these excessive emissions (Hickel 2020). Additionally, just 90 producers of fossil fuels and cement — the so-called "carbon majors" — have created 63% of cumulative worldwide emissions from 1751 to 2010 (Heede 2014).

Historical emissions need to be understood as a racialized appropriation or colonization of the atmosphere, which is both harmful in and of itself, but also has further harmful effects. As Max Liboiron reminds us, "pollution is not a manifestation or side effect of colonization but is rather an enactment of ongoing colonial relations to Land". Pollution is thus best understood "as the violence of colonial land relations rather than environmental damage" (Liboiron 2021, 6–7).

Racialized violence resulting from historical emissions manifests in a number of ways. Firstly, historical emissions have real, measurable climate impacts. The cumulative emissions of the United States, the European Union, Russia, Japan, and Canada between 1850 and 2012 will contribute to a nearly 0.5°C temperature increase by 2100 (Rocha et al. 2015, 10).[ii] Thus, the appropriation of the atmosphere also drives climate chaos, which through slow onset events and the increased frequency and intensity of extreme weather events will "lead to new forms of land-expropriation

through rising sea levels and desertification" (Folkers 2020, 617), even if the temporal delay and complex causal chain between emissions and their effects means such "accretional harms" are often not perceived as "violence" (Nixon 2011). Secondly, as Sarah Riley-Case and I have argued, these historical emissions matter "because their acts were constitutive in enabling the conditions of dispossession, violence, slavery, racial difference, and uneven wellbeing that generated — and continue to generate — stark asymmetries between and within countries" (Mason-Case and Dehm 2021). As such, they can be considered act of original violence — or "primitive accumulation" — that created the conditions of possibilities for a racialised regime of fossil fuel capitalism.

Many developing countries have argued that such historical emissions are also significant because they represent an "appropriation of atmospheric space." That is, they prevent other countries from pursuing the same carbon-intensive development pathways that industrialized countries have pursued or even emitting what would be their "fair share" within a carbon budget consistent with a given temperature target. Thus, the historical emissions of some have severely constrained the policy choices of other countries about what development pathways to pursue (Shue 2014).

Andreas Folkers has argued that the "colonization of atmospheric space by CO_2 emissions" should be understood as a form of "air-appropriation" (Folkers 2020, 612). He writes that the concept of "air-appropriation" which refers to the "the occupation of the atmosphere by CO_2 emissions as an effect of the combustion of fossil fuels" (Folkers 2020, 617) makes it possible to "foreground the violence, the imperial origins and ongoing social asymmetries of the Anthropocene condition" (Folkers 2020, 612). He traces a longer history of the territorialization of authority, premised upon the "acts of appropriating, measuring and dividing space makes and orders these spaces in the first place" (Folkers 2020, 617) and the sovereign appropriation of land in Europe, the extension of this violent control over space through colonialism. In contrast to historical forms of colonial

appropriation focused on the appropriation of land, what is at stake with air-appropriation, he suggests, is the "molecular spatiality that concerns the chemical composition of the atmosphere expressed in parts per million (ppm) of CO_2" (Folkers 2020, 617). He draws on the work of Michel Serres, who highlights the interconnected etymology of property, proprietary, and cleanliness to conceptualize waste as a type of appropriative control (Serres 2010).

Excessive emissions, however, were not perceptible as an act of appropriation until the atmosphere — or the atmosphere's carrying capacity of greenhouse gases — became scientifically recognised as limited. In classical international law approaches, air (along with the high seas) was conceived as being *res communis* ("belonging to all") on account of its being limitless and available for the use of all. However, as the scientific consensus consolidated that there were clear limits on the atmosphere's capacity to absorb GHGs and/or waste gases, the atmosphere increasingly became an object of legal concern and governance. The questions about *whether* quantified emissions limitations should be imposed, on *which* polluters, and how they should be *quantified* were highly contested throughout three decades of climate negotiations. Due to developing country advocacy, the preambular paragraphs of the 1992 *United Nations Convention on Climate Change* (United Nations Framework Convention on Climate Change (New York, 9 May 1992) 1771 U.N.T.S. 107, 31 I.L.M. 849 (1992), entered into force 21 Mar. 1994, hereinafter UNFCCC) acknowledge that "the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs."

While developing country parties have insisted that the principle of "common but differentiated responsibilities" (UNFCCC, art 3.1) meant that historical polluters needed to take the lead on

emission reductions, this interpretation has been rejected by developed countries, and the principle is increasingly undermined and decentred in the regime (Dehm 2021, chap. 3). While the 1997 Kyoto Protocol operationalized the principle of "common but differentiated responsibilities" and only imposed emission reduction obligations on developed country parties, the 2015 Paris Agreement (*Paris Agreement*, opened for signature on 22 April 2016, UNTS XXVII.7.d (entered into force 4 November 2016, hereinafter Paris Agreement)) is premised on self-differentiation, with each country putting forward its own "nationally determined contribution" and lacks any process for ensuring each country is contributing its "fair share" of the global mitigation effort (Dehm 2018c; 2021). Thus, the way in which the international climate regime imposed limits did not properly readdress the unequal historical appropriation of the atmosphere. Instead, by imposing only very modest emission reduction limitations on historical polluters, it effectively allowed the unequal appropriation of atmospheric space to continue.

Additionally, the unequal appropriation of atmospheric space by historical polluters was converted into an unequal allocation of initial carbon credits through the legal establishment of international emissions trading schemes. The initial allocations of the new immaterial property rights in carbon were premised upon the unequal historical appropriation of the atmosphere. This created a "unequal distribution of these entitlements amongst states" (Felli 2014, 254) that favoured the Global North over the Global South, and this initial unequal distribution of property rights within the regime has ongoing implications for the structure of international carbon markets and the forms of dependency and control they establish. Emissions trading entails a certain "privatization of the atmosphere" (Torres 2001), by legally constructing permits that allow the holder to emit, and constructing the legal architecture that allows such permits to be traded between polluters. The text of the 2005 Marrakech Accords that operationalized the Kyoto Protocol's carbon trading mechanisms explicitly denies that it "created or bestowed any right, title or entitlement to

emissions" on parties (UNFCCC, Decision 15/CP.7, FCCC/CP/2001/13/Add.2. 2002, and UNFCCC, Decision 2/CMP.1 FCCC/KP/CMP/2005/8/Add.1. 2006). But commentators agree that, in practice, the effect of the decision created a quasi-property right (Yandle 1999; Wemaere, Streck, and Chagas 2009). Thus, the establishment of the carbon trading regime not only put limits on future emissions but also — simultaneously — established the "constitution of public entitlements to emit greenhouse gases" (Felli 2014).

The initial allocation of property rights in "entitlements to emit" was implicitly premised upon an "occupation theory" or "first discovery" justification for property. In the early 20th century, Morris Cohen explained that "[t]he oldest and up to recently the most influential defence of private property was based on the assumed right of the original discoverer and occupant to dispose of that which thus became his" (Cohen 1927, 15). The so-called "doctrine of discovery" which was used to justify colonialism in the Americas, was premised on claims by European powers of their "ethnocentric allegations of cultural, racial, governmental, and religious superiority over the rest of the world" (R. J. Miller 2019). Farhana Yamin notes that "[b]y requiring only modest cuts from current emissions levels (and in some cases allowing increases), the Kyoto Protocol targets appear to sanction grandfathering as a formula for allocating emissions" — an approach that gives developed countries "considerable advantages because it sanctions their high levels of current emissions" and this works to the disadvantage of developing countries (Yamin 1999, 267). She suggests the grandfathering approach reflects "two traditional legal principles regulating the appropriation of things and territory historically favoured by [countries of the Global North]:" firstly that "whoever possesses a territory and exercises actual control over it acquires a legal title;" and secondly, where something is consider *terra nullius*, "the 'first come-first served' principle establishes title, provided there is an actual display of sovereignty and authority" (Yamin 1999).

This approach, based on "grandfathering," differs sharply from other principles that could be used to determine allocations, such as claims of equal per capita rights to emit GHGs (D. Miller 2009; Salzman 2010), or frameworks such as greenhouse development rights, in which the allocation of obligations is based on considerations of both responsibility (contribution to the problem) and capacity (ability to pay), as well as a "right to development" (Baer et al. 2008) or the application of the "polluter pays" principle in relation to historical emissions (Yamin 1999). In contrast to these latter approaches, which are based on consideration of equality or equity, "grandfathering" favors those countries that have historically been the main polluters.

Other commentators have highlighted how practices of "grandfathering" have rewarded historical polluters. Romain Felli argues that the process of so-called "grandfathering" "ensured that the distribution of entitlements amongst countries favoured the wealthiest and most 'polluting' countries: those with the highest amount of emissions received the largest amount of entitlements to emit" (Felli 2014, 262). Similarly, Diana Liverman notes that "[b]ecause the baseline for reductions was based on emissions in 1990, the atmosphere was effectively 'enclosed' according to pollution levels in 1990." This affirmed and endorsed "prior appropriation," such that "those who first polluted the atmosphere then [would] acquire a right to pollute under international law" (Liverman 2009, 294).

Therefore, although many commentators argued that the key problem with the Kyoto Protocol was that it allowed "the underdeveloped world … to continue to emit with impunity" (Yandle 1999; Campbell, Klaes, and Bignell 2010), because developing countries were not (pursuant to the principle of common but differentiated responsibilities (CBDR)) required to commit to emission reductions, arguably the more problematic effect of the Kyoto Protocol was that it constitutionalized an unequal and inequitable allocation of rights to emit that favored the historical

polluters of the Global North. Although countries of the Global South were excluded from immediate emission reduction obligations under Kyoto, the principle of GHG emissions agreed to — namely "grandfathering" — was disadvantageous to them (Felli 2014, 263).

Moreover, the hybrid system established by the Kyoto Protocol does not simply permit the trading of allowances. It also enables the production of "offset" allowances or credits from activities considered to represent 'saved' or 'prevented' emissions. The former "Clean Development Mechanism" allowed countries of the Global North to purchase carbon credits from "emission reduction" projects located in the Global South (Kyoto Protocol, art 12). The stated objectives of the mechanism were to deliver globally aggregate and symbiotic benefits, to help countries of the Global South achieve sustainable development, and to allow countries of the Global North to achieve their compliance obligations in the most cost-effective manner (Kyoto Protocol, art 12).

However, critics have highlighted that such schemes have failed to reduce aggregate emissions (Martin Cames et al. 2016) while also failing to promote sustainable development (Boyd et al. 2009). Instead, they often caused social, environmental, or human rights harms in the communities where project were located (Lohmann 2006). Thus, not only did the creation and unequal initial allocation of property benefit the historical polluters of the Global North, but it also created new relationships of structural inequality in the carbon economy by positioning countries of the Global South as producers of carbon credits to satisfy demand from and benefit the Global North. As James Gathii writes, "[a]t the heart of initiatives like carbon offsets is the continuation of a long history of extraction, exploitation, and exploration of raw materials or commodities from Global South countries with valuable ecosystems" (Gathii 2024, 546). The new carbon economy thus replicated and reproduces neo-colonial and racialized inequalities and promotes new forms of "accumulation by decarbonization" (Bumpus and Liverman 2008), "carbon colonialism" (Dehm

2016), "CO_2lonialism" (Indigenous Environment Network 2009b) and the actualization of new forms of global authority over land and resources in the Global South (Dehm 2021). As such, these initiatives reflect a continuation of the systemic economic oppression and exploitation enabled by structures of racial capitalism under the guise of the so-called "green economy."

V. Fossil Fuels, "Stranded Assets" and International Investment Law

This section discusses a second telling example of the racialized dynamics of property in the context of the international legal regulation of climate change namely how international investment law is allowing fossil fuel companies to seek compensation if governmental actions in response to climate concern impact their investment or expected returns. International investment law has increasingly been used by fossil fuel companies to seek compensation from governments that implement climate policies that might impact their profits. This highlights the racialized protections of property that international law provides. There is a growing critique of the racialized nature of international investment law. As James Thuo Gathii and Ntina Tzouvala write, international economic law "is deeply implicated in how relationships of expropriation, exploitation, and hierarchy along race and ethnicity are produced and in the ways in which some people are subordinated by others through processes of economic extraction and wealth acquisition" (Gathii and Tzouvala 2022, 199). They argue that the legacies of slavery, imperialism, and colonialism that are central to capitalism, have not been "transcended" by international economic law, but rather that "past patterns of direct political subjugation have been transformed to contemporary patterns of over-exploitation, destruction, and abandonment, often carried through and subsequently rendered invisible or are 'legitimated' by [international economic law]" (Gathii and Tzouvala 2022, 199–200).

The history of international economic law shows how the field has been structured by the imperative to maintain, colonial power and racial hierarchies, especially in the aftermath of formal decolonization. As Felipe Ford Cole writes, "For the jurists and diplomats that shaped the core [international investment law] doctrines in the nineteenth and early twentieth centuries, however, the goal was securing the property of investors from "civilized" races in a world of "uncivilized" races" (Cole 2022, 1). Scholars have highlighted how the process of investment arbitration emerged in the aftermath of socialist revolution and decolonization (Miles 2013; Pahuja 2011) to protect the private property of Western companies in the face of Third World "resource nationalism" (Dietrich 2017) and efforts to claim permanent sovereignty over their natural resources.

The emergent field of investment law grew out of arbitral practice and associated scholarly writing in the early 20th century, where lawyers sought to enable "positioning the protection of foreign property as a universal rule against domestic attempts at large-scale redistribution of wealth" (Leiter 2022, 56). They invoked the "general principles of law as recognized by civilised nations," which was authorized by a "hierarchisation of difference" that favored Western claims of legality over those of socialist ad Third World states (Leiter 2022). The development of the recent field was spurred by efforts to protect wealth, power, and "fossil capital," including a number of key arbitrations over the nationalization of oil resources (Sornarajah 2015; Anghie 2007). The involvement of fossil fuel company directors and lawyers was as "masterminds" of and active participants in the project to develop investment law (Perrone 2021). Given this history, it is particularly concerning that international investment law is now being utilised by some fossil fuel companies in ways that risk posing a barrier to a rapid transition away from fossil fuels and is increasing the costs of the energy transition (Tienhaara et al. 2023; 2022; Tienhaara and Cotula 2020; Tienhaara 2018).

The fossil fuel industry has made extraordinary profits from the extraction, circulation, and combustion of fossil fuels. According to some analysis, it has amounted to a total of USD $52 trillion or a daily profit of USD $2.8 billion over the past 50 years (Carrington 2022). Thus it is unsurprising that the fossil fuel industry has, for decades, promoted misinformation and sought to influence policy to protect its interests (Supran, Rahmstorf, and Oreskes 2023; Franta 2021; Dehm 2023a). However, the science is clear: in order to meet the international goal of holding the average surface temperature rise to 1.5 degrees Celsius, a rapid phase-down of fossil fuel use is necessary. Analysis published in *Nature* in September 2021 showed that in order to have a 50% chance of limiting warming to 1.5 degrees, by 2050 nearly 60% of oil and fossil methane gas and 90% of coal must remain unextracted (Welsby et al. 2021).

However, governments have "already licensed, permitted, and constructed more oil and gas fields, coal mines and other fossil fuel infrastructure than is compatible with a liveable climate" ("Amicus Curiae Brief Regarding the Request of Advisory Opinion Submitted by the Republic of Chile and the Republic of Colombia" 2023). The 2023 IPCC Synthesis Report warned that "projected CO2 emissions from existing fossil fuel infrastructure without additional abatement would exceed the remaining carbon budget for 1.5°C" (Lee et al. 2023). The International Energy Agency has modelled that in order to have a 50% chance to limit global heating to 1.5°C, no new oil and gas fields should approved for development, nor any new coal mines or mine extensions (Bouckaert et al. 2021; Fernández and Spencer 2023). Academic studies have confirmed that no new fossil fuel projects are needed in a 1.5°C world (Green et al. 2024). This fact, in conjunction with the reality that "preventing new fossil fuel projects is, generally, more economically, politically, and legally feasible than closing existing projects," ground their normative claim that "that new fossil fuel projects ought not be permitted" (Green et al. 2024).

However, the phasing out of fossil fuels also needs to be informed by justice principles: states — and arguably also corporations — with large historical and ongoing emissions must take the lead in phasing out fossil fuels (Okafor 2020, para 29-30). Moreover, equitable considerations needs to inform what fossil fuels are left in the ground, who has the best case for using the remaining allowable amounts of fossil fuels, and whether compensation should be paid to low-income countries for keeping fossil fuels in the ground (Carney 2016; Dehm 2023a, 173–74). Although it took almost 30 years of discussions, international climate negotiations have started to address the underlying cause of the climate crisis, namely fossil fuels (which accounted for 91% of CO2 emissions in 2022) (Hausfather and Friedlingstein 2022). The 2021 "Glasgow Climate Pact" called on countries to "accelerat[e] efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies" (UNFCCC, Decision 1/CP.26 (2022) FCCC/CP/2021/12/Add.1, para 20). COP28 in 2023 called on parties "to contribute to…transitioning away from fossil fuels in energy systems" (UNFCCC, Decision 1/CMA.5 (2024), FCCC/PA/CMA/2023/16/Add.1, para 28(d)). Nonetheless, the United Nations Environmental Programme's *Production Gap* report shows that countries still plan to produce more fossil fuels than is consistent with limiting warming to 1.5°C (SEI, Climate Analytics, E3G, IISD, UNEP 2023).

Given this, it is concerning that international investment law might present a further barrier to a rapid and equitable transition to a low-carbon society. It might impose the costs of that transition on states and their populations rather than on the companies who have profited from causing the climate crisis. Kyla Tienharra et al, provide a careful analysis of the legal and financial risks that countries, especially low- and middle-income countries face, and conclude that "government policies necessary for the energy transition will be delayed, weaker than otherwise, and/or more

costly to taxpayers due to ISDS cases and the threat of investor claims" (Tienhaara et al. 2023). In 2023, the Special Rapporteur on the right to a healthy environment wrote that:

> Humanity has reached a now-or-never point that demands deep, rapid emission reductions, detoxification and scaled-up nature protection by 2030. Otherwise, we risk an unliveable future for ourselves and future generations. Yet as States struggle to address the climate crisis, protect the environment and safeguard human rights, they are threatened by foreign investors using ISDS claims and threats to delay, weaken or overturn these imperative actions and seek billions of dollars in compensation (Boyd 2023, para 72).

There have been over 150 international investment law cases brought by companies involved in extracting, transporting, refining, selling, or burning fossil fuels for electricity (Tienhaara, Johnson, and Burger 2020). However, these cases did not directly engage with questions of climate policy. One of the first cases to be adjudicated that more directly implicated climate policy was *Rockhopper v Italy* (Rockhopper Italia S.p.A., Rockhopper Mediterranean Ltd, and Rockhopper Exploration Plc v. Italian Republic, ICSID Case No. ARB/ 17/14.). This case concerned the decision of the Italian government to impose a ban on all oil and gas projects within 12 nautical miles of the Italian coast. This impacted the 2014 license of Rockhopper's, a UK-based company, to drill for oil off Italy's Adriatic coast. The tribunal found in favor of the fossil fuel company and ordered Italy to pay them $185 million in compensation for this expropriation.

There are various critiques that can be made of the *Rockhopper* decision (Arcuri 2023; Arcuri, Tienhaara, and Pellegrini 2024; Marzal 2023b). One important critique concerns how the tribunal ascertained the damages awarded to the investor based not on their "sunk costs" but on their future expected profits, based on a discounted cash flows analysis (Marzal 2023b; 2021; 2023a). Such an approach to damages assumes that the company should have been able to extract — and

profit from — all the oil in the concessions, without any ecological or other limitations, despite the warning from climate science that fossil fuels must remain underground unburnt. However, arguably at the heart of the decision is the question of what constitutes property.

The *Rockhopper* case arises out of regulatory disputes over the Ombrina Mare project. An exploration permit was first sought in 2002, granted in 2005, and exploration started in 2008, despite strong opposition from local citizens in the "No Ombrina" movement (Arcuri 2023, 6). In the aftermath of the Deepwater Horizon oil disaster, the Italian government passed the Decree Prestigiacomo which prohibited oil extraction within 5 nautical miles of the coast and 12 nautical miles of protected areas. Although the permit should arguably have been refused at this stage, especially after the Technical Committee considering its environmental impacts recommended against granting a permit, no action was taken.

In 2012, a new Law Decree on Development created an exception to the previous Decree Prestigiacomo, to exempt oil operations that had already submitted a production concession application from the ban. The project was revitalised, and in August 2015, the Ministry of Environment issued the Decree of Environmental Compatibility and an application for a production concession was lodged. While this application was still pending, in December 2015, a Stability Law was introduced, which banned all oil extraction within 12 nautical miles, and in January 2016 the permit for the project was denied. In April 2017, Rockhopper commenced arbitration proceedings against Italy. The claimant successfully argued that Italy had breached Article 13 of the Energy Charter Treaty (Energy Charter Treaty, entered into force Apr. 16, 1998), which regulates expropriation. This was based on a contested factual finding of the tribunal that "the Claimants had a right to be granted a production concession which was engaged as of 14

August 2015," and the tribunal presented the denial of the permit as a deprivation of this right (*Rockhopper* para 191).

However, as Alessandra Arcuri shows, this legal conclusion depended upon the tribunal first "envisag[ing] a 'right to a production concession'" and then then equating it to a *de facto* property right, when, in fact, under Italian law, "Rockhopper was never endowed with such a right" (Arcuri 2023, 13). She argues that the tribunal's approach treated the company's expectation that it would be granted a production concession "as an irrevocable right is a way to augment investors' rights" (Arcuri 2023, 13). She suggests that the award did not reflect existing property entitlements, but was in fact "constitutive of otherwise non-existing property rights" (Arcuri 2023, 13). Arcuri argues that the tribunal constituted new rights for the fossil fuel company in two different ways: firstly by "creating a right to obtain a concession for the production of hydrocarbons which was nowhere to be found under Italian law," and secondly, "in line with neoliberal developments of international investment law, the tribunal extended the property rights and the concept of expropriation by equating an alleged right to obtain a production concession to property rights that could be expropriated" (Arcuri 2023, 17).

While *Rockhopper* is, as Arcuri argues, "particularly illustrative of how arbitration tribunals can create new rights by expanding the boundaries of expropriation and by misreading domestic law" (Arcuri 2023, 14), it is certainly not unique in this regard. As Antony Anghie identifies, investment tribunals have "been continuously expanding the concept of property itself through their findings on what constitutes a 'foreign investment'" (Anghie 2023, 83). Scholars have shown that ISDS arbitrators have "advanced investors' rights [by] interpreting ambiguous treaty provisions very broadly in a way that establishes new categories of protected property that did not previously exist" (S. Nichols 2018, 252). This more expansive interpretation of what constitutes property in the

investment law context has far-ranging implications, including for the "distribution of regulatory costs between the public and private" and the compromise of "public policy latitude" (S. Nichols 2018, 264). It reflects an approach to property taken within the international investment regime that is focused on "the maximization of local wealth through foreign investment" (Perrone 2017, 675). This focus thus promotes an approach that fosters the interests of foreign investors over national government or local communities. These cases demonstrate how international investment law "can be deployed to expand the property rights of the fossil fuel industry and to counter ecological democratic forces," leading scholars to argue that international investment processes are "complicit in delaying the green transition by ossifying and amplifying the fossil industry's property rights" (Arcuri 2023, 2). What emerges is both an extension of and a protection of the property rights of investors through international arbitration, to protect the interests of fossil capital, protecting fossil fuel companies from the costs of climate action, despite the fact they both caused and profited from the crisis.

VI. Resisting Reparations

This section discusses a final telling examples of the racialized dynamics of property in the context of the international legal regulation of climate change, namely the limitations of the "no harm" rule, which effectively internationalized the domestic principles of the tort of nuisance, used to provide full compensation for the racialized harms caused by climate change. In recent years, vulnerable countries in the Global South, especially low-island states, have experienced devastating impacts of climate change caused by the historical emissions of early-industrialising countries. The issue has recently gained new visibility and momentum. Already five million deaths a year are linked to climate change, and climate disasters are costing over $100 billion annually. These figures are projected to increase as climate change intensifies (Millan 2021; Mercado 2022). Some estimates suggest that developing countries will face between $290 billion and $580 billion in economic

losses from climate change in 2030, in addition to non-economic losses, with some predictions suggesting such losses could reach $1.7 trillion by 2050 (Markandya and González-Eguino 2019).

Demand for climate reparations by these affected countries is, as Sarah Riley Case has highlighted, intimately intertwined with a broader reckoning of the racialized violence of capitalism and colonialism, given that they are "rooted in the understanding that ecological harms arise from imperial relations" (Riley Case 2023, 50). These claims for climate reparations, she argues, are "indissociable" from demands for reparations for the ongoing legacies of slavery and colonial plunder, and this inescapable connection both gives further moral and legal weight to these claims while also "provid[ing] insights into meanings of reparations" (Riley Case 2023, 50). In her final report as special rapporteur on contemporary forms of racism, E. Tendayi Achiume called on the international community to "[p]rioritize reparations for historical environmental and climate harms and for contemporary harms rooted in historic injustice" (Achiume 2022, para 78). She elaborated that "[r]eparations require addressing historic climate injustice, as well as eradicating contemporary systemic racism that is a legacy of historic injustice in the context of the global ecological crisis."

Although countries of the Global South have voiced demands for some form of compensatory justice for the impacts of climate change for at least three decades, such demands have been persistently evaded and countries of the Global North have refused to discuss any compensation of historical harm or anything that might give rise to liability (Dehm 2020). Countries of the Global North have adopted a variety of tactics to obstruct and delay any outcomes related to compensation for climate-related harm, including "limiting the scope of the issue, reducing transparency, manipulating concepts, and pushing nontransformative solutions" (Falzon et al. 2023). The issue of "loss and damage" did not appear in the program of the UNFCCC until fifteen

years later, when it was included under "enhanced adaptation actions" as part of the 2007 *Bali Action Plan* (UNFCCC, Decision 1/CP.13 (2008), FCCC/CP/2007/6/Add.1, para 1(ii)-(iv)).

In 2013, in a major breakthrough, the Warsaw International Mechanism for loss and damage associated with climate change impacts was established (UNFCCC, Decision 2/CP.19 (2014), FCCC/CP/2013/10/Add.1). The treatment of loss and damage was one of the controversial aspects of the Paris Outcome — the Paris Agreement and the COP21 decision that accompanied it (UNFCCC, Decision 1/CP.21 (2016), FCCC/CP/2015/10/Add.1). Article 8.1 of the Paris Agreement, recognizes, "The importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage" (Paris Agreement, art 8). However, the accompanying COP decision included a clause that Article 8 of the Paris Agreement "does not involve or provide a basis for any liability or compensation" (UNFCCC, Decision 1/CP.21 (2016), FCCC/CP/2015/10/Add.1, para 52).

In 2022, after concerted action by climate justice organizations and groups and countries of the Global South, the international community agreed to the establishment of a funding mechanism for loss and damage (UNFCCC, Decision 2/CP.27 (2023), FCCC/CP/2022/10/Add.1). This was a historic step, a crucial victory for climate justice. However, the actual operationalization of the fund the following year (UNFCCC, Decision 1/CP.28 (2024), FCCC/CP/2023/11/Add.1), makes visible the limitations and constraints of this fund. In particular, there are no obligations imposed on historical polluters to contribute to the fund, and the amount pledged (US$661 million at the time of writing) represents less than 1% of the estimated $400 billion annual costs of climate change (McDonald 2023).

Simultaneously, there is growing concern that debates about loss and damage have been "captured by dominant neoliberal climate governmentality," and that, as a result within dominant institution and scholarly discourses, the root causes of climate harm are obscured, Western knowledge and technocratic interventions are centered in responses, and certain "colonial subjectivities" are imposed onto those impacted by climate change in the Global South (Jackson et al. 2023). Moreover, to date, most of the financing discussions within loss and damage bodies have focused on processes of prudential risk management, international support to establish new (index-based and other) insurance mechanisms, and the adoption of financial instruments such as catastrophe bonds (Dehm 2020).

The mobilization of green finance used to promote the development of insurance against climate makes visible the inherent contradictions in the "climate-development-finance nexus" (Chamberlain and Bernards 2024). James Chamberlain and Nick Bernards suggest such efforts are best understood as efforts to "navigate the contradictions engendered by global capital accumulation … within the constraints posed by international financial subordination" (Chamberlain and Bernards 2024, 15). Climate insurance schemes, such as the African Risk Capacity, they argue, "looks like precisely the inverse of most visions of climate reparations or climate justice." It entails a "net transfer of aid and fiscal resources to finance capital," and provides "uncertain protection" to those most vulnerable to climate hazards (Chamberlain and Bernards 2024, 15). Addressing climate risk through private financing mechanisms thus "continues the historical entrenchment and subordination of economies of the Global South to the current global debt and financial architecture that is already woefully imbalanced against them" (Gathii 2024, 536). Simultaneously, such schemes represent a dangerous inversion of climate justice demands that enables the further evasion of responsibility by those who have contributed most to causing the climate crisis. They put more responsibility on those who have contributed least to cuaisn thr climate crisis, but who are also the most vulnerable to ecological harm (Dehm 2020).

Given the persistent structural barriers faced in seeking compensative or reparative justice through international climate negotiations, it is unsurprising that climate justice advocates and communities impacted by climate harm have sought other legal avenues for redress outside of the international climate regime. In the aftermath of the 2015 Paris Agreement, there has been rapid growth in climate litigation, with the number of climate change-related cases more than doubling since 2015. While the "first generation" of climate litigation primarily focused on traditional environmental law arguments — such as administrative appeals against approvals for fossil fuel mines and infrastructures — "second" and "third generation" climate cases have mobilized new and novel legal arguments to bring claims against public and private actors (Peel, Osofsky, and Foerster 2017).

Some of these cases directly engage arguments for climate reparations, including a growing number of tort-based claims seeking compensation from fossil fuel companies for the climate impacts already being experienced by communities and individuals (Ganguly, Setzer, and Heyvaert 2018). However, as I describe below, these claims remain structurally shaped by limitations of property rights, given that they are primarily based on tort doctrines, such as nuisance, that are focused on the protection of an owner's right to the use and enjoyment of their property. For example, the transnational tort, *Luciano Lliuya v RWE AG* brought by a Peruvian farmer against German energy giant the Essen Regional Court, is based on provisions in the German Civil Code that allow an owner to seek an injunction if their ownership is interfered with (Collyns 2022; 2015). On May 28, 2025, the court dismissed the plaintiff 's appeal because it found that there was no concrete danger to his property (Zivilsenat des Oberlandesgerichts Hamm [Fifth Division for Civil Matters of the Higher Regional Court of Hamm], Verdict (May 28, 2025). Although his case was dismissed, the plaintiff and his legal team celebrated the ruling as "mak[ing] legal history" because the "judges

confirmed that major emitters can be held liable under German civil law for the consequences of climate change" (The Climate Case, Saul vs. RWE (accessed June 3, 2025)). The court's legal reasoning affirmed that The German Civil Code can apply transnationally in climate cases, that RWE's emissions are globally significant, that civil liability can arise from lawful polluting activity, and that holding emitters liability does not create a competitive disadvantage but reflects a value-based legal system (Dehm 2025a). However, many other climate-vulnerable people in the Global South will not have the standing to bring similar actions if they lack what Lliuya had, namely formalized evidence of ownership of his home. Although other less proprietary based reparative claims have also been proposed, such as atmosphere recovery litigation, based on the public trust doctrine, such claims have not yet been legally pursued (Wood 2021).

At the international level, the question of reparations for climate harm is raised most directly by the International Court of Justice (ICJ) Advisory Opinion on *Obligations of States in Respect of Climate Change* (Obligations of States in respect of Climate Change, Advisory Opinion, I.C.J. Rep. 2025 (July 23)). The Pacific Island climate activists who spearheaded the campaign for the Advisory Opinion have described it as part of "an epic battle to save planet Earth" (U.N. Press Conference on Request for International Court of Justice Advisory Opinion on Climate Change). The advisory opinion handed down in July 2025, has been celebrated as marking the start of a "new era of climate reparations" (Narulla 2025). One of the most significant aspects of the ICJ's advisory opinion is the court's affirmation of the applicability of broader principles of general international law to the climate crisis, including the duty to prevent significant harm to the environment and general rules on State responsibility (Wewerinke-Singh 2025). However, even as the ICJ opened the door to climate reparations, it was evasive on the key temporal questions that are central to any future claims about reparations owed by individual countries for their historical greenhouse gas emissions (Dehm, 2025b). Thus, even as the advisory opinion opens the doors to potential

future claims for climate reparations, it also highlights the many still existing legal hurdles that such claims would face (Dehm, 2025b).

Despite this important opening, there are still formidable obstacles to *in concreto* international legal claims for historic responsibility for climate change, and the operation of the "no harm" rule arguably reproduces some of these barriers. Legal mechanisms are most apt at addressing individualized, quantifiable harm and its proximate causes, and are ill-equipped to address structural injustice. Legal requirements to demonstrate foreseeability can limit remedies to those harms caused knowingly. They can exclude responsibility for emissions prior to a certain date, even though industrialised nations still benefit from, and arguably were unjustly enriched, through emitting activities.

Legal requirements to show specific causation cannot properly grapple with the temporally expansive, global, environmental, cumulative, and collective dimensions of climate change. The difficulties that claims for historical emissions face in demonstrating all elements of the duty to prevent significant harm to the climate system, including meeting all the evidentiary requirements, does not indicate an inherent "weakness" in these claims (Mason-Case and Dehm 2021). Rather, it highlights how the doctrines of international law are themselves often still implicated in historical harms, and thus inadequate, for properly remedying the complex harms arising from cumulative, historical emissions.

Arguably, one of the key underlying reasons why the 'no harm' rule provides only a limited and very constrained tool for promoting climate reparations is that it, too, is structurally constrained by the logic of property. The "no-harm" rule was first articulated in relation to the environment in the 1941 *Trail Smelter* arbitration. The oft-cited ruling states that, "under the principles of

international law …no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence" (*Trail Smelter Case (United States, Canada),* Reports of International Arbitral Awards, 16 April 1938 and 11 March 1941, Vol III pp. 1905-1982, hereinafter *Trail Smelter Case* 1965). This principle has subsequently been recognised as a customary norm of international law, preventing transboundary pollution, and become "the fundamental building block of a system of international environmental protection" (Mickelson 1994, 220). However, despite the significance of this case, it is rare to see scholarly accounts that critically engage with the facts, circumstances, and context of the dispute. Instead, the dispute is reduced to "simplistic and abstract statements of principles" (Mickelson 1994, 224).[iii]

Recent scholarship highlights the importance of critically revisiting this case. Sigrid Boysen argues that *Trail Smelter*, far from being the celebrated origins of international environmental law, should better be understood as its "original sin," given how the case has grounded international environmental principles on what is essentially a property norm (Boysen 2021; Venzke 2022; Kulamadayil 2022). What the arbitration did was essentially transpose to the transnational level the domestic tort of nuisance, which protects property owners' right to the quiet enjoyment of their property. The applicable standard is derived from the Latin maxum *sic utere tuo ut alienum non laedas* — use your own property so as not to harm that of another (Mickelson 1994, 220).

In particular, revisiting the facts and context of *Trail Smelter* shows how the arbitration tribunal framed damage in a very constrained and limited way, as economic damage or damage to property. This framing potentially has ongoing implications, especially for the racialized communities most vulnerable to the impacts of climate change. The *Trail Smelter* arbitration arose out of the sulfur

dioxide pollution generated by a smelter operated by the Consolidated Mining and Smelting Company of Canada Limited, located at Trail in British Columbia, on the Columbia River, about 11 miles from the international border with the United States (Read 1963, 213). Initially, Canada and the United States sought to resolve the dispute through negotiations and established an International Joint Commission to evaluate and quantify the damage caused. Based on the Commission's report, Canada paid $350,000 in damages to the United State. However, the dispute persisted because the pollution, and resulting harm, continued.

In 1935, a special agreement was reached between the parties, *Convention for the Settlement of Difficulties Arising from Operation of Smelter at Trail, B.C* (signed 15 April 1935; ratified 3 August 1935), under which they agreed to constitute a tribunal (Article I) and set out the questions the tribunal was to decide (Article III) as well as other procedural matters. Critically, the parties specified that the tribunal should apply the law and practice of the United States as well as international law and practice (Article IV). The choice of United States law, rather than Canadian law, as the applicable law to the dispute was both deliberate and driven by a shared concern by both parties that Canadian nuisance law precedents were more "unfavourable to industrial enterprise," while US precedents were perceived as "much more evenly balanced in their effect on industrial and agricultural enterprise" (Read 1963, 227).

The tribunal's opening statement demonstrates a keen awareness that the role of the parties could easily be reversed, and that both parties had a shared interest in ensuring that "indemnity to damaged parties for proven damage shall be just and adequate," but also that "unproven or unwarranted claims shall not be allowed" (*Trail Smelter Case* (1941) 1939). The tribunal's decision recognised it would not be advantageous to either party that "industrial effort should be prevented by exaggerating the interests of the agricultural community," nor that the "agricultural community

should be oppressed to advance the interest of industry" (*Trail Smelter Case* (1941) 1939). Thus, rather than developing a principle that would clearly prohibit pollution above specified thresholds, the Tribunal sought to promote a delicate balance between industrial interests and interests in limiting pollution. This uneasy balance between pursuing industrial development and obligations to limit environmental harm has structured international environmental law (Koskenniemi 1984 see also *Declaration of the United Nations Conference on the Human Environment*, UN Doc. A/CONF.48/14/Rev.1 (1972) hereafter Stockholm Declaration, principle 21; *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992).

In considering the choice of law, the tribunal, however, did not refer to the Special Agreement but determined that the "law followed in the United States in dealing with …the matter of air pollution… is in conformity with the general rules of international law" (*Trail Smelter Case* (1941), 1963). After noting that no decisions of an international tribunal relating to air pollution, or even water pollution, had been cited or found, it noted that "[t]here are… certain decisions of the Supreme Court of the United States which may be legitimately taken as a guide in this field of international law, for it is reasonable to follow by analogy, in international cases, precedents established by that court" (*Trail Smelter Case* (1941) 1964). The tribunal's famous and oft-cited statement of principle — which has become foundational for international environmental law — was directly based on the (industry-friendly) principles of United States nuisance law. Specifically, in defining damage and delimiting the extent to which damages were recoverable, the tribunal referred to "decisions of the courts of the United States in suits between private individuals" (*Trail Smelter Case*, 1966). The reliance on these precedents meant that the tribunal adopted a very narrow understanding of damage as "only things for which pecuniary loss could be proven," thereby dismissing other intangible forms of injury (Rubin 1970, 261 & 265).

In his analysis of the decision, Alfred Rubin suggests that relying on the more industry-favorable United State precedents meant that the decision "favors the polluter in continuing his polluting activities to continue as long as they do not cause 'damage' in the sense of direct injury measurable in money terms to the industrial or agricultural production of a second state" (Rubin 1970, 263). He is concerned that the case thus implies, "that general international law permits a state to fail to regulate injurious effusions that drift into the territory of a second state, as long as the damage done is not directly translatable into a provable cash sum" (Rubin 1970, 265). While the "no-harm" rule in international law has evolved since the *Trail Smelter* arbitration, the implicit propriety logic arguably continues to influence how harm that needs to be prevented and compensated for is conceptualised.

Another potental hopeful avenue for seeking reparations for climate harm is human rights-based litigation for compensation for loss and damage (Wewerinke-Singh 2023). Margaretha Wewerinke-Singh provides an analysis on rights-based climate litigation aimed at addressing loss and damage that seek legal remedies, including monetary compensation, corporate accountability, and addressing climate-induced displacement (Wewerinke-Singh 2023). A number of such cases are pending in different jurisdictions, and Wewerinke-Singh is optimistic that "these cases reflect a move in climate litigation towards holding historical polluters accountable for loss and damage based on human rights" (Wewerinke-Singh 2023, 552). However, she is also alert to ongoing challenges, including the barrier posed in some jurisdictions by the requirement to demonstrate "actual injury" or some form of economic loss. While there have, to date, been some "significant normative advancements and institutional breakthroughs," these have, she notes, "fallen short of providing tangible redress for victims" due to both the "still-maturing state of rights-based climate litigation" and the "difficulties in translating legal principles into effective remedies in a complex, multi-jurisdictional and politically charged context" (Wewerinke-Singh 2023, 552).

One of the few human rights cases where reparative remedy was awarded was *Billy et al. v. Australia,* where the Human Rights Committee found Australia had violated Indigenous Torres Strait Islanders' rights to family life and culture by failing to take adequate adaptation measures (*Views adopted by the Committee under article 5(4) of the Optional Protocol, concerning communication No. 3624/2019*, CCPR/C/135/D/3624/2019 (22 September 2022) hereafter *Billy v Australia*). The decision is highly significant as it was the "first time an international human rights body established state responsibility for human rights violations resulting from climate change impacts, and directed the state to make 'full reparations' to the victims" (Wewerinke-Singh 2023, 558). However, it is significant that the decisions only found violations based on Australia's failure to take adequate adaptation measures and did not discuss violations arising from Australia's failure to take adequate mitigation measures. As such, it represents a "lost opportunity" (Voigt 2022) to develop human rights jurisprudence to address the legal responsibility of historical and ongoing polluters. Instead, a focus on adaptation measures — while undoubtably necessary — imposes obligations primarily on highly vulnerable and often financially constrained countries of the Global South. Philip Alston has harshly critiqued human rights bodies for evading issues of mitigation — "the issue of greatest importance for reversing the current trajectory" — and instead being "far more comfortable in addressing adaptation, impacts on particular groups and procedural rights than confronting the core causes of climate change itself" (Alston 2019, para 24).

This focus on adaptation measures, rather than mitigation measures, reflects a broader tendency of human rights frameworks to evade demanding structural changes to the international political and economic conditions necessary to realize human rights and instead focuses on state responsibility for human rights realization domestically. Similar dynamics have been observed in how human rights responded to the problem of economic inequality. In the 1970s, countries of

the Global South argued that addressing global inequalities and structural injustice is a prerequisite for the realization of human rights, especially economic and social rights. Domestically, by the 1980s and 1990s, such arguments had been defeated and a more "individual" and less "structural" vision of human rights was institutionalized (Dehm 2018a; 2019).

At the heart of the tension between a more liberal tradition of human rights, focused on individual freedom, and a more counter-liberal tradition of human rights, which has been much more attentive to how free markets and global trade relations posed threats to the effective enjoyment of human rights, is arguably the controversial question of a "right to property" (Lang 2011, chap. 2). The status of a "right to property" has been a key point of contention between these traditions. The right was included in the Universal Declaration of Human Rights (art 17), but deliberately excluded from the International Covenants. In the late 1980s and early 1990s, the right to own property was affirmed in a series of human rights resolutions (G.A Resolution 41/132, "Respect for the right of everyone to own property alone as well as in association with others and its contribution to the economic and social development of Member States" UN Doc. A/41/925 (4 December 1986); G.A Res 45/98, "Respect for the right of everyone to own property alone as well as in association with others and its contribution to the economic and social development of Member States" UN Doc. A/RES/45/98 (14 December 1990)) and experts argued that protection of the right to property was a central human rights concern and necessary for the realization of other rights (Rodríguez 1992; 1993). The right to property have been strategically mobilized to assert claims to land by Indigenous peoples, especially in in the Inter-American human rights system (Engle 2010). However, the elevation of a "right to property" in the post-Cold War period also helped consolidate more neoliberal "trade-related, market-friendly human rights" (Baxi 2002). It is not a stretch to say that the degree to which human rights law is capable of offering truly transformative and reparative responses to climate damages depends on the extent to which the

human rights institutions, discourses, and imagination remain shackled by the constraints imposed by a logics of property, or the extent to which they can exceed and contest them.

This analysis foregrounds how international legal norms deployed to promote climate reparations, including transnational torts, the no-harm rule, and human rights remedies, are all to some degree constrained by a property logic. In a world structured by racial capitalism, where the distribution of property rights are highly unequal due to a violent history of colonial dispossession of Indigenous peoples and racialized land laws, relying on property norms to promote climate reparations will structurally disadvantage racialized peoples. As Tony Anghie argues, "[a]ny discussion of reparations must begin by engaging with the process by which the world was transformed into property and by confronting the historical fact of the unprecedented dispossession that followed" (Anghie 2023, 90).

Additionally, the history of nuisance law cannot be told separately from the history of industrial pollution, with scholars noting how doctrinal changes made such pollution permissible (Antolini 2001; Garrells 2009). When nuisance law becomes subject to a utilitarian logic (Epstein 1979), it favours industrial development over corrective or racial justice. Moreover, there is a long history of property law torts such as nuisance being invoked to "exclude Blacks from spaces racialized as 'white'" (Henderson and Jefferson-Jones 2019; Godsil 2006). Relying on the proprietary logic of property in seeking remedies for climate harm reinforces rather than ameliorates the history of racialized, colonial dispossession and the inequalities of racialized regimes of property.

A transformative approach to climate reparations must thus foreground the *harms of dispossession*, rather than *harms to property*, in order to promote genuine reparations that contest, rather than

reinforce structural racism. This recognition that "contemporary international legal principles [may] present barriers to historical responsibility for climate change," highlights the need to, as former Special Rapporteur on contemporary forms of racism Tendayi Achiume recommended, "decolonize or transform this law" (Achiume 2023). Similarly, Indigenous philosopher Kyle Powys Whyte has argued that because the "political relations established through settler colonialism are closely coupled with the infliction of anthropogenic environmental change" and these political relations simultaneously Indigenous peoples' cultural and political capacities to adopt to climate change, settler-colonial states have an obligation to acknowledge how harmful these current political relations are and "support stable and evolving respect for Indigenous self-determination" (Whyte 2021, 241). That is, reparations for loss and damage entails "political reconciliation", including by reworking political relations frameworks such as treaties, in order to "radically repair the political relationships that the inflicted anthropocentric environmental change on Indigenous peoples" (Whyte 2021, 241).

VII. Conclusion

This article seeks to draw attention to the legal architecture underpinning the way in which racial capitalism produces, distributes, and profits off of climate harm and how racialized regimes of property right structure the political economy of climate change. Three examples explore various ways in which racialized regimes of property produce and reproduce climate injustice.

Firstly, the article shows how the historical appropriation of atmospheric space by countries of the Global North replicates and repeats colonial processes of appropriation, thereby denying racialized and colonized peoples around the world the capacity to determine their own development

pathways and ensuring that the initial property allocation in the new carbon economy was structured by relations of inequality and dependency.

Secondly, it shows how international investment law, which works to maintain neo-colonial relations, has continually expended the category of property to protect and secure the right of (white) capital and is now operating to protect the interests of fossil capital. Against this background, the international legal frameworks used to address the harm of climate change, which were developed through direct analogies from the property tort of nuisance, are completely inadequate for addressing the racialized violence of climate change as they do not address the background legal questions of what harms are considered a harm to property and what rights and entitlements are considered property how such propriety interests have been distributed.

The examples highlight both how the legal protection of property is preventing just and effective climate responses, and how property regimes work to continually reproduce racial difference and racial inequality.

It is, therefore, unsurprising in divergent strands of scholarship on racialized regimes of property, on Indigenous resurgence, and on ecological jurisprudence there is a converging argument about the need for property, as a legal form, to be radically reconceptualized. Property theorist Margaret Davies writes that "[r]e-forming property as an idea, a practice, and an institution in a way that is materially responsive and (for land) situated in space is one of the most significant adjustments required for a more resilient and sustainable social-ecological future" (Davies 2021, 15). These insights are echoed by other property scholars. Jill Fraley argues that property rights are "the single largest limitation on our ability to respond effectively to the climate crisis" (Fraley 2020, 94). Peter

Szigeti suggests that because "property law holds the key to an ecologically respectful economy system," the "starting point for the ecologiziation of law should be property law" (Szigeti 2021, 47–48). Others have highlighted how transforming international law for a more liveable world will already require contending with legal protection of intellectual property, including reshaping the form of the patent (Saunders 2025).

Much of this critical scholarship on property draws explicitly on Indigenous struggles and Indigenous jurisprudence. For example, Margeret Davies, Lee Godden, and Nicole Graham suggest reimagining property "within a framework of habitat," a project they see as inherently aligned with decolonization (Davies, Godden, and Graham 2021). Indigenous jurists have sought to teach non-Indigenous scholars not to think about "struggles over land only as conflicts over property and/or territory" but rather "as struggles over the very meaning of the relationship between human societies and the broader ecological worlds in which they are situated" (R. Nichols 2020, 151). The legal structure of ownership of "land-as-property" entails a violent disembedding from place and physical entanglements whereas land is necessarily "specific and unique, not universal and common" (Liboiron 2021, 46). The diverse and varied Indigenous jurisprudence thus offers ways of understanding land not as "property" but as a rationality that sustains relations culture, belonging, obligation, and law (Black 2010).

Michi Saagiig Nishnaabeg scholar Leanne Simpson writes that "The opposite of dispossession is not possession, it is deep, reciprocal, consensual attachment… This is our power" (Simpson 2017, 43). In learning from other forms of law focused on relationality and responsibility, rather than rights and ownership, we might find ways to break free from the legal form of property and in doing so, "break with, the political order sustained by racial capitalism" (Bhandar 2018, 199) while fostering more ecologically just modes of engagement. In the face of the ecological crisis, the

difficult question of "how to collectively create the conditions for turning away from property as we know it" (Bhandar 2018, 200) is more urgent than ever.

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[i] The largest cumulative emitters are the United States (20%), China (11%), Russia (7%), Brazil (5%) and Indonesia (4%).

[ii] Note, this figure is based on cumulative Kyoto GHG emissions; it differs slightly if only CO_2 emissions are considered.

[iii] Karin Mickelson's contextual reading of the case foregrounds that "'the quest for political and economic advantage' plays a major, if not predominant, roles in disputes of this kind" (Mickelson 1994, 232). She identifies four factors that were of crucial importance in determining the case: (i) "the importance of there being a clearly identified source of damage as well as clearly established harm"; (ii) the perception of both side that significant interests were at stake in the dispute; (iii) that both side realized that the risk of transboundary damage from industrial sources of reciprocal; and (iv) an established history of cooperation between the wo countries (Mickelson 1994, 227–29).