An update to this article is included at the end

Political Geography 99 (2022) 102638

Contents lists available at ScienceDirect

Political Geography

journal homepage: www.elsevier.com/locate/polgeo

The unbearable heaviness of climate coloniality

Farhana Sultana

Department of Geography and the Environment, Syracuse University, USA

ARTICLE INFO

Keywords:
Climate coloniality
Climate change
Epistemology
Materiality
Decolonization
Lived experiences

ABSTRACT

The extremely uneven and inequitable impacts of climate change mean that differently-located people experience, respond to, and cope with the climate crisis and related vulnerabilities in radically different ways. The coloniality of climate seeps through everyday life across space and time, weighing down and curtailing opportunities and possibilities through global racial capitalism, colonial dispossessions, and climate debts. Decolonizing climate needs to address the complexities of colonialism, imperialism, capitalism, international development, and geopolitics that contribute to the reproduction of ongoing colonialities through existing global governance structures, discursive framings, imagined solutions, and interventions. This requires addressing both epistemic violences and material outcomes. By weaving through such mediations, I offer an understanding of climate coloniality that is theorized and grounded in lived experiences.

1. Introduction

> "Climate colonialism forces a re-embodiment and relocation of how, why, and who is at fault/responsible. The climate is failing to merely change. It is being colonized and forced to alter, modify, and—as catastrophes indicate—it is rebelling and resisting the assault upon it." (Martinez, 2014, p. 79)

> "While the global community congratulates itself on achieving what is politically possible, we cannot overlook the anemic nature of the agreement considering the magnitude of the problem. It will not avoid the death of millions – because they simply do not matter." (Pulido, 2018, p. 128)

> "I am invited to speak, but only when I speak my pain (hooks, 1990). Instead, I speak of desire. Desire is a refusal to trade in damage; desire is an antidote, a medicine to damage narratives. Desire, however, is not just living in the looking glass; it isn't a trip to opposite world. Desire is not a light switch, not a nescient turn to focus on the positive. It is a recognition of suffering, the costs of settler colonialism and capitalism, and how we still thrive in the face of loss anyway; the parts of us that won't be destroyed" (Tuck & Ree, 2013, p. 647)

In a speech that went viral at the opening summit in the COP26 (26th meeting of the Conference of Parties on climate), Prime Minister of Barbados, Mia Mottley, argued "We do not want that dreaded death sentence, and we have come here today to say, 'Try harder.'" After a two-year hiatus due to the COVID-19 pandemic, the necessity to halt climate breakdown was fervently clamored for at the global conference in late 2021. Yet a dismal COP26 led Indigenous and environmental activists to call various climate solutions to be false and a form of perpetuating colonialism through land grabs, extraction, displacement, and dispossession. Bolivian President, Luis Arce, echoed such the concerns about carbon offsetting and the imposition of rules from powerful countries on historically marginalized countries through the UN system and other international mechanisms to be the "new carbon colonialism," whereby post-colonial countries are marginalized in international negotiations and power matrices of control are exerted over narratives on climate change. A parallel People's Summit for Climate Justice, held just outside the COP26 venue, made insistent demands for systems change. Youth climate activists rallied under the banner of "no more blah, blah, blah" to criticize failures and unkept promises by world leaders. Rhetorical critiques of 'empty promises' were backed up with examples of real-world politics, such as the simultaneous commandeering of climate justice narratives and greenwashing by the fossil fuel lobby and politicians. Indeed, the fossil fuel industry had the largest delegation to the COP26, drawing attention and criticism globally in the overt and covert influence and manipulations of climate policy through decades of climate denial, delay, deflections, and dispossessions.

A leading climate justice activist from the UK, Asad Rehman, said at the closing of COP26 "The rich have refused to do their fair share, more empty words on climate finance. You have turned your backs on the poorest who face a crisis of COVID, economic and climate apartheid because of the actions of the richest. It is immoral for the rich to talk

E-mail address: sultanaf@syr.edu.

https://doi.org/10.1016/j.polgeo.2022.102638
Received 16 March 2022; Accepted 17 March 2022
Available online 28 March 2022
0962-6298/© 2022 Elsevier Ltd. All rights reserved.

about the future of their children and grandchildren when the children of the Global South are dying now." Such scathing criticism was similarly paralleled by many scholar-activists who pointed out the failures to tackle loss and damage that disproportionately impacted the post-colonial coastal and small island nation-states. After the COP26, Ugandan youth climate activist Vanessa Nakate expressed her frustration, "We cannot adapt to starvation. We cannot adapt to extinction. We cannot eat coal. We cannot drink oil. We will not give up."

From heads of state to local activists, colonial tactics were identified and openly called out during and after the COP26. As many dejected climate activists, delegates, and youth from the Global South left the COP26, a sense of injustice and climate delay was articulated by many, expressing grief, anger, sadness, and futility. While some framed it in terms of climate justice failures, others were more direct in calling out colonial and racial tactics of control and disposal of marginalized communities across the Global South and elsewhere. This sense of necropolitics at a global theater such as the COP was criticized more so than in the past, where refusal to 'make nice' was unmistakable. The varied resistance and oppositional tactics were also captured in mainstream media outlets. The sense of urgency with which more constituents across borders argued for better and more effectual outcomes was on display. While such concerns have been expressed at many COPs before, the rage was more profound. Ironically, over a decade ago at the 2009 COP, Klein (2009) reported "And unless we pay our climate debt, and quickly, we may well find ourselves living in a world of climate rage." This rage was deemed righteous in the claims by historically-oppressed countries for justice, reparations, and equity over several preceding COPs. But now the rage has gone global. Yet, it is not equivalent everywhere nor experienced in the same registers.

The COP26 can be seen as one of the theaters of climate colonialism (led mainly by corporations, powerful governments, and elites), yet simultaneously as a site of decolonial, anti-colonial, anti-racist, and feminist politics (led primarily by activists, youth, Indigenous groups, academics, unions). Ernstson and Swyngedouw (2019) termed the depoliticizing technocratic discourse that coexists with obscene capitalist accumulation and waste as the Anthropo-obscene (critiquing the totalizing banner of Anthropocene that homogenizes an undifferentiated humanity that does not exist). International climate negotiations falter in addressing climate change without meaningfully reducing fossil fuel dependency, growth models, and hyper-consumption, along with the systems that undergird them across scales. Rather, these spaces become spectacles, one of performance, that erases historical and spatial geopolitics and power relations (Cottle, 2009; Oglesby, 2010). A performance of diversion, delay, co-optation, and performativity without substance is repeated almost annually. Nonetheless, these are also spaces of opportunities to challenge the system, to utter necessary words for more people to hear, collectivize among young and old activists, learn from different positionalities, create new openings and possibilities of alliances – in other words, a repoliticization of climate instead of the depoliticized techno-economist utopias that never deliver. The global theaters of climate negotiations showcase politics and the political, whether subaltern or suburban, where there are both reifications and ruptures in what politics is and what constitutes its pathways. Sense of despair, suffocation, stagnation, abandonment, and regression co-exist with that of revolutionary potentiality, alternative possibilities, collectivizing, worldmaking, and critical hope (cf. Cabral, 1973; Freire, 1970).

As I closely followed the COP26 events, I recalled an entry I had written many years ago as a student. I reproduce parts of it here, despite how scattered the thoughts may be from back then, written by a young me trying to make sense of the events around her. I share it mainly for the haunting of the words today, how it resonates with contemporary climate politics, and reflecting how the personal is always political. In other words, a personal account of the unruly mix of embodied emotions signals the collective affective registers of contemporary climate politics discussed above.

আমার স্পষ্ট মনে আছে [I clearly remember] that night in April 1991 when a massive tropical cyclone barreled into desh [Bangladesh], how the sound of the storm, the trees churning, and buildings shaking scared me throughout the night. I was terrified by the deafening sounds across the land and howling winds outside that battered everything, knowing instinctively a disaster was unfolding. News broke the next day of the devastation where a 20-foot tall sea surge killed thousands overnight; later we would learn it was up to 150,000 people. So many people, just stolen by the sea! A gamut of grief, worry, and guilt filled me that day and subsequent days, as we read newspapers and looked at the images on our small TV of utter devastation, flattened homes and trees, floating carcasses of humans and livestock alike. Most of this country is at sea level, so the water just surged in and took everything away. "আমার সবকিছু শেষ, কেউ নাই!" ["I have lost everything, everyone!"] cried a woman, whose entire family and homestead were swept away, and she barely managed to survive by clinging to a tree for days. কত ক্ষতি, বিধ্বস্ততা, দুঃখ [So much destruction, devastation, suffering]. My immediate family was fortunate as our home was in the floodplains a little further inland from the main sites of devastation along the coast. But we worried about my ancestral home nearer the coast and our extended family there, of my elderly grandparents and relatives who lived in traditional homes made of wood, bamboo, and clay, in villages deep in the delta marshes of the Bengal Delta, one of the world's largest deltas formed by two of the world's most powerful rivers (the Ganges and Brahmaputra). আমরা মাটির মানুষ, পলি মাটিতে শিকড়, কিন্তু আমরা প্লাবনভূমি, নদীর এবং জোয়ারভাটার দেশেরও মানুষ [We are people of the soil, rooted in the fertile delta, a people of floodplains crisscrossed by rivers in a land of tidal waves]. Tidal rhythms rule everything and flooding is an annual occurrence during the monsoon season, but devastating cyclones and sea surges were less common. No phones, electricity, or paved roads to the villages existed back then, so we didn't know how our family was for many days. Coastal communities were historically protected by the Sundarban mangrove forest, but increasingly subjected to tropical cyclone damage and destruction with deforestation. But in coastal villages and towns to the east of the Sundarban, there is no natural protection from the wrath of nature. I kept worrying, the cyclones are coming, killing all. বার বার মনে হল, আমাদের সরকার কি করছে, পৃথিবীর ক্ষমতাশীলরা কি করছে? [I was frustrated with thoughts of what our government was going to do, what the global powerful would do]. I felt like both the government and the global community didn't do enough to reduce vulnerabilities and risks. Man-made global warming is already upon us. Scholars, journalists, activists, politicians in Bangladesh were already talking about it, since we were feeling the impacts already. Indeed, our nation-state was birthed only in 1971 in the wake of a massive tropical cyclone of 1970 that sparked the hard-won deadly war of independence from Pakistan, for its utter lack of care or concern for our dead and dying here, where a devastating storm became a politically galvanizing force (but that's another story for another time). So I constantly worry, I worry what happens to those who are drowned out from more powerful storms and surges, whose water sources are increasingly salinized from rising seas and encroaching seawater, whose land is disappearing from erosion? Where do people take this collective trauma, grief and anger? আমরা কোথায় যাব, আমাদের কি ভবিষ্যৎ? আমরাকি হৃতছারা, পরিত্যক্ত? (Where will my people go, what future do we have? Must we remain abandoned, forsaken?) The disproportionate burden of climate damage is falling on formerly colonized and brutalized racialized communities in the developing world. We are still colonized, but this time through climate change, the development industry, and globalization. I feel an immense responsibility to do something. But no one is going to listen to someone like me, and even more importantly, more marginalized peoples, women and children, farmers and fisherfolk, writers and scholars. But we are all expected to be resilient because we have no choice. What empty words resiliency and recovery feel like. Such hollowness, so much sorrow. এই শূন্যতা ভারী লাগছে

[This emptiness feels heavy]. আমাদেরকি কন রেহাই নেই? [Do we have any respite?] হ্যাঁ, আমরা জয়লাভ করব, আমরা নির্ভয়, আমাদের সহনশীলতা আছে, যাইনা হোক [I think yes, we will survive, we are fearless, we will endure and fight, whatever may come].

I reproduce this vignette (with requisite translations where necessary) at the risk of embarrassing myself, as it was written by a younger me registering the visceral reactions to events around me, but also trying to articulate what I knew then. I share this as a form of unorganized testimonial that bears witness to history and coloniality (cf. Thomas, 2019); it is not shared for victimhood, guilt catharsis, damage narrative or trauma porn, but one of emotional embodiment while experiencing one of the deadliest tropical disasters at the time, one that ushered in a political conscientization of and planted the seeds towards theorizing climate coloniality through lived experiences. As Tuck and Ree (2013) remind us, "Damage narratives are the only stories that get told about me, unless I'm the one that's telling them." I share my vignette as a form of telling from a local personal perspective and recounting grief, worry, and rage in a combination of emotions that also included determination, empathy, and desire for something better. But in sharing this, I am also critically reflexive of the geopolitical and intersectional location from where I speak, i.e. my positionality and subjectivity in the relational privileges I hold in telling this story - middle class, woman, educated, with Indigenous roots in the marshes of the Bengal delta but living in the floodplains inland from the ravaged coast, someone who feels is constantly transgressing insider-outsider boundaries that are simultaneously local and global, yet someone who has stakes in and whose politics are shaped by belonging to the delta and of a people who have endured and fought against centuries of colonialism and imperialism (cf. Sultana, 2007). This accounting is one of situated knowledge, of a standpoint, of partial truths. In attempting to understand wider climate processes rooted in lived experiences, I recognized my obligations and situatedness as a young person. I realize now that I was already writing and thinking decades ago along the lines of what is far better articulated and theorized in the contemporary moment. As I observed the events unfolding at the COP26, I ruefully recalled this entry from many years ago for the similarities and resonances across the decadal, spatial, and social registers to what is being said now. The experiences of colonial and imperial violence create emotional atmospheres of rage, resolve, frustration, and a desire to act that resonate more widely.

Years later, I would read Fanon, noting that I was perhaps articulating that to be colonized is to be made to feel less-than, be told what the truths are, be valued differently over time and place, a dehumanization through an epidermalization of inferiority and being created as racialized Other (Fanon, 1967; Said, 1978). The colonial wound is embodied, it is engraved in bodies and minds. Structural racism structures the world in unequal ways through colonial and imperial violence, both material and epistemological. Fanon gives us tools to think from embodied experiences of climate and colonialism, of geopolitical epistemology and materiality. The spatialization of colonialism's racism and environmental destruction go hand in hand (Martinez, 2014; Opperman, 2019; Pulido, 2018; Silver, 2019; Whyte, 2018). Climate coloniality reproduces the hauntings of colonialism and imperialism through climate impacts in the post-colony (located primarily in the tropics and subtropics where climate-induced disasters and shifts have been prevalent for some time). Climate change lays bare the colonialism of not only of the past but an ongoing coloniality that governs and structures our lives, which are co-constitutive of processes of capitalism, imperialism, and international development. The uneven and unequal vulnerabilities and marginalizations, of deaths and devastation taken for granted, draw attention to continuities from the past and into the future. It is a slow violence (Nixon, 2013).

In this paper, I wanted to start by feeling with climate change, explore its heaviness as it insidiously seeps into different aspects of life, the erosions it propels, the suffocations it creates, the intergenerational traumas that remain. The ennui of coloniality creates sensories of being and not-being, of belonging and not-belonging, of deficiency and capaciousness, of giving in and resisting. I use some autoethnography from ongoing work as a methodological intervention to theorize climate coloniality here. I invite readers and fellow travelers to reflect on their own resonances and connections, where a colonial wound is the fertile ground for analyzing, framing, and feeling otherwise. My contemplations here are not final nor finalized in the least, they continue to marinate and germinate, since there is an unfathomability in the incompleteness to ongoing coloniality. While academic writing conditions us to write in removed, conceptual ways, at a level of abstraction that allows for analysis, I want to interlace with the fleshiness of climate, the pasts and presents in our bodies, minds, soils, kin – where the theory is in the flesh, and struggles form the basis of political consciousness and oppositional epistemologies against oppression in shared worlds (Moraga & Anzaldúa, 1981). Or, as the late bell hooks poignantly articulated, "marginality as much more than a site of deprivation … it is also the site of radical possibility, a space of resistance" (hooks, 1989, p. 20). In some ways, this is perhaps border thinking, or thinking from borderlands that are oppressed by the colonial matrix of power but nonetheless resist it, where knowledge can be produced outside of modernity but in relation to it in decolonial scholarship (Anzaldúa, 1987; Mignolo, 2017). Alternative epistemologies and cosmologies emerge from lived experiences that were/are devalued in Eurocentric modernity and climate coloniality. This requires addressing both epistemic violences and material outcomes. By weaving through such mediations, I offer an understanding of climate coloniality that is theorized and grounded in lived experiences. I demonstrate that confronting climate coloniality also involves reconstituting individual and collective memories and consciousness for reconciliation and liberation. Part of this is accounting for the embodied emotional geographies of climate coloniality.[1]

2. Understanding climate coloniality

In my ongoing work on coloniality, feeling the weight of the topic and the ways it made me feel simultaneously vulnerable and resolute, suffocated and inspired, I asked BIPOC[2] scholars and activists from around the world in occupied, post-colonial, and settler-colonial contexts their opinions on coloniality. I requested words or short phrases to commence discussion, and I started off the conversation with my own response: heavy. Many respondents agreed with this but also shared their own. Responses from several dozen people were incredibly insightful, each one reverberated through me, validating and clarifying decades of complex emotions and thoughts I had witnessed in myself and many around me. They also resonate more widely in what they demonstrate and name, both collectively and individually, on feeling coloniality globally. I share a few samples here. The responses are organized in alphabetical order for no reason except ease of reading in the (colonizing) language of English:

[1] This paper further illustrates both analytically and performatively the different ways of approaching embodied geopolitics and territorialities that are of interest in political geographers (e.g. Jackman et al., 2020; Last, 2015; Marston et al., 2020). It also speaks to emerging work in political geography on decoloniality (e.g. Bonilla, 2020; Naylor et al., 2018). Similarly, it resonates with work on disasters and capitalism (e.g. Rhiney, 2020; Rivera, 2020). I refrain from citing the vast body of work on vulnerability, resilience, and adaptation in climate change, as that is beyond the scope of this particular paper, but is integrated into my work elsewhere (e.g. Sultana, 2010, 2014).

[2] BIPOC stands for Black, Indigenous, and People of Color. While a contested acronym, it is widely used as an umbrella signifier of common experiences of colonial and imperial racializations by non-white peoples.

- Alienating
- Anger
- Conformity
- Continued exploitation
- Dehumanizing
- Ecocide
- Exhausting
- Extractivism and displacement
- Fake narratives of our happiness
- Gaslighting
- Grief
- Harm
- Hegemony of Eurocentric knowledge
- Horror
- Impacts how one lives and loves
- Incessant
- Injustice
- Lives lost and under threat
- Living in exile
- Longing
- Loss
- Mourning
- Oppressive
- Overwhelming responsibility to resist
- Pain
- Phantom limb of kinship loss
- Rage
- Recognizing ongoing colonial practices
- Remembering
- Sadness
- Suffocating
- Tangled
- Trauma
- Unknowable wisdom
- Violated

These are some exemplars of a wide array of responses that were profound in their range, form, similarities, and differences. They showcased the multiplicity and endless ways colonialism haunts occupied, post-colonial, and settler-colonial subjects. Analysis of all the reflections demonstrated to me how precarity and vulnerability co-exist with connectedness and kinship. These were not victim narratives but in their telling, it is palpable the resistance, worldmaking, undoing, longing, pain, reflexivity, intergenerational connectivity, and more that exists, when read together.[3] The responses resonated with my younger self and with the evolution of my own consciousness and critical self-reflection on embodying climate colonialism's grief, trauma, and resistance that shape and inform my politics. As a scholar from Latin America articulated, it is an '*overwhelming responsibility to resist.*' But it is also a need to recognize the visceralities and entanglements that persist. While heterogeneous, colonized communities have some shared understandings and meanings, as well as some overlapping tragedies and histories. The epistemically ignored, invalidated, or discounted may be largely invisible to those in power (cf. Spivak, 1994), but are visible and viscerally related to by those inhabiting Othered communities and spaces. This was evident across the brief testimonials. In other words, coloniality impacts all aspects of life – from relationships with nature, to one another, to wider systems at work.

By weaving in the three sets of empirical examples and lived experiences – COP26 speeches, my vignette, a collection of reflections – that showcase how the personal and the structural are linked, I theorize what climate coloniality is, what it does, and why it matters, both epistemologically and materially. I turn to this next.

Briefly put, coloniality in lived experiences expresses the complexities of coloniality of power (cf. Maldonado-Torres, 2007; Mignolo & Walsh, 2018; Quijano, 2007), and the ongoing and enduring assaults of colonialism through modernity, capitalism, neocolonialism, imperialism, and international development. Coloniality relies on racial domination and hierarchical power relations established during active colonialism and ongoing in post-colonial spacetimes, where the colonial matrix of power persists. Thus, climate coloniality occurs where Eurocentric hegemony, neocolonialism, racial capitalism, uneven consumption, and military domination are co-constitutive of climate impacts experienced by variously racialized populations who are disproportionately made vulnerable and disposable (see also Martinez, 2014; Sheller, 2020). The racial disposability of both those experiencing climate devastation in their homelands and those displaced as climate migrants demonstrate further the curtailing of self-determination and futurities (Gonzalez, 2021). Ongoing climate coloniality is expressed through insidious racism globally and continued Othering, dispossessions through colonial-capitalist extractivism and commodification, rapacious displacement and destruction, creation of sacrifice zones, and excessive exposures to harms from climate-induced disasters (Andreucci & Zografos, 2022; Klein, 2016; Mahony & Endfield, 2018; Moulton & Machado, 2019). Context matters in understanding coloniality, so it isn't just an abstract analysis of the racialization of difference, but of accounting for local, embodied, material, lived experiences of knowing subjects.

The relationship between colonialism, capitalism, and empire has been expounded upon by many scholars so I will refrain from reproducing them here, but it is worth noting some connections further. For instance, Rodney (1972) drew attention to the ways that the West overdeveloped while it actively underdeveloped resource-rich countries of the Rest (i.e. contemporary post-colonial and occupied countries of the Global South).[4] Indictments of the hypocracy of colonial accumulation through dispossession are well-documented (Césaire, 1972; Fanon, 1963; Hall, 1992). Overall, historical differences position colonial and imperial countries at greater advantages over post-colonial and presently-occupied countries. Colonial logics of extractivism continue through neocolonial and development interventions post-WWII. The ecologically unequal exchange between the Global South and Global North, ongoing extractive capitalism, the imperial structures of global trade, and domination in setting policies and ideologies – all work to maintain climate coloniality (Roberts & Parks, 2009; Warlenius, 2018). Scholars have quantified this ecologically unequal exchange as the ongoing colonial plunder of resources and labor from the Global South to the Global North (Dorninger et al., 2021; Hickel et al., 2021). This results in the production of historically-exploitative overdeveloped economies, whereby geopolitical and economic processes continue various colonial patterns of extraction and dispossession. It has been argued that the Global North owes the Global South a climate debt due to historical climate colonialism (Abimbola et al., 2021) and the ever-increasing colonization of the atmosphere (Malm & Warlenius, 2019). Despite such critiques, colonial roots of the lack of recognition and simultaneous racial devaluation continue to stymie progress on international climate justice on these fronts (Newell et al., 2021; Sultana, 2022). Legacies of imperial violence live on not only exacerbating environmental degradations but increased climate-induced disasters. As frequencies and strengths of climate-fueled natural hazards such as tropical cyclones grow, the structural violences of colonialism are further felt corporeally, communally, politically, economically, and ecologically. Slow but compounding violence intensify vulnerabilities that maintain climate coloniality and extends it into the future (Nixon, 2013). Some lives and ecosystems are rendered disposable and sacrificial, whereby structural forces, both historical and contemporary, fuel it. The racial logic of climate tragedies and cumulative impacts are ever-present.

Coloniality is experienced through continued ecological degradations that are both overt and covert, episodic and creeping – e.g. pollution, toxic waste, mining, disasters, desertification, deforestation, land erosion, etc. – whereby global capitalism articulates with development and economic growth ideologies to reproduce various forms of colonial racial harms to entire countries in the Global South and communities of color in the Global North. Climate coloniality is perpetuated through global land and water grabs, REDD+ programs, neoliberal conservations projects, rare earth mineral mining, deforestation for growth, fossil fuel warfare, and new green revolutions for agriculture – which benefit a few while dispossessing larger numbers of historically-impoverished communities, often elsewhere. Interventions are called

[3] These and my vignette, among many other writings by BIPOC thinkers, also counter the unbearable whiteness of climate grief in media and publications (Ray, 2021; Burton, 2020). My ongoing ethnographic work further situates such responses on a wider historical, spatial, and social scale. That work is in progress.

[4] I use Global South and Global North as analytical categories, but also geographical spaces marked by heterogeneity and historical differences.

by various names and have different tenors – green colonialism, carbon colonialism, fossil capitalism – but often with similar outcomes of domination, displacement, degradation, and impoverishment. Carbon colonialism through carbon offsets projects, which are increasingly ramping up instead of down despite known critiques and resistances, have been discussed for some time (Bachram, 2004; Bumpus, 2010). Extractivism propagated by global capital and state-sanctioned interventions perpetuates geopolitical climate necropolitics within and beyond borders (Charkiewicz, 2009; Clark, 2020; DeBoom, 2021; Grove, 2014). Mbembe's concept of necropolitics already applied to our ancestors and lands, and continues to this day, and sadly, likely into the future (cf. Mbembe, 2003). It is indeed through racialized Othering that climate change proceeded and proceeds (Klein, 2016, drawing on the work of Edward Said). The undifferentiated humanity that is assumed in persistent narratives of the Anthropocene has already been shown to be problematic.[5] Universalism of the Anthropocene obfuscates historical and contemporary power imbalances and responsibilities, and the various differentiations and racializations.

As transnational corporate monopolies travel the globe for profit, patterns of colonial dispossession are further entrenched. Extraction and imperialism continue unequal political economies, with imperial and emerging modes of hierarchies of power relations fueled by global market systems (Dunlap & Jakobsen, 2020; Ye et al., 2020). Legacies of colonialism continue the ecological unequal exchange, domination of developing world through development policies and financial control from imperial powers and institutions, climate solutions that result in resource extraction and creation of sacrifice zones, and through international climate negotiations and targets that control the trajectories of development in historically impoverished countries of the post-colonial world (Baskin, 2019; Hickel, 2020). The territorialization of dispossessions of colonialism has endurance in governance structures and political framings (Elden, 2021; Gordillo, 2021). At the same time, fossil fuel capitalism (Malm & Hornborg, 2014; Moore, 2016) promotes capitalist consumption through the creation of development ideologies and desires of Western-style hyper-consumption in development subjectivities across the Global South. This repeats colonialities of imperial violence through development logics and western educational hegemonization, which I discuss later in the paper.

Neocolonial structures of governance render possibilities of transformation more difficult because of structural barriers such that systemic challenges remain unresolved. As many scholars and activists have raised for years, green capitalism and market-based technocratic interventions, ideologies of net-zero carbon instead of real/negative zero carbon, and continued capitalist solutions, will not solve structural and systemic problems. Part of the problem is the lack of recognition that the problem exists, with an assumption that nation-states play on equal footing on the global scene when that is patently not the case. Unequal negotiating power exists not just at COPs but in trade treaties, bilateral and multilateral agreements, development interventions, climate finance, and so on (Ciplet & Roberts, 2017; Falzon, 2021; Khan et al., 2020; Okereke & Coventry, 2016). Undergirding all this is a colonial logic of control and hierarchization. Carbon colonialism through greenwashing of narratives and a capitalist control of the discourses of climate emergency play out in the expanding machinations on rare earth mineral grabs, deep ocean floor mining, enclosures of commons, destruction of local communities and ecosystems for singular gains. Indeed, controlling of climate narratives by the fossil fuel industry, powerful governments, and elite allies at the COP26 were challenged by less-powerful states dealing with loss and damage as well as by activists, academics, farmers groups, labor unions, and students working globally. Ironically, the expendability of socio-ecologies and expansion of sacrifice zones are related to many instances of state-sanctioned violence that also results in climate migration; this issue then confronts immobility and hostile immigration policies from other states as well as marginalization of displaced communities within their own borders. These highlight how the state is a site of action and policies that sanction on who lives or who dies, but states are never alone, as they are influenced by capital, elites, other states, and global institutions.[6]

Climate apartheid is how many call this socio-spatial differentiation in who pays the disproportionate price of climate breakdown, is made expendable, and who is spared for now (Alston, 2019; Rice et al., 2021). This form of eco-apartheid manifests between and across the Global North and Global South at multiple scales. Climate apartheid exists for those at the intersectionality of race, gender, and class exposed to ecological harms and toxic environments (Tuana, 2019). Scholars have demonstrated that the homogenizing tendencies of an undifferentiated 'we' in common climate discourse is inflected by colonialism and racism (Gonzalez, 2021; Pellow, 2016; Porter et al., 2020); similarly, those experiencing climate impacts more violently are also often rendered 'less than human.' Indeed, scholars have argued that the climate crisis is inherently a racist crisis globally (Sealey-Huggins, 2018; Williams, 2021). That climate change is an extension of colonialism and exploitation was made as early as 1991 (Agarwal & Narain, 2012). Burdens on the poor across the Global South to reduce greenhouse gas emissions continue to exist, yet luxury versus survival emissions not being equivalent have been raised repeatedly. Colonization of the atmosphere (Malm & Warlenius, 2019) means that luxury emissions and survival emissions aren't accounted for appropriately, and increasingly less atmospheric space is left for greenhouse gas emissions and ecosystems loading for historically-oppressed and impoverished communities. Some have called such climate debts to be violation of communal rights and human rights (Warlenius, 2018). Extraction and exploitation leave behind place-specific pollution, devastation, and loss, much of which is irrevocably retrievable or recoverable. Yet after decades of knowing of escalating climate impacts, there has been little mitigation to halt ever-increasing greenhouse gas emissions (Stoddard et al., 2021).

Because much of the underdeveloped Global South provided the resources that overdeveloped the Global North over centuries through colonialism and then imperialism and neocolonialism, many countries in the former were left less capable of addressing climate impacts and having reduced or ineffective state capacities. Overexploitation of human and more-than-human systems is long-standing. The crumbling infrastructure, inadequate social safety nets, lack of access to clean water and sanitation, the racialized classed bodies laboring the land or waiting for water, breathing air pollution and choking, feeling the heat and toiling in it, facing housing and educational disparities, are affective and embodied experiences of communities and individuals. These are complex forms of abjection, precarity, uncertainty, exhaustion, trauma, stress among those deemed disposable. At the same time, it becomes imperative to recognize the differential intersectionalities within communities in how harms can be reproduced at different scales. They are intersectionally gendered, in the capture and colonization of women's bodies and knowledges, in subjugations through Eurocentric gendered

[5] The concept of a singular humanity in Anthropocene has been thoroughly critiqued in scholarship around capitalocene (Moore & Patel, 2017), racial capitalocene (Verges, 2017), chthulhucene (Haraway, 2015), and plantationocene (J. Davis et al., 2019).

[6] While a lack of democratization and investment in public institutions have played key roles in perpetuating domestic problems across countries of the Global South that mostly gained independence fairly recently (the bulk between 1940s and 1960s), external interferences and influences have also contributed to a range of internal crises. There is simultaneous complicity and conflict in ongoing geopolitical maneuverings. Structural issues in post-colonial and occupied countries, such as ethnonationalism, corruption, inefficiencies, and elite capture, demonstrate the importance of spatial and scalar analyses. This allows for more complex understandings of processes at play, and in nuancing states across the Global South. This literature is vast, however, and beyond the scope of this article.

norms and disposability of racialized gendered bodies for capitalism and in sacrifice zones, as well as in control of women's bodies through overpopulation narratives (Gaard, 2015; Hendrixson et al., 2020).[7] Co-production of racial capitalism, heteropatriarchy, white supremacy, and imperialism has been extensively written about across contexts; for instance, spatial intersectionality scholarship shows how these play out vis-à-vis climate and the COVID-19 pandemic (e.g. Sultana, 2021). There are also class differentiations, as not all vulnerabilities in a region are experienced in homogenous ways because communities are intersectionally differentiated by access to wealth, resources, and safety nets. Local elites and community members can be complicit with maintaining patriarchy, extractivism, exploitation, and capitalism, who have been conditioned to buy into logics and desires of capitalist developmentalism. The confluence of local power imbalances, uneven creation of vulnerabilities and production of risks, end up merging global climate breakdown with scalar intersectional factors from the planetary to the body, thereby creating more complex tapestries of outcomes in different contexts. Thus, nuancing the Global South shows the multitudinous ways that differently situated subjects experience global and local inequities simultaneously, even if we hold the analytical category of the Global South as largely a signifier of post-colonial and occupied countries.[8]

Ultimately, coloniality discursively limits the terms of global debate, hegemonizes knowledge of and about climate change, and what actions are possible, thereby destroying other epistemologies (cf. Maldonado--Torres, 2007). Hierarchical power relations and knowledge production are maintained in the enduring colonial matrix of power (Quijano, 2000). Cognitive coloniality is maintained in a colonization of the mind in terms of what is knowable and what has value (Nandy, 1983; Wa Thiong'o, 1986). This co-exists with epistemic violence in knowledge production and valuation of expertise (cf. Santos, 2014). A lack of cognitive justice and epistemic decolonization (Mignolo, 2017; Ndlovu-Gatsheni, 2018; N'krumah, 1965) is perpetuated in the reinforcement of climate coloniality along with Western hegemonization of climate narratives, financing, and solutions. Epistemic racism is internal to Eurocentric knowledge production (Grosfoguel, 2013), such that 'methodological whiteness' (Bhambra, 2017) is normalized in education, training, policy-making, and public discourse on climate. Uncritical adoption and internationalization of colonial gaze of assumptive Western superiority and techno-fetishism are ever-present. Since Eurocentrism internalized racism and colonialism, this system of power is hegemonic globally now in how climate is talked about, planning that is pursued, and dominant education around it.[9]

Simultaneously, the colonial white gaze that saw non-white Others as inferior and lacking continues to desire to 'fix' the 'third world' and further white saviorism in climate solutions (Andreucci & Zografos, 2022; Chambers, 2018). It cultivates epistemologies of deficiency yet relies on 'resilient' locals to be good development subjects who 'adapt' (Mikulewicz, 2019; Moulton & Machado, 2019). The critique of coloniality in development and humanitarian aid can be extended to climate solutions and technocratic managerialism in green capitalism as well as in climate adaptation projects (Bigger & Webber, 2021; Eriksen et al., 2021; Haverkamp, 2021). Chaudhary (2021) argues that extractive capitalism linked to colonialism and imperialism is maintained through circuits of development interventions, FDI (foreign direct investments), flows of economic growth and transnational capitalism, which come at the expense of the racialized and gendered poor in a "colony of the exhausted" that is then normalized. This perpetual exhaustion is fodder for the saviorism in climate. Extractivist logics that devalue matter – geology, species, ecosystems, communities – is elaborated by Yusoff (2018) in a 'grammar of geology' that adds to scholarship on scientific racism which can be extended to colonial logics in climate saviorism.

While climate coloniality is experienced materially and viscerally, it is also an epistemological site of struggle. One can be from a frontline community and made vulnerable, feel and endure displacement and dispossession, but it is important to note that agency and resistance exist in different forms. For instance, Perez (2021) draws from Pacific Islands to critique the caricatures and complicities that are often overlooked, and argues that "we must turn to Pacific Islander voices, stories, arts, and narratives so that we can more fully engage feeling and affect, correlation and storiation, with(in) Anthropocene islands." (p.4) Similarly, Simpson (2021) argues for decolonizing epistemological understandings and relationships to the earth. Mignolo (2017) reminds us to resist the ways colonized Others are made to feel and think as being epistemologically and ontologically deficient. In other words, we need to problematize what it means to be human and the praxis of being human (Wynter, 2003; Wynter & McKittrick, 2015).

It may be comforting to know that colonialism and imperialism have always faced an opposition (Césaire, 1972; Fanon, 1963). It exists in ongoing environmental and Indigenous struggles globally (Guha & Martinez-Alier, 1997) and also in the 'ontological disobedience' (Burman, 2017) that attempts to overcome the Othering and colonial wounds (Ahenakew, 2019; Mignolo, 2007). Challenging epistemic violence requires overcoming coloniality of power through epistemological and ontological shifts that foster pluriversality instead (Escobar, 2020). This means recognizing and accepting the co-existence of multiple ways of knowing and being in the world, whereby the Eurocentric colonial model is but one way of existing and relating to socio-ecologies. This decolonizing oeuvre results in both epistemic and material challenges to climate coloniality, to which I now turn.

3. Decolonizing climate

There is an urgent need to decolonize climate. Epistemology and materiality simultaneously are central to decolonization – i.e. both knowledge production and epistemological framings, but also engaging with praxis of material outcomes and lived experiences (e.g. fossil fuel capitalism, neoliberal development paradigms, endless growth ideologies, maldistribution of material wellbeing, etc.). To decolonize climate at a basic level means to integrate more decolonial, anti-colonial, feminist, anti-racist, and anti-capitalist critiques and struggles into mainstream climate discourses and practices to redress ongoing oppressions and marginalizations. Fundamentally, decolonizing necessitates the critical interrogations of the complexities of empire, imperialism, and capitalism, and how to decenter and dismantle them. It also confronts and addresses material outcomes of framings and reframing, internalizing a material praxis that takes co-production seriously. It is not about just recognizing the problems, but workings towards distributive justice, reparations, and restitution (Táíwò, 2022). Decolonizing means accounting for and reflecting on the past and present, in order to configure future pathways to remove colonial and imperial powers in all their forms. This requires confronting and dismantling colonial ideologies and racisms baked into power hierarchies, including those that create and maintain climate breakdown. In tackling climate coloniality, the need arises of being mindful of the goal of not only undoing centuries of harm and ongoing devastations through

[7] Much of this is driven by ecofascist and neo-Malthusian ideologies, as well as white anxiety in a brown planet.

[8] Increasingly, these countries and communities share commonalities with challenges faced in many marginalized BIPOC spaces in the Global North, despite differentials of power between nation-states at the global scale and the implications of that to countries and communities in the Global South. These international, scalar, and historical differentials and outcomes thereof can't be denied, but increasing strands of commonalities are evident upon investigation. Such attention also allows for nuancing the Global North, even if we hold it as an analytical category and geographical location.

[9] Post-colonial and decolonial scholarship provide rich debates and theoretical terrains from which to draw from in both understanding and undoing of harms and framings (the vastness of this scholarship is beyond the scope of this article). I signpost some throughout the paper to think through coloniality of climate.

policies, finance, events, media, and insidiousness of everyday life, but also rebuilding and reconstituting in different ways. In more capacious and equitable ways. Thus, research, activism, and policy-making need to be more critically reflexive of methodologies and methods used, and the cognitive biases that persist (Tuhiwai Smith, 2012).

Decolonizing climate necessitates radical alterity and shifts in imaginations and obligations. "A radical imagination attends in equal measure to experiences of loss and disempowerment as it does to practices of resilience and resistance, as these manifest across grassroots and transnational settings" (Chao & Enari, 2021, p. 45). This requires challenging the normalization of universal truths, technological impositions, Eurocentric dualisms, hegemonies, and modernity. Liberation comes from destroying colonialism's impacts on lands, bodies, and psyches to overcome the apocalypse that continues to be coloniality – i.e. moving from alienation and dehumanization to self-realization in order to decolonize colonial traumas (cf. Fanon, 1963). Experienced in intertwined and distinct ways, the cumulative harms are further entangled and intersected by interlocking oppressions of race, gender, class, and other relevant axes of differentiation that are local and global. This means accounting for contextual forms of patriarchy, class oppression, or racism that interact with broader processes to co-produce and amplify harms.[10] At the same time, healing colonial and imperial wounds through transformative care, empathy, mutuality, and love hold possibilities (cf. hooks, 2000). We desperately need to heal colonial wounds everywhere. To achieve this, concerted work is needed on both the material and political, and the discursive and epistemological, while recognizing how these are but analytical categories for discussion and are intricately intertwined in everyday life in spatio-scalar ways.

3.1. The material and political

I want to return to the global scale to consider why there are persistent challenges to achieving decolonized climate governance, ideologies, and practices. It is known that material outcomes are impacted by the vulnerabilities differentiated through racialization and colonialism, and the unequal exposures to harm. Structural changes are necessary in international governance for equitable recognition and distributive justice to occur across and between countries (Benjaminsen et al., 2021). There have been recurrent critiques of the injustices integral to global governance systems (Kashwan & Ribot, 2021; Okereke & Coventry, 2016). While desires for transforming inequitable and exploitative systems are reiterated by different constituents and countries (as seen at the COPs and elsewhere), this remains elusive. As Bluwstein (2021, p. 2) argued, 'transformation is not a metaphor', in other words "the difficult strategic, organizational, and practical questions" remain massive challenges in undoing harms and having equitable outcomes. Despite global counterinsurgencies envisioned and occurring, the hardening of 'climate fascism' (Parenti, 2011) continues. This is because contemporary governance systems are undergirded by centuries of colonial and imperial power structures and ideologies, whereby now a global network of nation-states, corporations, and elites dominate discursive framings around climate and the material outcomes therein.

Thus, challenges to and changes in this system are resisted. Resistance to empire dying is manifested in the opposition to shared governance, accountability and giving up control, as these result in loss of existing and future power and material wealth. One could argue that this fear of loss of material wellbeing tied to white supremacy and fear of climate apocalypse are breeding greater climate anxiety in the Global North. But environmental justice activists across BIPOC communities have been fighting dispossession against imperial and colonial erasure for a considerable time (Escobar, 2020; Scheidel et al., 2020). Decolonizing thus beckons an unsettling of geographical imaginations and material outcomes (Last, 2015). A reworking of relationships becomes necessary across geopolitical scales but also in human/non-human relationships. Valuing Indigenous and traditional knowledge and sciences worldwide is essential to this (Acabado & Kuan, 2021; Emeagwali & Shizha, 2016). Indigenous work in the USA, Canada, Australia, New Zealand, and Palestine point to the ways internal colonization has been resisted in settler-colonial contexts, offering insights into border crossings for abolition justice. For instance, NoiseCat (2021) writes about how First Nations in Canada are resisting occupation and annihilation by the settler-colonial state of Canada. Resisting and calling for abolition of fossil fuel dependency means restructuring not only current geopolitical orders but relationships to the earth from which fossil fuels are extracted (Estes, 2019). Unfortunately, the hegemony of fossil-military industrial complex remains a stranglehold (Belcher et al., 2020) and confronting this and reconfiguring alternative and just energy transitions remain a challenge.

Nonetheless, different material solutions and outcomes have been imagined and insisted upon thus far. Demands have been made of debt cancellation as part of climate reparations for countries of the Global South, who have historically been impoverished and indentured through colonial and imperial finance mechanisms and capitalist extractivism fueled by neoliberal global trade. The debates around climate reparations remain contentious, as loss and damage acknowledgement has not been followed through with sufficient financial support (McNamara & Jackson, 2019). But reparations are more than that, it's about supporting worldmaking and material changes that account for histories of slavery, colonialism, and imperialism across Asia, Africa, and Latin America (Ghosh, 2021; Táíwò, 2022). Another demand rests with the halting or slowing down of the continued colonization of the atmosphere with increasing greenhouse gas emissions and insufficient shifts where they are most needed. Mitigation within over-developed countries remain fractured and delayed, as degrowth has not taken hold to reduce hyper-consumption, materials throughput, and systemic wastage in many countries of the Global North (Hickel, 2021; Kallis et al., 2020). Instead, there is widespread export of the problem (carbon leakage) and finger-pointing and blame-game, where wealthier colonial and imperial states can export and offshore their emissions, while weaker countries or those with lax environmental regulations, have their emissions go up. It is a form of carbon colonialism (Bachram, 2004; Bumpus, 2010; Lyons & Westoby, 2014).

In addition, decolonizing climate would also entail restructuring the world economy to halt the unequal ecological exchange that drains from the Global South to the Global North that enable their higher consumptions and inequitable appropriations (Hickel et al., 2021). Scholars have calculated that since 1960 alone, structural adjustment programs, unfair terms of trade, and other interventions have not just plundered but also thwarted potential flourishing of communities and ecosystems across the Global South, thereby polarizing the world further and creating asymmetries and uneven development within and between countries. Material decolonization would require that imperial extractivist logics that fuel the unequal exchange and plunder be first stopped and then compensations or reparations be made. Efforts would also seek ways to discontinue practicing and preaching endless growth on a finite planet and pursue enhancing wellbeing otherwise. This necessitates active efforts towards decommodification and de-imperialization.

Decolonizing climate would have to rethink and address various institutions and processes at multiple intersecting scales that lead to various entanglements. One would be the role of the state, where it sits vis-à-vis the rise of mutual aid, calls for agroecological sovereignty, energy sufficiency, anti-capitalist and anti-neoliberal development. Decolonizing climate is largely meaningless if it doesn't accompany measurable shifts in law, policies, institutional frameworks or material distributions. Material outcomes are adjudicated, governed, and filtered through co-constitutive processes that need collaborative work and

[10] A feminist intervention would be to address patriarchy in the decolonizing process and the coloniality of gender (Lugones, 2010); for a decolonial feminist political ecology analysis, see Sultana (2020).

sharing of power. Publicly-accountable funding, technologies, and policies, whereby there is necessary transformation of public institutions and capacities, become central to this across the post-colonial and occupied world.

Furthermore, the roles of development institutions and funding come under critical consideration, as development can and has perpetuated forms of neocolonial control over the post-colonial and occupied world through the operations of state and non-state organizations, and cognitive conditioning of citizens and institutions. Donor-driven development is about power; it is neither neutral nor benign. What is climate-resilient development or adaptation may not involve local input despite intense local impacts, thereby needing interrogation. Development has material and ideological components through which coloniality is enacted and reproduced in capitalist-colonial renditions (Kothari et al., 2019; Sachs, 2009). This occurs through the creation and promotion of desires of Western-style hyper-consumption in development models across the Global South. It repeats colonialities of imperial violence through development logics, financing, geopolitics of debt, and Western educational hegemonization. Education that continues Western Eurocentric models of knowledge production, circulation, pedagogy reify coloniality and colonization of the mind as development subjects and citizens are created every day. Decentering this Eurocentrism in education and training with concomitant structural shifts are necessary for decolonization (Sultana, 2019).

Accumulation through various forms of dispossession in the capitalist control of the climate emergency has been critiqued and demanded to be halted. Alongside this, is the complicity of post-colonial nation-states in participating in continuing colonial patterns in order to economically develop more as they work with corporations and global institutions, often at the expense of futures of their marginalized populations, instead of increasing wellbeing and redefining the 'good life' beyond only economic growth. Not all countries participate equivalently, but loan conditionalities and development debt are often instruments of coercion. Capitalist consumption and wastage model promoted by international development repeat colonialities of colonial-capitalist extractivism and violence. The continuities of the 'ecologies of the colonial present' (D. K. Davis & Robbins, 2018) in bureaucratic and political control necessitate that demands continue to be made by communities to their states to curtail privatization of water and commodification of nature and life through domestic protest and resistance. It requires that states listen and respond accordingly, despite global and local archaeologies of imperial finance and political control.

Another important aspect is recognizing that elite environmental resistance in the Global South isn't always equitable to marginalized populations locally (Baviskar, 2020). Fragmentations, captures, co-optations, and silencing occur across various intersectional oppressions, such as class, gender, race, and Indigeneity (Acha, 2019; B. Agarwal, 1992; Gergan, 2017). Speaking for instead of speaking with occurs everywhere, so it is critical not to romance the local. But, does there need to be a unified conceptual or practical assemblage for action? No. Diverse interests can co-exist in political struggles against essentialisms and capture by local elites and against risk of co-optation by hegemonic forces (e.g. fossil fuel corporations and their political allies espousing green narrative and climate justice rhetoric acquired from resistance movements). The intersectional differentiations in any context need to be acknowledged while recognizing that collectivities are always fractured but held together by a common goal despite differences and hierarchies. There are rooted networks and emergences in complex formations all over the place and across time (Cantor et al., 2018; Rocheleau & Nirmal, 2015). Without homogenizing the colony, it is still possible to recognize its general valence as a unit of analysis at a global scale. The colony is intersectionally differentiated in each context, and there are disparities in power and privileges among BIPOC communities internally. Elites can capture and exploit locals, near and far. But that is an insufficient critique for not recognizing various attempts to recover collective histories, memories, and self-determination. This is not easy work. Lack of considerations of reflexivity, positionality, unequal power dynamics, and interconnected impacts of interventions at different scales can lead to failed alliances (Burman, 2017). These remain ongoing tensions and challenges.

Shrinking spaces of alterity with neoliberal globalization of capitalism occur both through and outside of development interventions. The privatization of public institutions, education, and living options (from food to water to housing) reduce and squash alternatives from flourishing. Yet resistances exist, however limited they may be. Ethics of care and collectivity is how we have survived through colonialism, capitalism, development, disasters, disruptions. Caring for each other, despite differences, is what carries us forward through devastations of cyclones, sea surges, riverbank erosion, loss of livelihoods, and degradation of homelands. We are variously wounded but we can heal. We may mend, we may be re-traumatized, we may harden – but we can also soften, we love, we celebrate, we have joy, we desire, and we thrive. Nonetheless, it would be callous not to acknowledge the socially-mediated, globally- and locally-produced, and ecologically-relational vulnerabilities that do worsen over time, how impoverishment and disposability persist, how increased and repeated harms make us weary and more vulnerable.

However, unreflexive celebration of transformative potentials does no one any favors. It would be impossible to deny the conformity and uniformity that development and capitalism try to systemically instill everywhere, or how capitalism reinvents itself through the crises it produces – both materially and discursively. The shrinking spaces of being otherwise and doing differently need to be acknowledged. As such, maintaining racial and classed privileges at a global scale are impossible in decolonizing climate justice. The urgent necessity of solidarities across frontlines for decolonization, reformulation of institutions and power matrixes across scales, alongside geopolitical shifts in advancing the valuation of a livable planet for all, are increasingly apparent. But it cannot be an uncritical celebration of transnational solidarity devoid of material politics or intersectional analyses. Scalar geographic analyses and critiques are essential both in confronting crises and in imagining co-created solutions. This includes epistemic decolonization and (re)commitment to collective action that crosses borders and boundaries.

3.2. The discursive and epistemological

In conjunction with confronting the material injustices, securitization of profit, and geopolitical planetary control, how can we better understand the ways colonialism, imperialism, capitalism, and development co-constitute one another for those deemed expendable and disposable – past, present, and in the future? Addressing discursive and epistemological climate coloniality becomes evident. First would be to address knowledge production and epistemic underpinnings of climate coloniality. Imperialism is buttressed by colonial forms of racialization and race science, devaluing Othered knowledges and expert voices from marginalized populations, often undergirded by Orientalism (cf. Said, 1978). This raises the urgency to decolonize knowledge production on climate change (Bronen & Cochran, 2021; Schipper et al., 2021). Who is the expert producing climate knowledge and what expertise is generally of value to media, policy-makers, the public? Who is setting policy agendas and planning outcomes? It is often the same talking heads (often Global North, white, male experts) who tend to dominate climate conversations, rather than those experiencing longstanding climate devastation or producing place-based knowledge (see also Tandon, 2021). A white 'manthropocene' (Di Chiro, 2018) still endures in framings and analyses despite critique. Whitewashing of climate discourses and intellectual spaces persists. For instance, narratives of a climate apocalypse or dystopian futures, popular in hegemonic climate framings and the media, is not a futurity for all, but a past and present of colonial oppression of people of color (H. Davis & Todd, 2017; Whyte, 2020). Yet common climate narratives are often about white futures that 'de-future' racialized Others which reinforces white supremacy

(Erickson, 2020; Grove et al., 2021; Mitchell & Chaudhury, 2020). This is but one example. Thus, decolonizing climate is very much about knowledge production (who is cited, which epistemologies, whose ontologies, and so on), and who is invited to speak, who is heard, and who helps set agendas. As a result, it is a shifting of the critical geopolitics of knowledge production as well as re-evaluating expertise and experts (cf. Walsh, 2007). In many ways, it is not just about having a seat at the table (e.g. participation at the COP26) but determining what the table is, i.e. the terms of the debate or framing of the conversation and having decision-making power.

Epistemological and ontological work is needed to confront the universalization and Eurocentrism in how climate is presented and understood, filtered through colonial science and gaze, differential valuation of human and non-human life and systems across Eurocentric and Other spaces. Pluralizing knowledge through interdisciplinary and transdisciplinary work, but also valuing plural epistemologies and ontologies, become important (Castree, 2020; Dhillon, 2021). Pluriverse, whereby many worlds become possible instead of just one world, is increasingly gaining traction (Escobar, 2018; Kothari et al., 2019). Western hegemony is challenged and resisted, or ignored and sidelined. However, barriers persist in the universalist logics of contemporary planetary governance (e.g. COPs, SDGs, etc.), the universalization of Anthropocene discourses, as well as coloniality/modernity in international development institutional frameworks, and global trade rules. These seek conformity, efficiency, compliance, and are resistant to refusal. But decoloniality of knowing and being (Quijano, 2000) requires Indigenization of knowledge and politics. Throughout history, this is not only ignored, silenced, and resisted in dominant discussions on climate, but often violently oppressed or erased.

Climate coloniality is thus perpetuated through mundane and institutionalized ways of subalternization of non-Eurocentric, non-masculinist, and non-capitalist understandings of climate, ecology, and nature-society relations (Chakraborty, Yangjee Sherpa, & Pidcock, 2021; Escobar, 2018). As a result, decolonizing educational systems are fundamental, as this is where systemic cognitive injustices often begin through formal Westernized education that has gone global. Decolonizing knowledge and the academy have been strident in recent years across disciplines in Eurocentric universities and curricula (Bhambra et al., 2018; Cupples & Grosfoguel, 2019). To decolonize climate knowledge and authority, intentional changes are needed in citational politics (cf. Ahmed, 2017) and confronting intellectual impoverishments by lack of accounting for how neoliberal capitalism works in academic knowledge production and who produces what knowledge (cf. Mohanty, 1988). Beyond this, training and education that perpetuate Eurocentric and colonial models of science globally create structural barriers to change. Epistemic violence and colonization of the mind need to be acknowledged and undone across universities, training centers, non-governmental organizations, and state institutions. This is part of disrupting climate coloniality.

Similarly, concepts of ecocide and epistimicide help further clarify how knowledges were erased and devalued, but in need of recovering and reconstituting. Epistemic violence rooted in colonialism and Eurocentrism is not simply rooted in ideology, but material harms in the creation of the Other (Spivak, 1988). Epistemic violence can also include silence, whereby erasing or excluding of testimony and evidence of erasures and harm become routine. Epistimicide and genocide are historically linked (Grosfoguel, 2013), as it is to the violence against women (Federici, 2018) and nature (Mies & Shiva, 1993). While epistemic erasures (cf. Cusicanqui, 2012) are not uncommon, recovering Southern epistemologies have been written about (Connell, 2014; Santos, 2014), although who speaks for whom has also been problematized (Puwar, 2020). Dominant narratives can be resisted along various pathways (feminist, decolonial, anti-racist, post-colonial, anti-speciesist, etc.). The decolonization of the mind remains critical for epistemic justice and pluriverse, where recuperation of collective memory, dreams, desires, and cultural practices to foster conviviality are important to overcome the colonial matrix of power. Deconstructing climate coloniality allows for an understanding of how climate change continues to condition the material realities and discourses not only around nature-society relationships, but also the epistemic violences that follow in its wake. It is the undoing of this that is at stake, and then the remaking of futures not haunted by the past and present. Epistemic disobedience that disavows functioning of neoliberal capitalism can come from rooted place-based practices (Jackson, 2020) and global counterinsurgency to imperial and military control (Parenti, 2011), while acknowledging the various challenges of doing this kind of work (Haverkamp, 2021).

Therefore, while climate coloniality temporally and spatially causes eroding and erasure, there are also fissures that rupture through it weight, resist its imposition, and rework it. For instance, Bawaka Country and collaborators (2019) point to weathering and multiple Indigenous knowledge that are excluded in hegemonic climate discourses and practices, but are valuable cosmologies of decolonial knowledge and resistance that center accountable, reciprocal, and ethical relations and processes. There are many different ways that decolonization is enacted, ranging from direct action, law, care networks, leapfrogging alliances, cultural resurgence, and more to center BIPOC futures. For instance, blockades, resistance movements, and land back claims are community claims-building for liberatory praxis (Estes, 2019). Speaking in one's native tongue, collective memory and culture rebuilding, retelling of historiographies, and celebrating human-nonhuman kinship are some of the strategies (Todd, 2017). Native singing and dancing are resistance (L. Simpson, 2021), and valuing storytelling is decolonial action (Mignolo & Walsh, 2018). Reclaiming sacredness is anti-colonial (Wane et al., 2019), and counter-stories and counter-mapping are strategies of opposition (Tilley, 2020). Defending territorial ontologies is decolonial politics (Cifuentes, 2021). Recognizing relational entanglements and healing foster well-being and convivialities (Escobar, 2018). To celebrate resurgence in cultural practices of art, literature, oral traditions, poetry, and dance is to claim agency, desire, futurity, and spirit. Traditional folk songs and dances, plays and street theater, poetry and literature recitals, arts and handicrafts fairs, seasonal festivities and flower ceremonies, puppet shows and oratory recitals, collective cooking and sharing food, giving alms to wandering mistrals and holy folk, prayer ceremonies and rain dances – for many these are simultaneously coping mechanisms, refusals, resistance movements, and decolonial actions, where recollections of collective memories and practices as well as enactments for liberation remain the goal. However, it is vital to not fetishize pre-histories as frozen time or culture as magical solutions to systemic oppression, but recognize how they further propel decolonization and revolutionary resistance. They also constitute oppositional counterbalances to the coloniality of cannibalization of cultural artifacts, practices, and linguistics. It is a refusal of poverty porn and only-victim narratives, but cultivates fleshing out theories and grounding concepts. It is an affirmation of the humanity of the oppressed, and of fostering radical equality. At the same time, it is an understanding of our complicities in perpetuating harms and actively working to redress it through everyday praxis and re-education.

In other words, the agency and corporeality of the colonized come to matter. The realities and concerns of those caught up in epistemic entanglements and friction (Tsing, 2015) need to be worked through, where reconciling may not be entirely possible, but differences can coexist. That is the point of pluriversality instead of universality (Escobar, 2018; Paulson, 2019). It is to make visible and draw attention to knowledges and lived experiences otherwise, to ground theory in places geographically and ontologically, to emplace theory in concrete struggles that recognize various forms of resistance to domination. This involves valuing transgressive oppositional gaze from those within (hooks, 1992). It insists upon not just engaging with scholarship and bearing witness to harm and violences, but accepting on their own terms the lived experiences and testimonials of self and family members, of kin

and ancestors among those subjected to coloniality. This process legitimizes, validates, and gives agency to the enunciating, embodied, and knowing subjects whose lived experiences, cosmologies, and praxis matter. It entails deep listening through the roars, whispers, and silences that exist. Through such processes, ethics of care, care networks, and prioritizing collective wellbeing instead of only individual wellbeing become more clarified. This accounts for embodied, ecological, economic, and political safety from harm and fosters flourishing. Healing the colonial wound through transgressive love and solidarity becomes possible. Alienation is fought against with reclaiming sacredness and relationalities, in moving towards liberation and self-determination.

So, can epistemic hegemony of modernity/coloniality be transcended? 'Subaltern contamination' of hegemonic discourses is possible (Spivak, 2012) even if whether the subaltern is heard, or who the subaltern is, remains contentious. Ultimately, accounting for complexity and contradictions helps to avoid simplistic narratives or reductionistic impulses. Doing the hard work of these shifts, from local to global, means reckoning with ongoing conflicts and challenges. Collective transformations are possible with unlearning of received Eurocentric epistemologies as universal truths, and enacting accountable, reciprocal, and ethical relations and processes, which many feminist and Indigenous scholars have called for (Asher, 2014; Collard et al., 2015; H.; Davis & Todd, 2017). Climate coloniality can splinter us apart, but it can also bring us into solidarities and collectives. It has united and galvanized various coalitions across spaces and scales, often under the banner of climate justice (Sultana, 2022). Various strategic essentialisms (cf. Spivak, 1988) can allow for political mobilization towards common goals. There is always the possibility and danger of silencing dissent and difference, which have to be safeguarded against. Nonetheless, there is increasing recognition that resurgence and renewal are possible, seeded through the fertile grounds of the colonial wound, to move beyond its conscriptions towards strategies of revival. As Fanon reminds us, we need to dismantle colonial oppressive institutions and apparatuses for true liberation. Collective liberation, not just emancipation, is thus necessary.

What is evident is that political liberation from climate coloniality will rely on allyship and solidarities in intentional anti-imperial and anti-colonial projects across peoples of occupied, post-colonial, and settler-colonial contexts – particularly among Black, Indigenous, People of color from across continents. Political consciousness informed by anti-colonial politics is necessary for decolonization and abolition. The natures of these relationships need to be worked out, but coalitions come together by working through contentions and differences. Kinship building can be fraught, it needs humility and humanity, overcoming alienation, acknowledging differences and commonalities to build shared goals (Dhillon, 2019). It may be challenging, but it is necessary. The worlds we inhabit are full of complicity, compromise, and contradictions, of maintaining white supremacy and racial capitalism, of moves to innocence and guilt (cf. Wekker, 2016). Refusal to participate in or resist these (cf. A. Simpson, 2007), whether settler-colonialism or racial capitalism, may come easier to some over others, but these are always collective endeavors arrived at through intentional, concerted, and reflexive work. Radical entanglements of places and histories mean alliances among BIPOC resistance in the Global North with those across the Global South become fundamental to liberation.

Decolonization thus must build political community and practical solidarities that foster pluriversality and reparative relations, and restore humanity and agency in the battle against climate change and climate coloniality. The ruthless extractions and dispossessions across territories everywhere showcase the connections across place-based materialities to broader extractive ideologies and colonial-capitalist greed. Indigenous scholarship demonstrates the importance of self-determination and ecological kinship, more-than-human relationality, and multi-species justice. Recognizing and valuing living complex ecosystems and agroecology, instead of marketized nature as commodity, become vital. Indeed in many instances, ecological struggles and decolonial struggles are often linked (Pulido & de Lara, 2018). Ultimately, there is no singular blueprint for decolonizing climate, as decolonizing is a process and not an event; it is ongoing unlearning to relearn. Ultimately it is in the many acts, small and large, acting in constellations and collectivities over time and place that bear results.

The terrors of colonialism foreclosed various conditions of possibilities, of futurities and flourishing that we will never know. We do not know what might have been and must now live through what is, yet continue to yearn for a better tomorrow. Working through this pain and unknowing allows for healing, can promote formulating liberatory praxis. Coloniality has remade and continues to remake the past, present, future of many peoples. Colonialism is not in the past, it is in the present and in the future. We are altered, reconfigured, expendable, but are not passive agents in this, despite constrained circumstances. We live, resist, rebuild, rejoice, and refuse. Yet, we also feel sorrow for a past that never got to be, a present that is incomplete, unknowables that haunt and pique. Our memories are reshaped and respond to local and global forces, we are all different but we share some common histories. These are the fertile grounds where colonial and imperial wounds and resultant rage, grief, and desire are not minimized but recognized as part of the driving forces of resurgence and liberation.

4. Conclusion

Colonialism haunts the past, present, and future through climate. Imperialism continues through neoliberalism, racial capitalism, development interventions, education, training, and the media. Climate coloniality is expressed in various forms, such as through fossil fuel capitalism, neoliberal growth and development models, and hyper-consumptive and wasteful lifestyles, but also through structures, systems, and epistemologies built and held in place by powerful alliances globally. Institutional unaccountability, anthropogenic hegemony, neocolonial approaches to 'resources', coloniality of global governance structures – all combine to create colonialities of climate. Climate coloniality seeps through everyday life across space and time, weighing down and curtailing opportunities and possibilities through a toxic mix of global racisms, rapacious extractivism, colonial-capital dispossessions, climate debts, patriarchy, and imperialism. Dominant discussions around climate change tend to make it seem apolitical, as a physical phenomenon to be fixed with technology and finance, instead of a restructuring of relationships to ecologies, waters, lands, and communities we are intimately, materially, and politically connected to. To decolonize is to reveal, reassess, and dismantle colonial structures and discourses, to make them non-universal and demonstrate the hegemony deployed historically and through particular racialized colonial practices, and expose the everyday tactics of oppression and empire-building. Decolonizing climate, therefore, needs to tackle with the complexities of colonialism, imperialism, capitalism, and development in the reproduction of ongoing colonialities through existing global governance structures, discursive framings, material outcomes, and imagined futures.

One thing is clear. Feeling, embodying, and experiencing the heaviness of climate coloniality is a steep price to pay for knowing it. However, speaking about it is an essential component to confronting it and pursuing decolonial futures of abundance and flourishing. Without pathologizing or objectifying those enduring climate coloniality, we need to be able to hear and heed their suffering, learn from the embodied emotional geographies of climate, while also registering and celebrating a multiplicity of local voices, stories, ideas, cosmologies, strengths, and convivialities. Politics of indifference, discounting, silencing, ignoring, co-optation, and theft can no longer continue, among both global and local oppressors and imperialists alike. This is important in dismantling climate coloniality for emancipatory futures.

I want to conclude the way I started. When I initially commenced working on this topic, I sought to conduct auto-ethnography, pulling together the scattered notes and ruminations collected over many years. But when I was invited to deliver the plenary lecture for this journal, I

borrowed parts of that ongoing work to develop my arguments here. I intertwined theories, empirics, emotions, and storytelling to ground the theorizations of climate coloniality in lived experiences. I demonstrated how lived experiences are emotionally embodied complex processes and fraught conditions, but are legitimate sites of geopolitical knowledge and counterbalances to hegemonic framings and structural forces. In working through my reflections as a young grieving brown woman from drowning homelands, I chose to focus on generosity, resonance, and conviviality with fellow travelers and readers as I shared the partial vignette at the beginning. I end with another vignette from my notes written in later years, on this feeling of heaviness of climate coloniality, which inspired the title of this paper. Again, it is shared here as an unrefined testimonial of sorts. So here are my words, scattered in the wind, falling at your feet, or in your arms.

> কী এই ভারীতা, যে আমি অনুভব করি, যেটা আমাদের ভারাক্রান্ত করে, যেখানে অনেক শব্দ ছুটে আসে কিন্তু আমি স্পষ্টতার সাথে প্রকাশ করতে পারি না? [What is this heaviness I feel that weighs us down, where many words rush in that I can't quite articulate into sentences with any clarity?] Words like struggle, oppression, anger, pain, suffocation, rage, emptiness, suffering, trauma, grief, gloom, anxiety, abandonment, being trampled upon, erasure, erosion, weight of poverty, degraded environments, constant need to shoulder burdens, internalized oppression. মনে হয় সারাক্ষণ প্রতিরোধ করি আমরা, লড়াই করে যাচ্ছি কত কাল [It feels like we are constantly resisting, having to battle for so long]. It requires a constant oppositional resistance, a fightback, a protest. It beckons inner strength, endurance, resilience, political solidarity, action, collectivizing when possible, not individualizing suffering/despair but seeing us in others, retrieval of lost wisdom, parsing out (lost) Indigenous knowledge/practice from imposed and colonized knowledge/practice, recognizing cultural genocide and epistemicide, shifts in internalization of colonial and developmental ideologies and desires. So many words and thoughts and feelings – yet I feel I have insufficient words, inadequate clarity through the roars and whispers of emotions, memories, witnessing, living. These are such visceral fleshy things. I keep wondering what the emotional embodied geographies of climate change are or the racialized and sidelined brothers and sisters across the globe – can we talk about traumas and wounds without it being seen as trauma porn or damage narratives, available for extraction and misuse by others? Do we have to dress it up in dispassionate palatable language for wider consumption and academic traction? How does one speak of lived experience or bear witness without accusations of causing more harm? Do we always have to pretend to be resilient, show how we've overcome difficulties, display the positive sides to our humanity, showcase our vitality, make nice – when do our complex realities and emotions matter beyond positive spins of strength and resilience? আমরা কি দুঃখ, স্নিগ্ধতা, দুর্বলতা, ক্লান্তি, আতঙ্কা প্রকাশ করতে পারি যাতে করুণা, পরিত্যাগ, ভয়, অবহেলা, বিচ্ছিন্নতা পাশ কাটা যায়? [Can we be sad, soft, weak, weary, and terrified, without being pitied, discarded, feared, ignored, sidelined, alienated?] Can we be all those things or none? I'm tired of this historical necessity to endure and be strong, and to not be simultaneously pathologized or fetishized. So many of us are exhausted. But still, indeed we do endure and survive, and we will thrive and flourish. I have to remind myself how far we have come, what we have lost, and what we have gained. We speak in our native tongue, we sing, dance, pray, rejoice, create, celebrate. We protest and persist and resist and honor and remember. We are one and many, of the past, present, and future. We seep into soil and stone, soar into skies, flow with waters. So, giving up is not an option because it never was. This heaviness cannot last forever. But I still have so many questions, with no clear answers. I worry about such things all the time. আমি চেষ্টা চালিয়ে যাবো, শিখতে থাকব, আর কাজ করবো; কোন শেষ নেই, এটি একটি অবিরাম কাজ [I will continue to put effort into this, learn more, I must do better. There is no conclusion; this is endless work]. লড়াই চলবে [The struggle continues].

Declaration of competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

I am grateful to Kevin Grove and the *Political Geography* journal for inviting me to deliver the 40th anniversary plenary lecture of the journal at the 2022 Annual Meeting of the Association of American Geographers in February 2022. I thank my interlocutors Deondre Smiles, Meredith DeBoom, and Jennifer Rice for their generous engagement with the article. For feedback on earlier drafts, I thank Kevin Grove and Jairo Funez. This article is dedicated to all those who fought and continue to fight the good fight.

References

Abimbola, O., Aikins, J., Makhesi-Wilkinson, T., & Roberts, E. (2021). Racism and climate (In)Justice. *Heinrich Böll-Stiftung*.

Acabado, S. B., & Kuan, D. (2021). *Indigenous peoples, heritage and landscape in the Asia Pacific: Knowledge co-production and empowerment*. Routledge.

Acha, M. R. (2019). Climate justice must Be anti-patriarchal, or it will not Be systemic. In K.-K. Bhavnani (Ed.), *Climate futures: Re-imagining global climate justice* (pp. 246–252). Zed Books.

Agarwal, B. (1992). The gender and environment debate: Lessons from India. *Feminist Studies, 18*(1), 119. https://doi.org/10.2307/3178217

Agarwal, A., & Narain, S. (2012). Global warming in an unequal world: A case of environmental colonialism. In *Handbook of climate change and India* (pp. 105–112). Routledge. https://doi.org/10.4324/9780203153284-16.

Ahenakew, C. (2019). *Towards scarring: Our collective soul wound*. Musagetes.

Ahmed, S. (2017). *Living a feminist life*. Duke University Press.

Alston, P. (2019). *Report of the UN Special Rapporteur on extreme poverty and human rights*. https://www.eia.gov/todayinenergy/detail.php?id=32912.

Andreucci, D., & Zografos, C. (2022). Between improvement and sacrifice: Othering and the (bio)political ecology of climate change. *Political Geography, 92*, Article 102512. https://doi.org/10.1016/J.POLGEO.2021.102512

Anzaldúa, G. (1987). *Borderlands/La Frontera: The new Mestiza*. Aunt Lute Books.

Asher, K. (2014). The doers and the done for: Interrogating the subjects and objects of engaged political ecology. *Archives of Computational Methods in Engineering, 13*(3), 489–496.

Bachram, H. (2004). Climate fraud and carbon colonialism: The new trade in greenhouse gases. *Capitalism Nature Socialism, 15*(4), 5–20. https://doi.org/10.1080/1045575042000287299

Baskin, J. (2019). Global justice and the anthropocene: Reproducing a development story. In F. Biermann, & E. Lövbrand (Eds.), *Anthropocene encounters: New directions in green political thinking* (pp. 150–168). Cambridge University Press. https://doi.org/10.1017/9781108646673.008.

Baviskar, A. (2020). *Uncivil city: Ecology, equity and the commons in Delhi*. SAGE India.

Belcher, O., Bigger, P., Neimark, B., & Kennelly, C. (2020). Hidden carbon costs of the "everywhere war": Logistics, geopolitical ecology, and the carbon boot-print of the US military. *Transactions of the Institute of British Geographers, 45*(1), 65–80. https://doi.org/10.1111/TRAN.12319

Benjaminsen, T. A., Svarstad, H., & Shaw of Tordarroch, I. (2021). Recognising recognition in climate justice. *IDS Bulletin*. https://doi.org/10.19088/1968-2021.127

Bhambra, G. K. (2017). Brexit, trump, and 'methodological whiteness'': On the misrecognition of race and class. *British Journal of Sociology, 68*, S214–S232. https://doi.org/10.1111/1468-4446.12317

Bhambra, G. K., Gebrial, D., & Nişancıoğlu, K. (2018). *Decolonising the university*. Pluto Press.

Bigger, P., & Webber, S. (2021). Green structural adjustment in the world bank's resilient city. *Annals of the Association of American Geographers, 111*(1), 36–51. https://doi.org/10.1080/24694452.2020.1749023

Bluwstein, J. (2021). Transformation is not a metaphor. *Political Geography, 90*, Article 102450. https://doi.org/10.1016/j.polgeo.2021.102450

Bonilla, Y. (2020). The coloniality of disaster: Race, empire, and the temporal logics of emergency in Puerto Rico, USA. *Political Geography, 78*. https://doi.org/10.1016/J.POLGEO.2020.102181

Bronen, R., & Cochran, P. (2021). Decolonize climate adaptation research. *Science, 372*(6548), 1245. https://doi.org/10.1126/SCIENCE.ABI9127

Bumpus. (2010). Carbon colonialism? Offsets, greenhouse gas reductions, and sustainable development. *Global Political Ecology*, 217–238. https://doi.org/10.4324/9780203842249-21

Burman, A. (2017). The political ontology of climate change: Moral meteorology, climate justice, and the coloniality of reality in the Bolivian Andes. *Journal of Political Ecology, 24*(1), 921. https://doi.org/10.2458/v24i1.20974

Burton, N. (2020). People of Color Experience Climate Grief More Deeply Than White People. *Vice*. https://www.vice.com/en/article/v7ggqx/people-of-color-experience-climate-grief-more-deeply-than-white-people.

Cabral, A. (1973). *Return to the source: Selected speeches of Amilcar Cabral*. Monthly Review Press.

Cantor, A., Stoddard, E., Rocheleau, D., & Brewer, J. F. (2018). Putting rooted networks into practice. *Archives of Computational Methods in Engineering: An International Journal for Critical Geographies, 17*(4), 958–987. http://files/10890/Cantor et al. - 2018 - Putting Rooted Networks into Practice.pdf.

Castree, N. (2020). Speaking for the earth and humans in the "age of consequences. *Ecocene: Cappadocia Journal of Environmental Humanities, 1*(1), 32–43. https://doi.org/10.46863/ecocene.32

Césaire, A. (1972). *Discourse on colonialism*. Monthly Review Press. https://doi.org/10.1017/CBO9781107415324.004

Chakraborty, R., Yangjee Sherpa, P., & Pidcock, R. (2021). From climate adaptation to climate justice: Critical reflections on the IPCC and Himalayan climate knowledges. *Climatic Change, 167*(3), 1–14. https://doi.org/10.1007/S10584-021-03158-1, 2021.

Chambers, A. (2018). A panicky atmosphere. In *Panic, transnational cultural studies, and the affective contours of power* (pp. 87–107). Routledge. https://doi.org/10.4324/9781351054744-5.

Chao, S., & Enari, D. (2021). Decolonising climate change: A call for beyond-human imaginaries and knowledge generation. *ETropic, 20*(2), 32–54. https://doi.org/10.25120/etropic.20.2.2021.3796

Charkiewicz, E. (2009). A feminist critique of the climate change discourse: From biopolitics to necropolitics? *Critical Currents, 6*, 18–27.

Chaudhary, A. S. (2021). The extractive circuit: An exhausted planet at the end of growth. *The Baffler*. https://thebaffler.com/salvos/the-extractive-circuit-singh-chaudhary.

Cifuentes, S. (2021). Rethinking climate governance: Amazonian Indigenous climate politics and integral territorial ontologies. *Journal of Latin American Geography, 20*(2), 131–155. https://doi.org/10.1353/lag.2021.0031

Ciplet, D., & Roberts, J. T. (2017). Climate change and the transition to neoliberal environmental governance. *Global Environmental Change, 46*, 148–156. https://doi.org/10.1016/J.GLOENVCHA.2017.09.003

Clark, T. (2020). Ecological grief and anthropocene horror. *American Imago, 77*(1), 61–80. https://doi.org/10.1353/aim.2020.0003

Collard, R. C., Dempsey, J., & Sundberg, J. (2015). A manifesto for abundant futures. *Annals of the Association of American Geographers, 105*(2), 322–330. https://doi.org/10.1080/00045608.2014.973007

Connell, R. (2014). Using southern theory: Decolonizing social thought in theory, research and application. *Planning Theory, 13*(2), 210–223. https://doi.org/10.1177/1473095213499216

Cottle, S. (2009). Global crises in the news: Staging new wars, disasters, and climate change. *International Journal of Communication, 3*, 494–516.

Country, B., Suchet-Pearson, S., Wright, S., Lloyd, K., Tofa, M., Sweeney, J., Burarrwanga, L., Ganambarr, R., Ganambarr-Stubbs, M., Ganambarr, B., & Maymuru, D. (2019). Goŋ Gurtha: Enacting response-abilities as situated co-becoming. *Environment and Planning D: Society and Space, 37*(4), 682–702. https://doi.org/10.1177/0263775818799749

Cupples, J., & Grosfoguel, R. (2019). *Unsettling Eurocentrism in the Westernized university*. Routledge.

Cusicanqui, S. R. (2012). Ch'ixinakax utxiwa: A reflection on the practices and discourses of decolonization. *South Atlantic Quarterly, 111*(1), 95–109. https://doi.org/10.1215/00382876-1472612

Davis, J., Moulton, A. A., van Sant, L., & Williams, B. (2019). Anthropocene, capitalocene, … plantationocene?: A manifesto for ecological justice in an age of global crises. *Geography Compass, 13*(5), Article e12438. https://doi.org/10.1111/gec3.12438

Davis, D. K., & Robbins, P. (2018). Ecologies of the colonial present: Pathological forestry from the taux de boisement to civilized plantations. *Environment and Planning E: Nature and Space, 1*(4), 447–469. https://doi.org/10.1177/2514848618812029

Davis, H., & Todd, Z. (2017). On the importance of a date, or decolonizing the Anthropocene. *Archives of Computational Methods in Engineering, 16*(4), 761–780.

DeBoom, M. J. (2021). Climate necropolitics: Ecological civilization and the distributive geographies of extractive violence in the anthropocene. *Annals of the Association of American Geographers, 111*(3), 900–912. https://doi.org/10.1080/24694452.2020.1843995

Dhillon, J. (2019). Notes on becoming a comrade: Indigenous women, leadership, and movement(s) for decolonization. *American Indian Culture & Research Journal, 43*(3), 41–54. https://doi.org/10.17953/AICRJ.43.3.DHILLON

Dhillon, J. (2021). Indigenous resistance, planetary dystopia, and the politics of environmental justice. *Globalizations, 18*(6), 898–911. https://doi.org/10.1080/14747731.2020.1866390

Di Chiro, G. (2018). Welcome to the white (M)anthropocene?. In *Routledge handbook of gender and environment* (pp. 487–505). Routledge. https://doi.org/10.4324/9781315886572-34.

Dorninger, C., Hornborg, A., Abson, D. J., von Wehrden, H., Schaffartzik, A., Giljum, S., Engler, J. O., Feller, R. L., Hubacek, K., & Wieland, H. (2021). Global patterns of ecologically unequal exchange: Implications for sustainability in the 21st century. *Ecological Economics, 179*, Article 106824. https://doi.org/10.1016/J.ECOLECON.2020.106824

Dunlap, A., & Jakobsen, J. (2020). The violent technologies of extraction. In *The violent technologies of extraction*. Springer International Publishing. https://doi.org/10.1007/978-3-030-26852-7.

Elden, S. (2021). Terrain, politics, history. *Dialogues in Human Geography, 11*(2), 170–189. https://doi.org/10.1177/2043820620951353

Emeagwali, G., & Shizha, E. (2016). African Indigenous knowledge and the sciences: Journeys into the past and present. In *African indigenous knowledge and the sciences*. Brill. https://doi.org/10.1007/978-94-6300-515-9.

Erickson, B. (2020). Anthropocene futures: Linking colonialism and environmentalism in an age of crisis. *Environment and Planning D: Society and Space, 38*(1), 111–128. https://doi.org/10.1177/0263775818806514

Eriksen, S., Schipper, E. L. F., Scoville-Simonds, M., Vincent, K., Adam, H. N., Brooks, N., Harding, B., Khatri, D., Lenaerts, L., Liverman, D., Mills-Novoa, M., Mosberg, M., Movik, S., Muok, B., Nightingale, A., Ojha, H., Sygna, L., Taylor, M., Vogel, C., & West, J. J. (2021). Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance? *World Development, 141*, 105383. https://doi.org/10.1016/j.worlddev.2020.105383

Ernstson, H., & Swyngedouw, E. (2019). *Urban political ecology in the anthropo-obscene : Interruptions and possibilities*. Routledge.

Escobar, A. (2018). *Designs for the pluriverse*. Duke University Press. https://doi.org/10.1215/9780822371816

Escobar, A. (2020). Pluriversal politics. In *Pluriversal politics*. Duke University Press.

Estes, N. (2019). *Our history is the future: Standing rock versus the Dakota access pipeline, and the long tradition of indigenous resistance*. Verso https://www.versobooks.com/books/2953-our-history-is-the-future.

Falzon, D. (2021). The ideal delegation: How institutional privilege silences "developing" nations in the UN climate negotiations. *Social Problems, 1–18*. https://doi.org/10.1093/socpro/spab040

Fanon, F. (1963). *The Wretched of the earth*. Grove Press.

Fanon, F. (1967). *Black skin, white masks*. Grove Press.

Federici, S. (2018). *Re-enchanting the world: Feminism and the politics of the commons*. PM Press.

Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.

Gaard, G. (2015). Ecofeminism and climate change. *Women's Studies International Forum, 49*, 20–33. https://doi.org/10.1016/j.wsif.2015.02.004

Gergan, M. D. (2017). Living with Earthquakes and angry deities at the Himalayan borderlands. *Annals of the Association of American Geographers, 107*(2), 490–498. https://doi.org/10.1080/24694452.2016.1209103

Ghosh, A. (2021). *The Nutmeg's curse: Parables for a planet in crisis*. University of Chicago Press.

Gonzalez, C. G. (2021). Racial capitalism, climate justice, and climate displacement. *Onati Socio-Legal Series, 11*(1), 108–147. https://doi.org/10.35295/osls.iisl/0000-0000-0000-1137

Gordillo, G. (2021). The power of terrain: The affective materiality of planet Earth in the age of revolution. *Dialogues in Human Geography, 11*(2), 190–194. https://doi.org/10.1177/20438206211001023

Grosfoguel, R. (2013). The structure of knowledge in Westernized universities: Epistemic racism/Sexism and the four genocides/Epistemicides of the long 16th century. *Human Architecture: Journal of the Sociology of Self-Knowledge, 11*(1), 73–90.

Grove, K. (2014). Biopolitics and adaptation: Governing socio-ecological contingency through climate change and disaster studies. *Geography Compass, 8*, 198–210. https://doi.org/10.1111/gec3.12118

Grove, K., Rickards, L., Anderson, B., & Kearnes, M. (2021). The uneven distribution of futurity: Slow emergencies and the event of COVID-19. *Geographical Research*, 1–12. https://doi.org/10.1111/1745-5871.12501. October 2020.

Guha, R., & Martinez-Alier, J. (1997). *Varieties of environmentalism: Essays North and South*. Routledge.

Hall, S. (1992). *the West and the rest: Discourse and power*. Polity Press.

Haraway, D. (2015). *Anthropocene, capitalocene, plantationocene, chthulhucene: Making kin, 6* pp. 159–165). Environmental Humanities.

Haverkamp, J. (2021). Collaborative survival and the politics of livability : Towards adaptation otherwise. *World Development, 137*, Article 105152. https://doi.org/10.1016/j.worlddev.2020.105152

Hendrixson, A., Ojeda, D., Sasser, J. S., Nadimpally, S., Foley, E. E., & Bhatia, R. (2020). Confronting populationism: Feminist challenges to population control in an era of climate change. *Gender, Place & Culture, 27*(3), 307–315. https://doi.org/10.1080/0966369X.2019.1639634

Hickel, J. (2020). Quantifying national responsibility for climate breakdown: An equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. *The Lancet Planetary Health, 4*(9), e399–e404. https://doi.org/10.1016/S2542-5196(20)30196-0

Hickel, J. (2021). The anti-colonial politics of degrowth. *Political Geography, 88*. https://doi.org/10.1016/J.POLGEO.2021.102404

Hickel, J., Sullivan, D., & Zoomkawala, H. (2021). *Plunder in the post-colonial era: Quantifying drain from the Global South through unequal exchange, 1960–2018*. New Political Economy. https://doi.org/10.1080/13563467.2021.1899153

hooks, bell (1989). Choosing the margin as a space af radical openness. *Framework: The Journal of Cinema and Media, 36*, 15–23.

hooks, bell (1992). *Black looks: Race and representation*. South End Press.

hooks, bell (2000). *All about love: New visions*. Harper.

Jackman, A., Squire, R., Bruun, J., & Thornton, P. (2020). Unearthing feminist territories and terrains. *Political Geography, 80*, Article 102180. https://doi.org/10.1016/j.polgeo.2020.102180

Jackson, M. (2020). On decolonizing the anthropocene: Disobedience via plural constitutions. *Annals of the Association of American Geographers, 111*(3), 698–708. https://doi.org/10.1080/24694452.2020.1779645

Kallis, G., Paulson, S., D'Alisa, G., & Demaria, F. (2020). *The case for degrowth*. Polity Press.

Kashwan, P., & Ribot, J. (2021). Violent silence: The erasure of history and justice in global climate policy. *Current History, 120*(829), 326–331. https://doi.org/10.1525/curh.2021.120.829.326

Khan, M., Robinson, S., Weikmans, R., Ciplet, D., & Roberts, J. T. (2020). Twenty-five years of adaptation finance through a climate justice lens. *Climatic Change, 161*(2), 251–269. https://doi.org/10.1007/s10584-019-02563-x

Klein, N. (2009). *Climate rage: Why rich countries must pay for the damage they've done*. Rolling Stone. https://www.rollingstone.com/politics/politics-news/climate-rage-193377/.

Klein, N. (2016). Let them drown. *London Review of Books, 38*(11). https://www.lrb.co.uk/the-paper/v38/n11/naomi-klein/let-them-drown.

Kothari, A., Salleh, A., Escobar, A., Demaria, F., & Acosta, A. (2019). *Pluriverse: A post-development dictionary*. Tulika Books.

Last, A. (2015). Fruit of the cyclone: Undoing geopolitics through geopoetics. *Geoforum, 64*, 56–64. https://doi.org/10.1016/j.geoforum.2015.05.019

Lugones, M. (2010). Toward a decolonial feminism. *Hypatia, 25*(4), 742–759. https://doi.org/10.1111/J.1527-2001.2010.01137.X

Lyons, K., & Westoby, P. (2014). Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts. *Journal of Rural Studies, 36*, 13–21. https://doi.org/10.1016/j.jrurstud.2014.06.002

Mahony, M., & Endfield, G. (2018). Climate and colonialism. *Wiley Interdisciplinary Reviews: Climate Change, 9*(2), 1–16. https://doi.org/10.1002/wcc.510

Maldonado-Torres, N. (2007). On the coloniality of being: Contributions to the development of a concept. *Cultural Studies, 21*(2–3), 240–270. https://doi.org/10.1080/09502380601162548

Malm, A., & Hornborg, A. (2014). The geology of mankind? A critique of the anthropocene narrative. *Anthropocene Review, 1*(1), 62–69. https://doi.org/10.1177/2053019613516291

Malm, A., & Warlenius, R. (2019). The grand theft of the atmosphere: Sketches for a theory of climate injustice in the anthropocene. In K. K. Bhavnani (Ed.), *Climate futures : Re-imagining global climate justice* (pp. 32–39). Zed Books.

Marston, S. A., Hawkins, H., & Straughan, E. (2020). *An artful feminist geopolitics of climate change* (pp. 433–444). Routledge Handbook of Gender and Feminist Geographies. https://doi.org/10.4324/9781315164748-44

Martinez, D. (2014). The right to Be free of fear: Indigeneity and the united nations. *Wicazo Sa Review, 29*(2), 63. https://doi.org/10.5749/wicazosareview.29.2.0063

Mbembe, A. (2003). *Necropolitics. Public Culture, 15*(1), 11–40.

McNamara, K. E., & Jackson, G. (2019). Loss and damage: A review of the literature and directions for future research. *Wiley Interdisciplinary Reviews: Climate Change, 10*(2), 1–16. https://doi.org/10.1002/wcc.564

Mies, M., & Shiva, V. (1993). *Ecofeminism*. Zed Books.

Mignolo, W. D. (2007). Delinking: The rhetoric of modernity, the logic of coloniality and the grammar of de-coloniality. *Cultural Studies, 21*(2–3), 449–514. https://doi.org/10.1080/09502380601162647

Mignolo, W. D. (2017). Coloniality is far from over, and so must be decoloniality. *Afterall, 43*(4), 38–45. https://doi.org/10.1086/692552

Mignolo, W. D., & Walsh, C. E. (2018). *On decoloniality: Concepts, analytics, praxis*. Duke University Press. https://books.google.com/books?id=l8hcDwAAQBAJ.

Mikulewicz, M. (2019). Thwarting adaptation's potential? A critique of resilience and climate-resilient development. *Geoforum, 104*, 267–282. https://doi.org/10.1016/j.geoforum.2019.05.010

Mitchell, A., & Chaudhury, A. (2020). Worlding beyond 'the' 'end' of 'the world': White apocalyptic visions and BIPOC futurisms. *International Relations, 34*(3), 309–332. https://doi.org/10.1177/0047117820948936

Mohanty, C. T. (1988). Under western eyes: Feminist scholarship and colonial discourses. *Feminist Review, 30*(1), 61–88. https://doi.org/10.1057/fr.1988.42

Moore, J. (2016). *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism*. PM Press. https://www.pmpress.org/index.php?l=product_detail&p=779.

Moore, J., & Patel, R. (2017). *Unearthing the capitalocene: Towards A reparations ecology* (Vols. 18–26). Roar Magazine. https://roarmag.org/magazine/moore-patel-seven-cheap-things-capitalocene/.

Moraga, C., & Anzaldúa, G. (1981). *This bridge called my back: Writings by radical women of color*. Third Woman Press.

Moulton, A. A., & Machado, M. R. (2019). Bouncing forward after Irma and Maria: Acknowledging colonialism, problematizing resilience and thinking climate justice. *Journal of Extreme Events*. https://doi.org/10.1142/s2345737619400037

Nandy, A. (1983). *The intimate Enemy: Loss and recovery of self under colonialism*. Oxford University Press.

Naylor, L., Daigle, M., Zaragocin, S., Ramírez, M. M., & Gilmartin, M. (2018). Interventions: Bringing the decolonial to political geography. *Political Geography, 66*, 199–209. https://doi.org/10.1016/J.POLGEO.2017.11.002

Ndlovu-Gatsheni, S. J. (2018). The dynamics of epistemological decolonisation in the 21st century: Towards epistemic freedom. *Strategic Review for Southern Africa, 40*(1), 16–46.

Newell, P., Srivastava, S., Naess, L. O., Torres Contreras, G. A., & Price, R. (2021). Toward transformative climate justice: An emerging research agenda. *WIREs Climate Change*, 1–17. https://doi.org/10.1002/wcc.733

Nixon, R. (2013). *Slow violence and the environmentalism of the poor*. Harvard University Press.

N'krumah, K. (1965). *Neo-colonialism: The last stage of imperialism*. Thomas Nelson & Sons, Ltd.

NoiseCat, J. B. (2021). *How indigenous peoples are fighting the apocalypse*. Emergence Magazine. https://emergencemagazine.org/op_ed/how-indigenous-peoples-are-fighting-the-apocalypse/.

Oglesby, D. (2010). *Spectacle in copenhagen: Public diplomacy on parade*. CPD Perspectives on Public Diplomacy. http://uscpublicdiplomacy.org/publications/perspectives/CPDPerspectivesCopenhagen.pdf.

Okereke, C., & Coventry, P. (2016). Climate justice and the international regime: Before, during, and after paris. *Wiley Interdisciplinary Reviews: Climate Change, 7*(6), 834–851. https://doi.org/10.1002/wcc.419

Opperman, R. (2019). A permanent struggle against an omnipresent death: Revisiting environmental racism with frantz fanon. *Critical Philosophy of Race, 7*(1), 57–80. https://doi.org/10.5325/critphilrace.7.1.0057

Parenti, C. (2011). *Tropic of Chaos*. Bold Type Books. https://www.boldtypebooks.com/titles/christian-parenti/tropic-of-chaos/9781568586625/.

Paulson, S. (2019). Pluriversal learning: Pathways toward a world of many worlds. *Nordia Geographical Publications, 47*(5), 85–109.

Pellow, D. N. (2016). Towards a critical environmental justice studies: Black lives matter as an environmental justice challenge. *Du Bois Review: Social Science Research on Race, 13*(2), 221–236. https://doi.org/10.1017/S1742058X1600014X

Perez, C. S. (2021). Thinking (and feeling) with anthropocene (pacific) islands. *Dialogues in Human Geography, 11*(3), 429–433. https://doi.org/10.1177/20438206211017453

Porter, L., Rickards, L., Verlie, B., Moloney, S., Lay, B., Latham, B., Anguelovski, I., Pellow, D., Porter, L., Bosomworth, K., Rickards, L., Verlie, B., Moloney, S., Lay, B., Latham, B., Bcnuej, I. A., Pellow, D. N., Naarm/Birrarung-ga, Porter, L., & Lay, B. (2020). Climate justice in a climate changed world. *Planning Theory & Practice, 21*(2), 293–321. https://doi.org/10.1080/14649357.2020.1748959

Pulido, L. (2018). Racism and the anthropocene. *The Remains of the Anthropocene*, 116–128.

Pulido, L., & de Lara, J. (2018). Reimagining 'justice' in environmental justice: Radical ecologies, decolonial thought, and the Black Radical Tradition. *Environment and Planning E: Nature and Space, 1*(1–2), 76–98. https://doi.org/10.1177/2514848618770363

Puwar, N. (2020). Puzzlement of a déjà vu: Illuminaries of the global South. *Sociological Review, 68*(3), 540–556. https://doi.org/10.1177/0038026119890254

Quijano, A. (2000). Coloniality of power, Eurocentrism, and Latin America. *Nepantla: Views From South, 1*(3), 533–580. https://www.decolonialtranslation.com/english/quijano-coloniality-of-power.pdf.

Quijano, A. (2007). Coloniality and modernity/rationality. *Cultural Studies, 21*(2–3), 168–178. https://doi.org/10.1080/09502380601164353

Ray, S. (2021). Climate Anxiety Is an Overwhelmingly White Phenomenon. *Scientific American*. https://www.scientificamerican.com/article/the-unbearable-whiteness-of-climate-anxiety/.

Rhiney, K. (2020). Dispossession, disaster capitalism and the post-hurricane context in the Caribbean. *Political Geography, 78*, Article 102171. https://doi.org/10.1016/J.POLGEO.2020.102171

Rice, J. L., Long, J., & Levenda, A. (2021). Against climate apartheid: Confronting the persistent legacies of expendability for climate justice. *Environment and Planning E: Nature and Space*. https://doi.org/10.1177/2514848621999286

Rivera, D. Z. (2020). Disaster colonialism: A commentary on disasters beyond singular events to structural violence. *International Journal of Urban and Regional Research, 1468–2427*, 12950. https://doi.org/10.1111/1468-2427.12950

Roberts, J. T., & Parks, B. C. (2009). Ecologically unequal exchange, ecological debt, and climate justice. *International Journal of Comparative Sociology, 50*(3–4), 385–409. https://doi.org/10.1177/0020715209105147

Rocheleau, D., & Nirmal, P. (2015). Feminist political ecologies: Grounded, networked and rooted on earth. In R. Baksh, & W. Harcourt (Eds.), *The oxford handbook of transnational feminist movements* (pp. 793–814). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199943494.013.032.

Rodney, W. (1972). *How Europe underdeveloped Africa*. Bogle-L'Ouverture Publications. http://www.marxists.org/subject/africa/rodney-walter/how-europe/index.htm.

Sachs, W. (2009). In *The development dictionary: A guide to knowledge as power* (2nd ed.). Zed Books.

Said, E. W. (1978). *Orientalism*. Routledge.

Santos, B. de S. (2014). *Epistemologies of the South: Justice against epistemicide*. Routledge. https://doi.org/10.1111/j.1468-5906.2008.00423.x

Scheidel, A., del Bene, D., Liu, J., Navas, G., Mingorría, S., Demaria, F., Avila, S., Roy, B., Ertör, I., Temper, L., & Martínez-Alier, J. (2020). Environmental conflicts and defenders: A global overview. *Global Environmental Change, 63*, Article 102104. https://doi.org/10.1016/j.gloenvcha.2020.102104

Schipper, E. L. F., Ensor, J., Mukherji, A., Mirzabaev, A., Fraser, A., Harvey, B., Totin, E., Garschagen, M., Pathak, M., Antwi-Agyei, P., Tanner, T., & Shawoo, Z. (2021). Equity in climate scholarship: A manifesto for action. *Climate & Development*, 1–4. https://doi.org/10.1080/17565529.2021.1923308

Sealey-Huggins, L. (2018). The climate crisis is a racist crisis: Structural racism, inequality and climate change. In A. Johnson (Ed.), *The fire now: Anti-racist scholarship in times of explicit racial violence* (pp. 99–113). Zed Books.

Sheller, M. (2020). *Island futures : Caribbean survival in the anthropocene*. Duke University Press.

Silver, J. (2019). Suffocating cities: Urban political ecology and climate change as social-ecological violence. In H. Ernstson, & E. Swyngedouw (Eds.), *Urban political ecology in the Anthropo-obscene: Interruptions and possibilities* (pp. 129–147). Routledge.

Simpson, A. (2007). On ethnographic refusal: Indigeneity, "voice" and colonial citizenship. *Juncture, 9*(4), 67–80. http://junctures.org/index.php/junctures/article/viewFile/66/60.

Simpson, L. (2021). *As we have always done: Indigenous freedom through radical resistance*. University of Minnesota Press.

Spivak, G. C. (1988). Can the subaltern speak? *Die Philosophin, 14*(27), 42–58. https://doi.org/10.5840/PHILOSOPHIN200314275

Spivak, G. C. (1994). Responsibility. *boundary 2, 21*(3), 19–64.

Spivak, G. C. (2012). *An aesthetic education in the era of globalization*. Harvard University Press.

Stoddard, I., Anderson, K., Capstick, S., Carton, W., Depledge, J., Facer, K., Gough, C., Hache, F., Hoolohan, C., Hultman, M., Hällström, N., Kartha, S., Klinsky, S., Kuchler, M., Lövbrand, E., Nasiritousi, N., Newell, P., Peters, G. P., Sokona, Y., & Williams, M. (2021). Three decades of climate mitigation: Why haven't we bent the global emissions curve? *Annual Review of Environment and Resources, 46*, 653–689. https://doi.org/10.1146/annurev-environ-012220-011104

Sultana, F. (2007). Reflexivity, positionality and participatory ethics: Negotiating fieldwork dilemmas in international research. *ACME: An International Journal for Critical Geographies, 6*(3), 374–385. https://acme-journal.org/index.php/acme/article/view/786.

Sultana, F. (2010). Living in hazardous waterscapes: Gendered vulnerabilities and experiences of floods and disasters. *Environmental Hazards, 9*(1), 43–53. https://doi.org/10.3763/ehaz.2010.SI02

Sultana, F. (2014). Gendering climate change: Geographical insights. *The Professional Geographer, 66*(3), 372–381. https://doi.org/10.1080/00330124.2013.821730

Sultana, F. (2019). Decolonizing development education and the pursuit of social justice. *Human Geography, 12*(3), 31–46. https://doi.org/10.1177/194277861901200305

Sultana, F. (2020). Political ecology 1: From margins to center. *Progress in Human Geography, 45*(1), 156–165. https://doi.org/10.1177/0309132520936751

Sultana, F. (2021). Climate change, COVID-19, and the co-production of injustices: A feminist reading of overlapping crises. *Social & Cultural Geography, 22*(4), 447–460. https://doi.org/10.1080/14649365.2021.1910994

Sultana, F. (2022). Critical climate justice. *The Geographical Journal, 188*(1), 118–124. https://doi.org/10.1111/geoj.12417

Táíwò, O. O. (2022). *Reconsidering reparations: Worldmaking in the case of climate crisis*. Oxford University Press. https://global.oup.com/academic/product/reconsidering-reparations-9780197508893.

Tandon, A. (2021). *Analysis: The lack of diversity in climate-science research*. Carbon Brief. https://www.carbonbrief.org/analysis-the-lack-of-diversity-in-climate-science-research.

Thomas, D. A. (2019). *Political life in the wake of the plantation: Sovereignty, witnessing, repair*. Duke University Press.

Tilley, L. (2020). The impulse is cartographic: Counter-mapping Indonesia's resource frontiers in the context of coloniality. *Antipode, 52*(5), 1434–1454. https://doi.org/10.1111/ANTI.12634

Todd, Z. (2017). Fish, kin and hope: Tending to water violations in amiskwaciwâskahikan and treaty six territory. *Afterall, 43*, 102–107. https://doi.org/10.1086/692559/ASSET/IMAGES/LARGE/FG1.JPEG

Tsing, A. (2015). *The mushroom at the end of the world*. Princeton University Press.

Tuana, N. (2019). Climate apartheid: The forgetting of race in the anthropocene. *Critical Philosophy of Race, 7*(1), 1–31. https://doi.org/10.5325/critphilrace.7.1.0001

Tuck, E., & Ree, C. (2013). A glossary of haunting. In S. H. Jones, T. E. Adams, & C. Ellis (Eds.), *Handbook of autoethnography (issue 6* (pp. 639–658). Routledge. https://doi.org/10.4324/9781315427812.CH33.

Tuhiwai Smith, L. (2012). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books. https://doi.org/10.2307/2653993

Verges, F. (2017). Racial capitalocene. In G. Johnson, & A. Lubin (Eds.), *Futures of Black radicalism*. Verso.

Wa Thiong'o, N. (1986). *Decolonising the mind: The politics of language in African literature*. East African Educational Publishers.

Walsh, C. (2007). Shifting the geopolitics of critical knowledge: Decolonial thought and cultural studies "others" in the Andes. *Cultural Studies, 21*(2–3), 224–239. https://doi.org/10.1080/09502380601162530

Wane, N. N., Todorova, M., & Todd, K. (2019). *Decolonizing the spirit in education and beyond*. Springer. https://doi.org/10.1007/978-3-030-25320-2

Warlenius, R. (2018). Decolonizing the atmosphere: The climate justice movement on climate debt. *The Journal of Environment & Development, 27*(2), 131–155. https://doi.org/10.1177/1070496517744593

Wekker, G. (2016). *White innocence: Paradoxes of colonialism and race*. Duke University Press.

Whyte, K. (2018). Settler colonialism, ecology, and environmental injustice. *Environment and Society: Advances in Research, 9*(1), 125–144. https://doi.org/10.3167/ares.2018.090109

Whyte, K. (2020). Indigenous environmental justice: Anti-colonial action through kinship. In B. Coolsaet (Ed.), *Environmental justice: Key issues* (pp. 266–278). Routledge.

Williams, J. (2021). *Climate change is racist: Race, privilege and the struggle for climate justice*. Icon Books.

Wynter, S. (2003). Unsettling the coloniality of being/power/truth/freedom. *CR: The New Centennial Review, 3*(3), 257–336. https://doi.org/10.1353/ncr.2004.0015

Wynter, S., & McKittrick, K. (2015). *Unparalleled catastrophe for our species?: Or, to give humanness a different future: Conversations* (Vols. 9–89). Sylvia Wynter. https://doi.org/10.1215/9780822375852-002

Ye, J., van der Ploeg, J. D., Schneider, S., & Shanin, T. (2020). The incursions of extractivism: Moving from dispersed places to global capitalism. *Journal of Peasant Studies, 47*(1), 155–183. https://doi.org/10.1080/03066150.2018.1559834

Yusoff, K. (2018). *A billion Black anthropocenes or none*. University of Minnesota Press.

Update

Political Geography

Volume 100, Issue , January 2023, Page

DOI: https://doi.org/10.1016/j.polgeo.2022.102812

Political Geography 100 (2023) 102812

Contents lists available at ScienceDirect

Political Geography

journal homepage: www.elsevier.com/locate/polgeo

Erratum to "The unbearable heaviness of climate coloniality" [Political Geography 99 (November 2022) 102638]

Farhana Sultana

Department of Geography and the Environment, Syracuse University, USA

The publisher regrets that errors were introduced to the Bengali text in the final version of the article. These errors have now been corrected.

The publisher would like to apologise for any inconvenience caused.

DOI of original article: https://doi.org/10.1016/j.polgeo.2022.102638.
E-mail address: sultanaf@syr.edu.

https://doi.org/10.1016/j.polgeo.2022.102812

Available online 21 December 2022
0962-6298/© 2022 Elsevier Ltd. All rights reserved.