Beyond the Single Story of Climate Vulnerability

Centring Disabled People and Their Knowledges in "Care-Full" Climate Action

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Submission date: 17 May 2023; Acceptance date: 5 April 2024; Publication date: 20 September 2024

DOI:10.13169/intljofdissocjus.4.2.0048

ABSTRACT

Health. Disability. Vulnerability. These words are often used when discussing the risks of climate disruption. These discussions warn of the potential for climate impacts to "undermine 50 years of gains in public health" (as stated by the *Lancet* Countdown on Climate Change). Increasingly, such discussions also acknowledge climate injustice, examining who will benefit or lose out from climate change, how and why. The embodied vulnerability of disabled people is often assumed within such discussions, with less consideration of the social, economic or political conditions that create this vulnerability.

By bringing disability justice and disability studies into correspondence with care, environmental and climate justice scholarship, this reflective paper challenges the master narratives that blur differentiated experiences of disability and climate impacts into a single story of inevitable vulnerability. Recognising disabled people as knowers, makers and agents of change, it calls for transformative climate action, underpinned by values of solidarity, mutuality and care.

KEYWORDS

disability, climate change, climate adaptation, vulnerability, precarity, care

1. Introduction

Rapid and mounting disruptions to the climate pose direct and indirect risks to human health and livelihoods, through sudden onset of extreme weather events, slower onset of ecosystem degradation (Watts et al., 2018) and uneven socio-political climate responses (Parry et al., 2019). Disabled people[1] – comprising 16% of the global population (WHO, 2023) – are disproportionately exposed to climate risks (Lindsay et al., 2022). They experience higher mortality and morbidity during extreme weather events (Gaskin et al., 2017) and are systematically denied opportunities to influence climate action (Polack, 2008; Jodoin et al., 2020).

Holistic and just approaches to climate disruption are increasingly advocated for climate-resilient development (IPCC, 2023), calling for transformations to practices, governance *and* the core values underpinning collective efforts to move towards

1. Throughout this article, we primarily refer to "disabled people" rather than "persons with disabilities" in line with the social model of disability. However, we recognise that language preferences vary between individuals and across different countries and regions.

sustainability for all. Beyond the moral imperative to "leave no-one behind" (Martin et al., 2020), as foregrounded by the UN Sustainable Development Goals, inaccessible climate decision-making processes will exclude a significant proportion of the population from informing, contributing to and fostering the essential transformations needed to build climate-resilient societies (Görgens & Ziervogel, 2019; International Disability Alliance, 2021). Yet, at the time of writing, disabled people are referred to only by 37 of 192 State Parties to the Paris Agreement in their (Intended) Nationally Determined Contributions and 46 State Parties in their national adaptation plans (Jodoin et al., 2022). When disability is mentioned, it is primarily in the context of heightened vulnerability to climate risks, blurring people's differentiated experiences into a single story and ignoring the agency of disabled people in efforts to mitigate and adapt to climate change (Bell et al., 2020; Kosanic et al., 2022; Stein & Stein, 2022).

In contrast, this reflective paper recognises disabled people as potential knowers, makers, and agents of change (Abbott & Porter, 2013; Hamraie & Fitsch, 2019). It examines how disability knowledges challenge master narratives of inevitable climate vulnerability. It calls for transformative shifts, away from the structures of oppression and power asymmetries that hollow out rights and debilitate human and non-human communities, towards "care-full" climate justice (Bond & Barth, 2020). Care has a complicated and problematic history in the context of disability; coercive care has long been used to segregate, restrain and abuse disabled people, particularly within institutional settings, and has traditionally informed responses to disability characterised by charity and pity (Piepzna-Samarasinha, 2021; Taylor, 2022). However, we reflect here on the need for collective cultures of climate care that advance liveable futures for all. These cultures would foreground solidarity, mutuality, "sustainability, slowness and building for the long haul" (Piepzna-Samarasinha, 2021, 53), affirming how "all bodies are unique and essential, that all bodies have strengths and needs that must be met" (2021, 21).

Insights from feminist disability studies are important here to affirm care and interdependence as integral to all embodied life and expose the "social injustice caused by the disavowal and denial of dependency" (Garland Thompson, 2011, 599). As social animals, all humans are both vulnerable and interdependent. Yet, some are buffered by privilege in ways that create an illusion of independence. This illusion perpetuates narrow ideals of personhood, such that people whose lives are buffeted by precarity become devalued as somehow less-than (Ahmed, 2017). These framings result in "othering", alongside calls to "fix" individuals to rectify "deficiencies" rather than addressing underlying socio-political drivers of climate precarity (Barnett, 2020; Eriksen, 2022). By "climate precarity", we refer to the additional risks imposed by climate disruption and uneven climate action on people whose lives are already "characterised by uncertainty and insecurity" (Waite, 2009, 426). A focus on individual "deficits" fails to acknowledge the complex relations of care (with humans and non-humans) in which we are all embedded, or to recognise the role that social, cultural, and institutional structures play in shaping how we understand different bodies, value or undermine their agency, and construct notions of disability and vulnerability (Rice et al., 2015).

Understanding people as self-sufficient beings with the capacity to cope with and tackle global socio-environmental sustainability challenges presents an empirical and philosophical problem in Western political and legal systems that are predicated on individual rights and autonomy. As argued by Gruen (2022, 165): "Rather than trying to accomplish the impossible by pretending we can disentangle, we would do better to think about how to be more perceptive and more responsive to the deeply entangled relationships we are in"; that is, to dismantle the exploitative systems and logics of domination and disposability that perpetuate injustice and divisive responses to the climate emergency (Taylor, 2022; Tschakert, 2022). Integral to such efforts are cross-movement climate coalitions underpinned by solidarity against intersectional harms (Sultana, 2022c). Sisters of Frida, for example, is an experimental collective of disabled women exploring intersectional possibilities and building mutual support networks to mobilise against oppression and reimagine empowered futures in the context of climate disruption and uncertainty. In their words, "Ultimately, there is no climate justice without disability justice" (Stage, 2022). Disability justice is a multi-issue movement that is anti-ableist, anti-sexist, anti-colonial, anti-racist, anti-war and anti-capitalist (Dokumacı, 2023). Driven by disabled people who identify as Black, Indigenous and People of Colour (BIPOC) and Lesbian, Gay, Bisexual, Trans and Queer (LGBTQ) activists who have been marginalised from mainstream disability rights organisations, it is committed to leaving no-one behind.

In this article, we discuss and critique dominant understandings of disability as vulnerability in relation to climate risk, action, justice and governance, while exploring how insights from disability justice and disability studies can inform new possibilities for transformative climate action and social change.

2. The Impacts of the Climate Crisis on Disabled People

Scientists and practitioners have increasingly recognised that disabled people are disproportionately affected by climate impacts (Smith et al., 2017; Kett & Cole, 2018; Kosanic et al., 2019), most notably in the context of extreme weather events (IPCC, 2023). Although empirical research in this area is still incipient, existing literature shows that disabled people bear disparate risks of mortality and injury, and often experience a worsening of existing health conditions in hurricanes, heat waves, wildfires, dust storms, floods, famines, and droughts (Gaskin et al., 2017; Lindsay et al., 2022; Stein et al., 2023). Slower onset environmental changes also pose challenges. Due to disabling barriers to employment in Tuvalu, Kiribati, and the Soloman Islands, for example, many disabled people depend on subsistence farming to live, yet farming yields are declining with sea-level rise and saltwater intrusion. Physical barriers prevent disabled farmers from relocating to plantations on higher ground, which threatens their food security, particularly as non-disabled household members are typically prioritised when food is scarce (Pacific Disability Forum, 2022). Likewise, the disappearance of territory and the cultural practices that they enable pose a grave risk to the physical and mental health of disabled Indigenous people (Vecchio et al., 2022).

Scientific recognition of the heightened vulnerability of disabled people has slowly permeated international and domestic climate policymaking during the past decade. However, although disabled people are referenced as being disproportionately affected by climate risks in the preamble to the Paris Agreement and other decisions adopted under the United Nations Framework Convention on Climate Change (UNFCCC), state parties have yet to adopt concrete measures to engage them in climate decision-making and action (Jodoin et al., 2020). Likewise, with few exceptions, when disabled people are mentioned in domestic climate policies, they tend to be included in a list of vulnerable groups, with no accompanying plans or policies to integrate their knowledge, ensure their participation or enhance their resilience (Jodoin et al., 2022).

Through ongoing patterns of structural disempowerment (Hande, 2019), disabled people are exposed to the disproportionate burdens of climate risks (Jampel, 2018; Pertiwi et al., 2019), particularly when navigating intersecting inequalities pertaining to race, ethnicity, gender, sexuality, age, religion and class (Eriksen et al., 2021). For example, people with mobility impairments are more likely to live in flood-risk, ground-floor, level-access properties (King & Gregg, 2021). In extreme weather events worldwide, disabled people have been unable to access evacuation warnings, emergency transport, shelters or health care due to a lack of accessible planning, facilities, and services (Smith et al., 2017; CBM Global Disability Inclusion, 2022; United Nations Office for Disaster Risk Reduction, 2023). In the context of extended climate stress, such as droughts and unpredictable rainfall in Kenya, Guatemala and El Salvador, essential social security and income maintenance schemes have been denied to disabled people (Keogh & Gonzalez, 2020). As people with compromised living conditions and livelihood constraints are also more likely to develop long-term illnesses and impairments, it is perhaps not surprising that the relationship between disability and poverty has been described as a "vicious circle" (Yeo & Moore, 2003).

It is the systematic exclusion of disabled people from climate governance – and the failure of states, scientists, and societies to address the root causes of the risks they face in the climate crisis – that generates their climate precarity (Stein & Stein, 2022). When a person is placed in a position of precarity, they are denied access to the opportunities and resources needed to remedy the challenges and uncertainties imposed upon them. Consistent with biomedical models that lodge disability as a deficit of individual bodyminds rather than a form of societal constraint (Lawson & Priestley, 2020), climate vulnerability is often accepted as a somehow "inevitable" consequence of life with impairment (Wolbring, 2009). However, this framing overlooks the role of exclusionary social, physical, political, and historical structures in creating climate precarity amongst disabled people (Görgens & Ziervogel, 2019; Jodoin et al., 2020). It also fails to recognise that "vulnerability is simultaneously existential, universal to the human condition, socially differentiated and unique to every individual" (Eriksen, 2022, 1291).

To respond to the climate crisis, it is essential to transform the wider social, economic and political processes that generate situations of precarity and undermine

people's opportunities to live dignified, meaningful lives, both in the world as it is now and as it changes in the face of climate disruption. In what follows, we reflect on how disabled people have been positioned in dominant climate responses to date, before discussing the need for transformative climate action rooted in solidarity and mutuality (Eriksen, 2022).

3. Disability, Eco-Ableism, and Climate Action

The knowledges, experiences and agency of disabled people are often overlooked in climate action and mainstream environmental movements (Larrington-Spencer et al., 2021; Salvatore & Wolbring, 2021). They are also neglected within environmental citizenship scholarship. When considered, disabled people are more often framed as citizenship "targets" (e.g. care recipients) than as active citizens (Fenney Salkeld, 2019). Neoliberal solutions that prioritise individual "pro-environmental behaviour" fail to distinguish between optional and *essential* resource consumption (Cram et al., 2022). For example, some disabled people rely on energy-intensive equipment to survive (e.g. power chairs, ventilators, dialysis machines) and there remain key barriers to enacting pro-environmental behaviours. Climate strategies can create or reinforce disabling barriers, thereby exacerbating social inequalities (Brathen, 2021). Many ostensibly laudable measures to reduce carbon emissions impact disproportionately on disabled people, such as the removal of dedicated accessible parking bays to make space for cycleways in support of active travel. The introduction of Clean Air Zones may help to reduce air pollution and thereby reduce respiratory illness; however, cars with more efficient technology favour wealthier households, and some disabled people may experience physical barriers to using public transport, as well as cost barriers to upgrading a mobility vehicle or purchasing expensive adapted cycles (Imrie & Thomas, 2008; Fenney Salkeld, 2016; Fenney, 2017). Demonstrating the potential to create further barriers, a Clean Air Zone is currently being introduced in Bristol in the UK just as accessible community transport services have ceased to operate, thereby hindering many disabled people's access to the city centre.

Concerns have also been raised about exclusionary forms of climate activism, characterised by inaccessible climate protests. The disabled people's movement has many years of experience in mobilising to resist and reimagine alternatives to social oppression (Castres, 2022); a wealth of expertise that could enhance collective efforts to demand political conditions that create and sustain opportunities to live meaningful lives in the world, and to do so in ways that are inclusive and empowering (Bristol Disability Equality Forum, 2022). These skills are rarely acknowledged in the ableist rhetoric that devalues the worth of disabled lives in the name of climate action (Barberin, 2019). Some in the environmental movement refer to population pressures as an environmental threat, demonising people in countries with high birth rates and deflecting focus from disproportionate resource consumption and carbon emissions (past and present) by wealthy individuals and organisations in the Global North (Schultz, 2021). While the racist implications of this logic have been

highlighted (Ojeda et al., 2020), less attention has been given to its ableist connotations; echoing problematic coercive population control policies and eugenic ideologies that seek to eliminate devalued, undervalued or stigmatised human traits (Garland Thompson, 2017). Similarly, responses to the COVID-19 pandemic have highlighted how the lives of "people with pre-existing conditions" are hegemonically presented as disposable in times of societal stress or in the pursuit of economic recovery (Chen & McNamara, 2020).

Rather than informing a shared human project of "inclusive world building" (Garland-Thomson, 2017), these responses constitute a form of "eco-ableism" (Wolbring, 2013): a failure to include disability knowledges in climate action or to recognise that many of the actions promoted to address the climate emergency will create new challenges for disabled people (Inclusion Scotland and the Environmental Rights Centre for Scotland, 2021). Despite the pioneering work of autistic activist, Greta Thunberg – who explicitly reflects on autism as a strength in her approach to the climate crisis – disabled people are rarely viewed as knowledgeable climate or environmental leaders. An analysis of user comments on YouTube videos linked to Thunberg's climate activism identifies the use of ableist, as well as sexist and ageist, tropes to discredit her (Park et al., 2021). Calls for a disabled or "cripped" environmentalism that centralises disability within environmental futures are therefore timely (Bruyère & Filiberto, 2013; Larrington-Spencer et al., 2021). Rather than assuming disability as a "weakness" or "vulnerability" to "cater for", this shift demands an understanding of "disability experiences [. . .] as sites of knowledge production" (Kafer, 2017, 233).

While eco-ableism is increasingly recognised and critiqued in the context of climate *mitigation* efforts (Wolbring, 2013), the knowledges, priorities and capabilities of disabled people have received little attention in climate *adaptation* scholarship to date; in a global assessment of 1682 climate adaptation articles, disabled people were only considered in 1% of sources (Araos et al., 2021). Indeed, there remains "negligible literature on consideration of disabled peoples in planning and implementation of adaptation-related responses" (IPCC, 2022, 2434). As argued by Anguelovski et al. (2016, 343), "Inequity in adaptation planning is a dual process of favouring certain privileged groups while simultaneously denying resources and voice to marginalised communities". This inequity turns adaptation and climate protection into a "privileged environmental good" (2016, 345) and increases the likelihood of maladaptation as climate risks are simply redistributed between populations (Atteridge & Remling, 2018). Ableist climate adaptation that fails to recognise or enhance the adaptive capacity of disabled people as potential knowers and agents of change (Hamraie & Fitsch, 2019) will only maintain and compound historic trends of disability injustice (Wolbring, 2009) and miss opportunities for progressive climate action.

One such example is the growing popularity of "nature-based solutions" to climate adaptation (Osaka et al., 2021), retrofitting urban environments with "green" or "blue" infrastructure (e.g. parks, woodlands, sustainable urban drainage systems) to reduce risks of flooding and overheating while providing opportunities for

"healthy" nature connection (Cleary et al., 2017). Although well intended, these interventions often fail to recognise or address the disabling barriers that undermine the autonomy of many people to access such experiences (Bell, 2019). In addition, the "greening" of socioeconomically marginalised urban neighbourhoods (in response to climate impacts or otherwise) can instigate processes of "green" or "ecological" gentrification, driving up the cost of living to a point where lower-income residents are displaced (Anguelovski, 2016). Although rarely acknowledged within the growing body of green gentrification scholarship (Osborne Jelks et al., 2021), disabled people are at particular risk of such displacement due to high levels of poverty through entrenched disabling barriers to employment (Hamraie, 2020). Disabled people are also more likely to face additional (often invisible) labour costs (Emens, 2021) in trying to rebuild social networks and navigate unfamiliar physical, health, and social care environments in new communities. Recognising such risks and the agency of disabled people, it is essential to find new ways to embed diverse disability knowledges in climate justice scholarship and practice (Jodoin et al., 2023).

4. Disability-Inclusive Climate Justice

Climate justice movements are increasingly foregrounding the unequal societal impacts of the climate crisis, examining who will benefit or lose out from climate disruption and prominent responses to it, in what ways and why (Sultana, 2022a). Three core tenets of justice are typically considered in this work (Kaswan, 2021; Suiseeya, 2021; Coolset & Néron, 2021): fairness in the socio-spatial *distribution* of climate burdens and benefits, alongside the material resources needed to cope and adapt; fairness of the processes or *procedures* by which climate decisions are made; and fairness in how the knowledges, identities and priorities of different people are *recognised*, valued, and respected in these decision-making processes and in how climate risks and impacts are framed and approached (Holland, 2017). Such movements have called for greater attention to how "the agency of marginalised citizens can be harnessed to (re)negotiate pervasive inequalities in practice" (Garcia & Tschakert, 2022, 652), arguing that "the intersections of different climate-related oppressions [. . .] can no longer be ignored" (Mikulewicz et al., 2023, 1). Also acknowledged is the need to avoid the "use and presentation of caricatures of vulnerability that lead to the inaccurate identification of problems" (Garcia et al., 2022, 13). Yet disability has received limited attention across this work to date, risking a "social ordering" of vulnerability (Eriksen, 2022) rather than creating space for genuinely intersectional climate justice.

The wider environmental justice movement has also been integral in challenging the uneven distribution of environmental health burdens and benefits across society (Svarstad & Benjaminsen, 2020), calling for transformative change that addresses underlying causes of inequality and unsustainability (Martin et al., 2020). Intersecting inequalities pertaining to race, gender and class have been foregrounded but, again, limited consideration has been given to the differentiated lives and knowledges of disabled people (Ann Johnson, 2011). When mentioned, disability is primarily used

as a "cautionary tale" to advocate for justice and restoration in the face of environmental change (Larrington-Spencer et al., 2021, 23). In this way, disability is understood as the embodiment of structural violence; a negative condition imprinted on marginalised bodies through environmental harm, often in the pursuit of external profit, power and capital accumulation (Watts Belser, 2020).

Recognising the tensions within this framing, disability justice and feminist scholars have called for a broader emotional landscape (Watts Belser, 2020) in the context of disability and environmental harm (Piepzna-Samarasinha, 2016). The disability justice movement understands that disabled people are "powerful not despite the complexities of our bodies but because of them" (Piepzna-Samarasinha, 2021, 21). As articulated by Eli Clare (2017, 255):

> *I want us to respect and embrace the bodies disabled through environmental destruction, age, war, genocide, abysmal working conditions, hunger, poverty, and twists of fate, rather than deeming them abnormal bodies to isolate, fear, hate, and dispose of. How can bodily and ecological loss become an integral conundrum of both the human and non-human world, accepted in a variety of ways, cure and restoration only a single response among many?*

This broader emotional landscape is particularly relevant to climate justice; with global temperatures approaching 1.2 degrees Celsius above pre-industrial temperatures, irreversible changes are occurring (and will continue to occur) across many valued ecosystems and everyday environments. Indeed, as noted by the IPCC (2023, 20), "With additional global warming, limits to adaptation and losses and damages, strongly concentrated among vulnerable populations, will become increasingly difficult to avoid". Anxiety and grief experienced in response to the loss or fracturing of cherished environments has been described as "solastalgia"; "the erosion of the sense of belonging (identity) to a particular place and a feeling of distress (psychological desolation) about its transformation" (Albrecht, 2005, 45). Although rarely considered, there are parallels between the sense of loss encountered within changing landscapes of "home" and the sense of loss that can be experienced as the familiar "fit" between body and world shifts with impairment onset and progression (Clare, 2017).

As noted by feminist disability scholar, Rosemarie Garland-Thomson (2002, 20), a body becomes disabled when it is "out of sync" with its physical, social, cultural, and political environments, when it "misfits". Misfitting occurs "when the environment does not sustain the shape and function of the body that enters it" (Garland-Thomson, 2011, 594). Contrary to stereotypes of disability as weakness, misfitting on a regular basis necessitates adaptability, resourcefulness and creativity in navigating and building relationships within the world. These skills are "often underdeveloped in those whose bodies fit smoothly into the prevailing, sustaining environment" (Garland-Thomson, 2011, 604). Indeed, "anticipatory scheduling" is often practised by disabled people to manage day-to-day uncertainties, of both body and world (Kafer, 2013). Expanding on this work, Arseli Dokumacı (2023, 5) reflects on the artful, micro-acts of survival that are improvised and mastered by disabled people to "bring into being

the worlds that are not already available to them" in conditions of constraint or "shrinkage". Shrinkage can occur in myriad ways; from bodily experiences of pain and body-environment misfits to the debilitation caused by conflict, brutality and the "colonialist, extractivist depletion of the world's offerings" (2023, 9).

Although integral to adaptive capacity, these skills of anticipation, contingency planning, resourcefulness, ingenuity, and living within limits are still largely overlooked within climate adaptation scholarship, policy and practice. Beyond a "cautionary tale" of environmental harm, the knowledges and experiences of disabled people can inform new strategies for coping with experiences of climate disruption and uncertainty, for reconfiguring a sense of home and curating meaningful lives in seemingly unfamiliar, uncontrollable and fragile landscapes (Watts Belser, 2020). In the words of feminist scholar, Sara Ahmed (2017, 180):

> *We can value what is deemed broken; we can appreciate those bodies, those things, that are deemed to have bits and pieces missing. Breaking need not be understood only as the loss of the integrity of something, but as the acquisition of something else, whatever that else might be.*

There are a growing number of disability-led climate networks – such as SustainedAbility, the Disability-Inclusive Climate Action Research Program, and the Disability-Inclusive Disaster Risk Reduction Network – that could play valuable roles in climate governance and decision-making. At present, these networks are yet to receive basic recognition as a formal Disability Constituency at the UNFCCC Conference of Parties, let alone being embedded within adaptation committees, or shaping the ways in which climate vulnerability assessments are framed, structured and conducted.

Notably, however, as articulated by Justice Shorter (2022), Disaster Protection Advisor at the US National Disability Rights Network:

> *While disabled people bring essential skills to our communities, we shouldn't have to "earn" our safety. As people with disabilities, we don't always need to be doing something to validate our existence or our presence […] We can just be. Of course, that doesn't mean that we shouldn't be a part of these conversations. But even if we're not, we still deserve to be safe. We still deserve to be treated with dignity. We still deserve to get the assistance that we need.*

Mutual advantage and "productive" contribution should not be prerequisites for climate justice, since "society is held together by a wide range of attachments and concerns" (Nussbaum, 2006, 160). In what follows, we explore the potential and limitations of disability rights in shaping who is recognised, respected and resourced to participate fully in – and/or be protected from harm within – climate scholarship, policy and practice.

5. The Potential and Limitations of Disability Rights in Addressing the Climate Crisis

The importance of equity, inclusivity and rights-based climate responses are increasingly noted, with the IPCC (2023, 34) recognising that "vulnerabilities and climate

risks are often reduced through carefully designed and implemented laws, policies, participatory processes, and interventions that address context-specific inequities such as those based on gender, ethnicity, disability, age, location and income". In July 2019, responding to the long-term and palpable absence of disabled people in international discussions around climate disruption (beyond disaster risk reduction), the UN Human Rights Council adopted a resolution on climate change and disability rights. This resolution called on governments to adopt a disability-inclusive approach to climate adaptation, an approach that "empowers persons with disabilities as agents of change to address the harmful effects of climate change in their day-to-day lives" (Office of the UN High Commissioner for Human Rights, 2020, 4). As acknowledged by the Paris Agreement, efforts to combat climate impacts should respect the human rights obligations of states, including those enshrined under the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (Jodoin et al., 2020).

As many legal scholars have argued, a disability rights framework has transformative implications for how climate policies are designed and implemented. Such an approach puts the onus on governments to address and protect the rights of disabled people in the design and development of climate policies, including by ensuring their full and effective participation in climate governance (Jodoin et al., 2020). It thereby challenges the notion that the climate vulnerability of disabled people is an inevitable or natural phenomenon, exposing it instead as an injustice resulting from pre-existing and ongoing legal, political, social, and economic inequalities. Disability rights obligations entail that states should leverage climate action to address the physical, institutional and attitudinal barriers that undermine the substantive equality of disabled people in society (Stein & Stein, 2022).

Participatory justice is integral to a disability rights approach (Stein & Lord, 2008). It requires that states take measures to ensure that disabled people can actively and meaningfully participate in decision-making on matters that affect their lives at an interpersonal level, in their communities, in society as a whole, and in the context of policymaking. This includes opportunities to participate fully in environmental (and wider forms of economic and political) decision-making, and to challenge exposure to deprivation, violence and debilitation (Martin et al., 2016). In this way, calls for participatory justice resonate with social and feminist approaches to disability that seek to "develop social, cultural, and material contexts that increase people's capacity for action" (Rice et al., 2021, 98).

Concerns have been expressed, however, about the potential to achieve disability justice through the development of disability rights or legal entitlements. Scholars have consistently documented that whether and how the rights of disabled people are understood, respected and protected varies significantly across different cultures, jurisdictions, and sectors of public policy (Vanhala, 2010; Lang et al., 2011; Aucante & Baudot, 2018). In particular, gaps frequently emerge between the ratification of treaties and the adoption of laws to protect disability rights on the one hand and how they are interpreted and applied by courts, governments, corporations, institutions,

and ordinary citizens on the other (Bagenstos, 2009; Malhotra, 2013; Maroto & Pettinicchio, 2014). Critical disability scholars are especially sceptical about the potential of law for disability justice and emphasise the enduring role that structural forms of oppression tied to sexism, racism, colonialism, and capitalism play in generating ableist ontologies, institutions, and violence (Tremain, 2001; Hutcheon & Lashewicz, 2020).

Paradoxically, to achieve their full promise for disability justice, human rights both entail and require transformative changes to the broader institutional, social, cultural, political, and economic structures that devalue, debilitate and discriminate against disabled people. Whether or not social movements are able to secure such changes hinges on the legal, discursive, and political opportunity structures that shape the use and effectiveness of different strategies for social justice (Andersen, 2006; McCann, 2006).

Ultimately however, human rights are anchored in a particular liberal framework that has been criticised for being colonial (Meekosha & Soldatic, 2011), anthropocentric (Nussbaum, 2006), and unable to address the role of capitalism in supporting hegemony and generating oppression (Malhotra, 2003). Such critiques insist on the importance of decentring Western legal norms and concepts relating to disability and adopting a decolonised approach that recognises the knowledge and experience of Indigenous Peoples and populations from the Global South (Meekosha, 2011; Velarde, 2018). They also call for a dismantling of extractivist economic systems underpinned by ideas of human exceptionalism (Tschakert, 2022); the misplaced notion that humans (or certain subsets of humans) are superior to all other organisms, and that human ingenuity and technology will be able to "fix" anything – bodies, ecosystems, planets – that we break (Klein, 2015).

6. From Careless Capitalism to Inclusive Cultures of Climate Care

Entrenched notions of human exceptionalism underpin a persistent faith in technocratic, neoliberal climate solutions, such as geoengineering stopgaps, carbon capture and storage, and carbon accounting schemes (Garcia & Tschakert, 2022; Sultana, 2022b). These responses create "placebos that distract attention from systemic problems, allowing us to continue the same economic and technological behaviours that got us here in the first place" (Morrison et al., 2022, 1102). They tackle – or displace – the proximate causes or impacts of climate disruption without addressing the exploitative, extractive power relations that drive them. Geoengineering "solutions", for example, create risks of enduring drought in regions of the world, such as sub-Saharan Africa, which are already experiencing widespread food and water insecurity, morbidity, and mortality (Klein, 2015). Here, we reflect on the potential for disability knowledges to counter such extractivist values, informing climate action underpinned by solidarity, mutuality and care. Technocratic "fixes" reinforce hierarchical systems of power that brand millions of people worldwide as less-than-human, subhuman, or as "sacrifice zones" unworthy of climate protection (Mikulewicz, 2019;

Tschakert, 2022). These responses also open the door to processes of triage that have typically constructed disabled people as those "least worth saving" (Abbott & Porter, 2013, 843); processes brought into stark relief in the context of the COVID-19 pandemic (Chen & McNamara, 2020; Scully, 2020).

In equating human worth and "normality" with productivity and market contribution, capitalism – and the extractivist logic that underpins it – has established asymmetric dependencies (Oliver & Barnes, 2012), reducing life "into objects for the use of others" (Klein, 2015, 169) and marking out signs of difference that may "impede" productivity (McRuer, 2006). Within disability studies, the original social model of disability was explicitly anti-capitalist in its conception and development (Oliver, 1996). Capitalism overworks, exploits and debilitates labouring bodies, while also undermining structures for collective care and creating entrenched barriers to inclusive forms of social organisation (Puar, 2017); "the need for surplus profit ensures that a system that generates disability must immediately conjure it away when it appears" (McRuer, 2006, 204).

Capitalism thrives through "sustaining crisis as a normative state, both bodily and economically" (Puar, 2017, 87). It is perhaps not surprising, therefore, that crisis has become the dominant frame for climate disruption among many environmental activists and experts. While this framing rightly calls attention to the severity and scale of accelerating climate risks, it also provides a favourable context for the invocation of a "shock doctrine", creating a sense of temporal desperation that enables "a power grab by those seeking to maintain and extend their privileges" (Goodman, 2018, 340). In its wake are growing reports of eco-anxiety; distress linked to impending and/or experienced environmental change (Boyd et al., 2023). Notably, there have been calls to reframe such anxiety as a form of "eco-care" (Hickman, 2020), to counter the carelessness of extractivist worldviews and harness the enduring care and attention required for care-full climate justice. Rather than the panic or shock that has become the dominant narrative of much of the climate movement, "a certain suspension of feelings of emergency, fear [. . .] is required to focus on caring attention" (Puig de la Bellacasa, 2017, 207).

In co-generating inclusive cultures of climate care, disability scholars and activists could learn from and with the Indigenous Peoples pursuing the revitalisation of their traditional knowledge systems and promoting their integration in climate decision-making (Nakashima & Krupnik, 2018; Reed et al., 2022). As noted by Bawaka Country et al. (2020, 296), given the "tendency to hold both climate and change within a strict, linear, universalist and ultimately colonising understanding of time", it is unsurprising that fear, denial or "efforts to impose control through the very structures that led to the problem in the first place" (2020, 298) have become the dominant responses to change.

To cultivate care-full climate justice, it is essential to move beyond mechanical, linear structures that view time as a resource that can be measured, discounted, or exploited for profit (Madden, 2010). Drawing on insights from critical disability studies, "crip time" constitutes such an alternative; it foregrounds the temporalities

of illness, impairment and disability in reconfiguring experiences of time, resists normative expectations of timeliness, productivity and development, respects bodily limits and creates new orientations to the past, present and future (Kafer, 2021; Dokumacı, 2023). As articulated by Samuels (2017), crip time:

> *Requires us to break in our bodies and minds to new rhythms, new patterns of thinking and feeling and moving through the world […] It insists that we listen to our bodyminds so closely, so attentively, in a culture that tells us to divide the two and push the body away from us while also pushing it beyond its limits. Crip time means listening to the broken languages of our bodies, translating them, honouring their words.*

Crip time recognises people's exposure to environmental toxins and debilitating environmental change as a form of accretive "slow violence" (Day, 2020). It reinforces the need to transgress the extractivist logic of capitalist time that drives ever faster rates of (human and non-human) energy extraction and consumption, countering the "movement toward productivity at all costs" (Krebs, 2022, 122). Crip time signposts new forms and temporalities of climate action based on care, mutual aid, and solidarity, holding flexible space and time for each other in ways that destabilise the normative assumptions underpinning the "inevitability" of sacrifice zones. In line with a disability culture "that has learned to value the humanity in all people" (Heumann & Joiner, 2021, 23), care-full climate action would recognise "the inherent value of every person and every ecosystem" (Klein, 2022, 391). It would appreciate "wealth" as an abundance of community, kinship and confidence in a liveable future for all (Solnit & Lutunatabua, 2023), and celebrate (rather than deny) interdependence as fundamental to survival and connection. From the perspective of disability inclusion, a care-full approach to climate action would affirm the skills and knowledges developed through life in crip time, and potentially lay the groundwork for the development of alternative climate messaging that is less likely to generate eco-anxiety or climate defeatism (Hickman, 2020).

7. Concluding Reflections

By bringing disability justice and disability studies into correspondence with care, environmental and climate justice scholarship, this article has highlighted the need to unpack and move beyond master narratives that collapse differentiated experiences of disability and climate change into a single story of vulnerability. We have presented opportunities to catalyse material, political and ideological shifts that position disabled people not solely as climate victims but as knowledgeable agents of change. While we recognise the promise of disability rights for climate justice, we also stress the many economic, institutional, cultural, and social challenges that limit their transformative potential in practice. Due to their foundations in Western legal traditions and human personhood, human rights are not, moreover, unproblematic in the cross-cultural and cross-species context of global climate justice. By focusing on the multiple structures of oppression sustained by extractivism, our article aligns with wider calls to move away from a relentless, debilitating quest for economic growth, towards "a reordering of the global economy around a reparative climate justice" (Diski, 2022, 13), recognising and valuing care as "key to societal wellbeing" (2022, 25).

Climate action has the potential to be instrumental in making precarious lives more secure. Such efforts require transformative shifts in existing systems of power that undermine the realisation of climate justice for all. In 2006, Martha Nussbaum called for "imaginative courage" to move beyond public cynicism and despair in forging new "ways in which people might get together and decide to live together" (2006, 414). Eighteen years on, in the face of accelerating climate, this call is ever more pressing. Yet, to muster such courage can be painful, particularly in the shadows of ongoing ableist responses to a global pandemic that has severely eroded the sense of self-worth and quality of life of many disabled people (Chen & McNamara, 2020; Scully, 2020; Shakespeare et al., 2021). It is, therefore, essential to create safe, enabling, anti-oppressive, care-*full* research spaces for human exchange and connection in this area. Such spaces challenge the idea that one's life is less valuable or worthy when ground down by (often overlapping) systems of oppression (Taylor, 2022); understand the risks of identifying as disabled when already routinely stigmatised and debilitated (Puar, 2017); and recognise disability as "both a signifier of inequity and the promise of something new and affirmative" (Goodley et al., 2019, 973).

While contextual vulnerability is recognised in human security framings of climate adaptation (O'Brien et al., 2007), climate precarity is often conflated with embodied vulnerability. This conflation perpetuates an illusion of climate immunity or invulnerability amongst privileged groups in ways that denigrate vulnerability and reproduce detrimental social hierarchies that brand certain people as sub-human. Efforts to dismantle such hierarchies are integral to developing new cultures of climate care capable of respecting and building capacity amongst multiply marginalised people to lead and shape climate action. Rather than pitting individuals and social movements against each other, we need coalition building that "offers integrated and intersecting solutions grounded in a clear and compelling vision of our future – one that is ecologically safe, economically fair and socially just" (Klein, 2022, 395). Such a climate coalition would embrace "the profound creativity and world-making capacities of disabled lives, experiences and kinship" (Cram et al., 2022, 10) and enable new "ways of living with/in [. . .] the ambiguity and uncertainty of human embodiment" (Rice et al., 2015, 524) in an increasingly fragile world. It would restore and sustain the enduring care and attention required to navigate, cope with and adapt to climate impacts in ways that are consistent with mutuality, solidarity and intersectional climate justice.

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