



CLIMATE JUSTICE AND PARTICIPATORY RESEARCH: BUILDING CLIMATE-RESILIENT COMMONS

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Putting Ethos into Practice: Climate Justice Research in the Global Knowledge Commons

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Introduction: Human Knowledge Is a Commons

Climate change is a product of colonial globalization, which has also made global communication possible with unprecedented ease. Human knowledge has become a global commons; knowledge produced in one place influences people across the world (Hess & Ostrom, 2007; Levine, 2007). The global knowledge commons includes a vast array of research, stories, history, and traditions—understandings of everything that is shared, such as oceans and watersheds, the atmosphere, seeds, soil, ecosystems, etc., and for people, cultures, histories, languages, and ontologies (Mazé, Domenech, & Goldringer, 2021; Perkins, 2019, p. 184). These include all the ways in which people connect to one another and the world.

This chapter considers the ethical implications of knowledge commons and how an ethos—a distinguishing set of beliefs, spirit, or character of a person, group, or culture—might emerge to help address the injustices inherent in the current knowledge commons, including those driven by climate chaos (Joranson, 2013; Puckett et al., 2012; Kranich, 2007). An ethos that amplifies historically marginalized perspectives through a decolonial and transformative lens emphasizes moving away from coloniality and towards more

inclusive climate justice. Knowledge co-production through participatory research is one way to begin to shift the power dynamics of institutional and community climate research. This has wider applications and implications for the shared commons, such as knowledge acquisition and dissemination, and for governance in general.

The Global Knowledge Commons Is Not Open Access

Knowledge commons, and its implications for governance, are increasingly discussed in environmental and climate justice spaces (Henscher et al., 2020; Janssen, 2022). The knowledge we have and share through the commons, who it is available to, and who has the privilege of understanding the changes happening to the ecosystems and environments we live in, are not equally shared and validated. There is a system of power embedded within institutionalized knowledge acquisition and dissemination pathways, particularly in the academy. The vast majority of published research on climate justice comes from the “Global North.” As a result, Western-colonial assumptions, validation, and publication systems are imposed upon the “Global South,” who are disproportionately impacted by the climate crisis. The mechanisms at work in systems of knowledge production and publication are colonial, resulting in research from colonial places and perspectives being seen and validated as more valuable. When it comes to discussions of climate justice, Western or Global North and Global South are used in much of the literature to distinguish between those who benefit from capitalist exploitation and those who suffer from it, from a global perspective.

As researchers, we need to be critical of from where, from whom, and for whom, and how knowledge is being produced and shared (Sultana, 2019). Vital, relevant knowledge does not necessarily follow the regimented hierarchies of Western academic institutions. Rather, knowledge is shared in a wide variety of ways that have not been legitimized by the colonial institutions we privilege and prioritize in knowledge production.

Capitalist globalization has created circumstances where much of the published research on climate justice is in English. Languages themselves are commons that help us share knowledge, and being able to communicate in various ways allows us to further dismantle the coloniality involved in communicating about climate justice research. Being more inclusive to different styles of communication also necessitates a conversation about various

worldviews and ethical systems. Global divisions include not only economic beneficiaries, the exploited, and those most afflicted by climate chaos, but also geographical and geopolitical divides. Those who inhabit extraction and fossil-fuel sacrifice zones are the most marginalized, exploited, and poor in all geographic locations.

Climate Justice Depends Upon Open Access to Knowledge

For environmental and climate justice, wide-reaching transformations to social and economic systems are required to avoid irreparable damage to the Earth's climate systems (Krause, 2018; IPCC, 2022). Within these discussions, besides attention to government policies and hand-wringing about why they have been so ineffectual thus far, much of the focus is on two ways of addressing deep system changes through i) degrowth, and ii) just transitions. These discussions often do not address the underlying capitalist and colonial roots that built society as we know it in the Anthropocene—the current geological age where humans are the dominant influence on climate and the environment. The deep-seated inequities of current governance systems will not necessarily be addressed through an energy transition that substitutes renewable forms of energy for fossil fuels (Temper et al., 2020). Another approach, iii) just transformation, recognizes the need for more than marginal political shifts and understands that transformations often occur in response to crises and disasters.

Just transformations involve changes in both political structures and social relations. Transformative change addresses “the growing economic and political power of elites, and patterns of stratification related to class, gender, ethnicity, religion or location that can lock people into disadvantage” (Krause, 2018, p. 511). Sustainability transformation goals are “grounded in universal and rights-based policy approaches; revers[ing] normative hierarchies within integrated policy frameworks; re-embed[ing] economic policies and activities in social and environmental norms; and foster[ing] truly participatory decision-making approaches” (Krause, 2018, p. 511). This requires inclusive empowerment for active and ongoing participation by all members of society in order to “consider how deeper social, economic and political structures create and reinforce vulnerability and hence are part of the problem” (Newell et al., 2021, p. 7). In this sense, climate justice activism

focuses largely on “the global dynamics of rights and responsibilities, mostly taking nation-states, and to a lesser extent, corporations, as the focal point” (Newell et al., 2021, p. 6), and for a better understanding of “how inequalities in global decision-making interact with and mirror local power dynamics of exclusion” (pp. 6–7). This call acknowledges the wide reach and impact that global climate decisions have on the planet, via the creation and adoption of new technologies. Democratization of governance, and therefore of access to knowledge, is a crucial part of such just transformations.

Decolonizing Knowledge Access Requires Political Activism

A few examples serve to demonstrate how transformational change in governance systems and institutions, when it happens at all, is usually very slow, and only takes place in response to political pressure from constituencies.

The Environmental Justice Movement (EJM) emerged in the USA in the 1960s in response to toxic waste sites and hazardous facilities’ being sited in or near low-income residential areas where racialized people lived, and suffered terrible environmental and health impacts. It is no coincidence that the movement emerged “in the wake of the civil rights movement and was shaped by African-American (predominantly women’s) resistance in the South” (Opperman, 2019, pp. 59–60). The EJM movement is inextricably linked to environmental racism, “the differential distribution of environmental burdens according to race, perpetuated by the exclusion of people of color from environmental decision-making” (Opperman, 2019, p. 58). The framing of “environmental justice” within this movement, although recognized as an intersectional way of approaching climate activism, also left the emphasis and importance of racial and economic justice out of focus, thus eliding the central role of white supremacy and capitalism in determining environmental injustice across the globe (Opperman, 2019, pp. 60–61). As the EJM gained momentum in the 1980s and 1990s (Mohai, 2018), it remained mostly a Western endeavour (Reed & George, 2011), defined through a lens of Western (i.e., colonial) thinking (Álvarez & Coolsaet, 2020, p. 50) in its history and practice.

Environmental justice and climate justice are terms that have been used interchangeably in some instances. Yet, there is a particular history that informs the use of these ideas. Environmental justice emphasizes the

intersection of social inequalities with environmental harm. Using ecological justice, which centres the relationship of humans to the nonhuman world (Opperman, 2019, p. 62), the EJM politicized the meaning of “environment” while simultaneously framing an opposition of social justice versus “an ecological valorization of the more-than-human” (Opperman, 2019, p. 62). As a result, the EJM has been critiqued for discounting the socio-cultural inequalities that are tied to race, space, and place in favour of boosting human intervention in ecological crises, making the movement appear to be motivated by white colonial-settler saviourism, while omitting any blame on capitalistic structures (Gonzalez, 2020; Pulido, 2016; Sperber, 2003; Dorsey, 2001, p. 69). In more recent years, the term “climate justice” has gained popularity in an effort to become a more inclusive and rights-based way of expressing the need for more than environmental justice—including global climate and commons justice as well. Many similar critiques remain relevant to those of the EJM in that climate justice often uses universalist philosophy and is deeply rooted in Western-colonial or “Northern” ideology (Newell et al., 2021, p. 2). The distinction between environmental and climate justice, although sometimes arbitrary, allows us to begin to see how the framing of environmental and climate movements serves to perpetuate Western colonial ideology (Kojola & Pellow, 2020; Cock & Fig, 2012; Arthur, 2017; Whyte, 2020) within climate research and what is validated in these spaces.

Many of the current climate solutions being put forward by governments serve to perpetuate and entrench pre-existing structural inequalities that drive climate crises (Deranger et al., 2022, p. 54). These power dynamics continue to privilege certain knowledges and discount others. Decolonial movements work to maintain “sustainable ecological practices, communal wealth-sharing, and institutions that preserve long-term quality of life” (Perkins, 2019, p. 187). This is in stark contrast to capitalist-coloniality (Álvarez & Coolsaet, 2020, p. 52), which is contingent upon industrial resource extraction of the land and human exploitation while simultaneously utilizing human exceptionalism and hetero-patriarchy to dismiss the ties between women and nature (Perkins, 2019, p. 188). This produces escalating inequities between those who are the cause of the climate crisis, primarily those benefiting from resource extraction industries, and those most negatively impacted by it. In a conference panel discussion on whether Canadian federal climate policy includes Indigenous Peoples and their rights that resulted in a report by Indigenous Climate Action (ICA, 2021), climate justice activist

Ariel Deranger noted, “Indigenous Peoples and our rights, knowledge, and climate leadership were mentioned again and again in both (the 2016 and 2020 federal climate) plans, and yet we were structurally excluded from the decision-making tables where these plans were made” (Deranger et al., 2022, p. 53). This in turn perpetuates the reproduction of bureaucratic structural inequalities that are driving the climate crisis.

Global participatory research networks and information sharing to build the global knowledge commons—open-access, freely available research results on current and future conditions, technologies, and options—are a way to work toward just transformations that conserve and protect the ecological commons on which all life depends.²

Climate Justice Aspects of the Global Knowledge Commons Are Emergent

Along with (and often in conjunction with) participatory community-based research, there are many processes underway that further the development of, and open access to, global knowledge commons. These include:

- Recognizing non-Western and Indigenous knowledges by disrupting and unsettling time-space distinctions as part of the commons: Examination of “commons” shifts focus away from the human connection with, reliance on, and domination of nature. Commons discourse tends to focus on collective action, voluntary associations, and collaborations by questioning governance systems and building participatory processes with interest in shared values and ethical responsibility (Perkins, 2019, p. 185). Climate crises need to be understood by listening to those who are experiencing them first hand. In many cases that means those who do not have a voice in the global knowledge commons. Indigenous peoples across the globe are knowledgeable about how to adapt and survive the changes that are happening, but the scientific methods of research are limiting the ways in which governments and colonial societies address these issues. Indigeneity is foundational for knowledge co-production. The only way to decolonize is to disrupt and undo the colonial frameworks we are accustomed to; dismantling the structures of capitalistic hyper-individualism, patriarchy, heteronormativity,

extractivism, and systems of white supremacy among other oppressions (Deranger et al., 2022, p. 67).

- Focusing on cognitive justice to explore and trace interactions among inequities: Cognitive justice is a concept that examines whose knowledge is seen as valid, who creates and disseminates knowledge, and who participates in authorizing and holding accountability for knowledge production (Newell et al., 2021, p. 9). In this sense, those in the global North are usually validated as more “objective” and universalistic assumptions about individualism within nation-states are seen as correct and just (Newell et al., 2021, pp. 6–7). Taking a different approach and adopting pluralistic, bottom-up, decolonial, and community-oriented methods of knowledge creation and dissemination, implies difficulties in gaining validation from the established systems of power. One aim of coloniality, in the context of Environmental Justice movements, is to anchor oppression in psychological structures in order to disempower through internalized oppression and affix marginalized people and groups to certain immovable spaces within movements (Álvarez & Coolsaet, 2020, pp. 62–63). The ways in which academic research has been historically and often continues to be done, is a microcosm with the same underpinnings. As researchers we must continuously challenge ourselves both through understanding of cognitive justice and the broader systemic oppressions, in order to address these concepts in our work.
- Unsettling human exceptionalism: There is an inherent focus on human experiences and needs in climate justice research. While human development and capitalist globalization cause the climate crisis, an emphasis on human survival above all other species and commodification of nature for human gain is called human exceptionalism (Newell et al., 2021, p. 7). Indigenous environmentalism, a key aspect of decolonization, rejects “colonialism, extractivism and dispossession in the current distribution and accumulation of wealth between nations, classes and social groups” (Newell et al., 2021, p. 7) in favour of a pluralistic way of understanding and pursuing justice by ascribing value to all

living things. Decolonization disperses human exceptionalism to focus on transforming the systems and practices into more complex and nuanced ways of approaching social, political and climate justice as intersectional movements.

- Prioritizing process-oriented participatory knowledge creation, co-production, and sharing: Knowledge co-production is linked to citizen or community science, interactive and creative research, co-design, and participatory research, among other methods (Newell et al., 2021, p. 9; Norström et al., 2020, p. 183). Participatory research for climate justice involves the participation of those who are knowledgeable in varying ways, and also seeks out perspectives that are hidden and/or formerly undervalued. This approach can be linked to decolonial ways of knowledge co-production, allowing for various perspectives to be seen as valid in the face of power structures. Decolonization demands detachment from the false concept of scientific neutrality; participatory research demands active participation of knowledge-holders from communities who are feeling the climate crisis first hand, who can help to reimagine meanings and lead climate justice movements (Álvarez & Coolsaet, 2020, p. 63; Deranger et al., 2022, p. 70). There are many ways of doing and knowing, so when we approach research with the goal of pluralistic knowledge co-production in mind, this necessarily means bringing together academics from various disciplines with many others, such as local communities, Indigenous communities, government, civil society, beneficiaries of the status quo, etc. However, such processes require a range of skills and types of knowledge and expertise to address the power dynamics, activate change and generate knowledge (Norström et al., 2020, p. 186) if they are not to lead to less engagement and simply reproduce knowledge hierarchies where certain kinds of knowledge and expertise are seen as more legitimate than others (Norström et al., 2020, p. 186). Without addressing power imbalances directly, the quality of engagement and process outcomes suffers (Álvarez & Coolsaet, 2020, pp. 59–60; Norström et al., 2020, p. 186).

- Protecting commons spaces: The physical spaces in which people live and move around are of importance, because (and to remind us that) we are not disconnected from the environment where we live. Commons governance relies on self-organized social systems and networks that are outside of political governance systems.
- Sharing knowledge with and for all: The traditional ways of scientific knowledge production and dissemination are siloed, do not value Indigenous knowledge (Deranger et al., 2022, p. 60), and instead focus on extracting data for supplemental use in Western science (Arsenault, et al., 2019, p. 122). There are many ways in which knowledge production can become more inclusive and decolonial: community-based approaches to research, which includes external accountability strategies; providing accessible capacity-building resources for communities to develop their own plans, assessments, and standards when conducting climate research; or participating in, documenting, and supporting the growing Indigenous guardian movement that trains Indigenous scientists as community monitors (Arsenault, et al., 2019, p. 128). Examples of how Indigenous and traditional communities are maintaining commons governance and knowledge commons include the Quilombos in Brazil where former slaves created small settlements of liberation, maintaining harmonious relationships with the land, in the face of systemic oppression; the Indigenous water protectors, land defenders, and pipeline fighters in Canada who are protecting their inherent rights and sovereignty of the land against government and private-sector oppression; and community gardens, often found in urban areas, that bolster community food sovereignty for neighbourhoods in food deserts. Other ways to facilitate knowledge sharing through commons include community radio and social media; open-access information sharing and making innovative technologies available; co-operative institutions that utilize and facilitate networks for and by community members; equal access to education and government processes to allow for social and political participation; integrating accessibility and different ways of learning, such as storytelling and language translation into design and dissemination; and many more ways of sharing knowledge in the commons. One key element

of knowledge sharing is relationship building, which include trust, consent, accountability, and reciprocity (Whyte, 2020, p. 1). Without this, access to resources will not be utilized. Decolonization of these concepts is the responsibility of powerholders, in many cases white colonial-settlers, like myself, who need to take responsibility and bolster relational reciprocity with Indigenous and marginalized communities.

Climate justice links the historical ways in which colonialism and coloniality harm nature and at the same time harm the most marginalized in society. Bridging the gap between academic pursuit of knowledge and communities who know the most about their own environments is crucial for climate justice transformations. Participatory research is one way to facilitate this shift. By prioritizing decolonial methods of knowledge creation and dissemination, researchers can move toward a more just way of participating in both academic pursuits and inclusive holistic community supports that reverse the dangerous impacts of the climate crisis.

Another important form of power relations is the position of researchers themselves. We have a responsibility to be sensitive to the “importance of local autonomies and self-recognition in overcoming injustices” (Álvarez & Coolsaet, 2020, p. 60). Being careful, humble, transparent, and taking time to discuss and share when approaching participatory research is of utmost importance. If we approach this by shifting and diffusing power to research participants, while making efforts to learn how and actively try to decolonize both ourselves and the systems of which we are a part, through steps that prioritize participation, we can start to build robust shared decolonial knowledge commons.

When we approach climate justice research through an ethos of decolonial and transformative justice, we begin to unravel the systems of power established by coloniality and global capitalism that are responsible for climate catastrophe.

NOTES

- 1 I want to acknowledge my subject position as a researcher. I am always learning and as such I strive to be everchanging, growing, and improving. As a white settler living on Turtle Island [1], I want to acknowledge the many Indigenous Peoples whose land was stolen and who continue to be oppressed by the colonialist state in which I reside. I carry a specific privilege that has afforded me my education, among other privileges, and that contributes to how I move around in the world more freely than others. My approach to this work comes from a deep learning and deeper unlearning that I have and will continue to experience throughout my life-course. This learning has been informed and heavily influenced by many BIPOC [2] women and Queer [3] folks to whom I owe a great deal of gratitude. The idea that there is one ultimately clear way to say, write, or express a point is in and of itself a colonial idea. It is therefore necessary to carefully unpack the “what, why, for whom, by whom, and how” of any decolonial endeavour (Sultana, 2019, p. 40).

[1] Turtle Island refers to the continent of North America for some Indigenous Peoples. <https://www.thecanadianencyclopedia.ca/en/article/turtle-island>
[2] BIPOC is an acronym for Black, Indigenous, People of Colour.
[3] Queer has been adopted as an umbrella term by some people who identify within the 2SLGBTQIA+ community and refers to themselves or the community as a whole.
- 2 Alarmingly, there are indications that the concept of “knowledge commons” is already being subverted and warped into a form of advertising for climate entrepreneurs (Luiken & Shah, 2022; Sperfeld et al., 2021).

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