

# On the possibility of decolonising planetary health: exploring new geographies for collaboration

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Decolonial planetary health aspires to centre the diversity and importance of Indigenous thought and stewardship. In this Viewpoint, we explore research in planetary health across holistic worldviews and western scientific approaches. We base our examination of decolonising interventions in planetary health by exploring how global trajectories play out in British Columbia, Canada. A central part of this analysis is highlighting intercultural thinking to promote an anti-colonial, anti-racist, and reciprocal approach to climate change and global health inequities across geographical space and within planetary health discourse. Our perspective encompasses an asset-based examination, which focuses on the Indigenous scholarship in planetary health that is already underway and considers how rigorous engagement with epistemic and geographical diversity can strengthen and advance planetary health. This is a place-based response to planetary health, as British Columbia experiences climate catastrophes that are impacting whole communities, cutting through major transportation systems, disrupting supply chains, and creating a further burden on public health agencies and authorities that are spread thin by COVID-19 response. We argue for a progressive acknowledgment of decolonising work that is pushing research and practice in planetary health forward.

We cannot solve complex problems from the same worldview that created them in the first place, as it will continue to perpetuate a disconnect between us and the planet as 'relatives.'

Nicole Redvers (2021)<sup>1</sup>

## Introduction

British Columbia, Canada, like many parts of the world, is faced with the challenge of bringing together cultures and ways of knowing to address converging health and environmental concerns that have uneven effects across populations. Bringing different worldviews together in conversation and practice requires transformative thinking.<sup>2,3</sup> In British Columbia, this challenge is set within the context of the struggle to implement the Declaration on the Rights of Indigenous Peoples Act, as well as ongoing systemic racism and inequity in the health care system.<sup>4</sup>

We propose an asset-based approach to the divide between worldviews that underlie planetary health and advocate change that encourages place-based collaboration across not only disciplines, stakeholders, and sectors but also among peoples and across diverse geographies. Planetary health offers a global scale of framing, although it is a field that is still learning to use both the strengths of ecological thought and the crucial political narrative required to connect ecological and health imperatives. Central to planetary health, as an emerging field of analysis, is the movement to decolonise the thinking within planetary health, ranging from work in Aotearoa New Zealand<sup>5</sup> to British Columbia and elsewhere.<sup>6-9</sup> The possibility of a decolonial planetary health builds on an emerging field that is deeply engaged with the link between environment and health.

In this Viewpoint, we question how planetary health, as a discourse and emerging field, can be harnessed to bolster

agendas that are already underway—overtly pushing back on dominant forms of colonial normativity, leaning into the kinds of framing from scholars such as Nicole Redvers calling for co-benefits,<sup>10</sup> and bringing attention to Indigenous thinking on the determinants of planetary health.<sup>1,11</sup> Although decolonial efforts are necessarily place based, there is a long history of international Indigenous thinking and collaboration on planetary health, as evidenced by the Declaration on the Rights of Indigenous Peoples that was passed by the United Nations general assembly in 2007. There have been specific calls to decolonise planetary health from Amazonia and Latin America, which we discuss further later on. Exploring decolonial geographies across continents, João Biehl argues for the urgency of an Amazonian ethics of care within the realm of a decolonial planetary health.<sup>8</sup>

In Canada, and during major climate change events unfolding across many Indigenous territories, experiences are informed by a colonial present where settler governments struggle to implement the Declaration on the Rights of Indigenous Peoples through reconciliation and recognition efforts,<sup>12</sup> including in academia.<sup>13</sup> Our intent here is to build on work informed by anti-colonial scholarship, suggesting a move towards health geographies of global decolonial collaboration. With this introductory frame in mind, we explore what it might look like to move the emerging field of planetary health beyond the divide between Indigenous worldviews and western scientific approaches, to address increasing climate, environmental, and related challenges that are immersed in the issues of settler colonialism and health equity. We end with a consideration of the future and of what is moving research in planetary health forward.

Our contribution centres intercultural thinking to promote a collaborative, anti-colonial, and anti-racist approach to global health inequities in ways that can effect diverse place-based contexts. British Columbia, for

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For more on the First Nations communities see the interactive map at <https://maps.fpcc.ca/>

example, is home to a tremendously diverse group of First Nations communities, cultures, and languages. Within the context of climate change, biodiversity loss, and mainstream environmentalism, Indigenous understandings of nature have been used by environmentalists to promote their own agendas.<sup>14,15</sup> Considering the tendency of mainstream environmentalism to erase the ongoing effects of colonialism and Indigenous Knowledges, we draw on our experiences as Indigenous and non-Indigenous scholars to advocate planetary health to further promote Indigenous self-determination and Indigenous understandings of health, wellness, and the environment. Planetary health thinkers must work with Indigenous Peoples and engage our diverse worldviews in ways that are non-exploitive, non-appropriative, meaningful, respectful, and reciprocal.

### Moving towards deeper understandings in planetary health

Although our goal is not to present an exhaustive review of literature here, one key component of planetary health is the need to see human health as dependent on the health of the planet. Another component is that humans have caused catastrophic climate change events and that planetary health as a science acknowledges the limits within which the earth system operates. As a field, or sub-discipline, planetary health has been referred to as a new science.<sup>16</sup> Additionally, current challenges in planetary health and decolonisation are necessarily related to the COVID-19 pandemic. Climate change and unsustainable practices produce inequitable health outcomes for both humans and animals and create the conditions of stress and conflict from which zoonotic pandemics, like COVID-19, tend to emerge.<sup>17-19</sup> Many argue that the COVID-19 pandemic provided a chance to pause and analyse recovery efforts, with the goal of strengthening sustainability and equity initiatives across the globe.<sup>20</sup>

Our intent is also not to conflate planetary health with climate change and confuse the matter with COVID-19. Rather, we seek to reassert the need for planetary health to respond to inter-related health equity challenges by intentionally linking health, social, ecological, and earth system thinking.<sup>21-23</sup> Informed by the potential to further explore the link between planetary health and health equity, our perspective centres the fact that Indigenous Peoples have been, for millennia, living according to and teaching about many of the principles that are central to planetary health.<sup>24</sup>

In the Canadian context, where our coauthorial group is writing from, transformative thinking has been visualised and practised through a two-eyed seeing approach, whereby one eye holds an Indigenous lens and the other comes from western thought and science.<sup>25,26</sup> Researchers in Indigenous health are using a two-eyed approach to engage in Indigenous research, including in planetary health. There is also momentum to approach

the divide between worldviews with what Willie Ermine refers to as an ethical space of engagement<sup>27</sup> by, through, and across decolonial geographies.<sup>28</sup>

### On decolonisation

The terms decolonial and decolonisation are used in different ways, and have produced substantial disciplinary critiques, including in human geography.<sup>29</sup> Tuck and Yang define decolonisation as “the restoration of Indigenous land and life” and the upheaval of existing colonial systems.<sup>30</sup> Furthermore, Tuck and Yang criticise the use of decolonisation as a metaphor; “When metaphor invades decolonization, it kills the very possibility of decolonization; it recentres whiteness, it resettles theory, it extends innocence to the settler, it entertains a settler future.”<sup>30</sup> Geographers Michelle Daigle and Margaret Ramirez write that decolonial geographies are grounded by the particularities of each place and informed by radical traditions of resistance and liberation, as enacted by a broad range of racialised communities. Accordingly, decolonisation within planetary health can centre Indigenous thinkers and social movements. For example, Land Back<sup>31</sup> is an Indigenous-led movement grounded by Indigenous stewardship and sovereignty that is demanding the literal return of lands and waters to Indigenous Peoples. A key question motivating this contribution is whether planetary health can build on contemporary foundations of decolonisation, rooted in embodied understandings of land, environment, and sovereignty, and avoid reproducing the appropriative nature of colonial environmental politics, movements, and organisations.

The harms of colonialism are clearly manifest in the climate crisis, and Redvers and colleagues<sup>4</sup> argue that these harms can also be observed at the molecular level. Such harms have affected the health and vitality of Indigenous communities, including the ability to access nourishing traditional foods, practice land-based ceremony, and coexist on and with the land. Decolonial planetary health, then, must uphold the responsibility of undoing the colonial harms that brought society to this juncture and climate emergency in the first place and heed Indigenous wisdom that has maintained sustainable cultures and ecosystems for thousands of years. Redvers and colleagues<sup>6,7</sup> discuss the deep-rooted Indigenous knowledge systems and practices that honour the interconnectedness of ecosystem and human health, an understanding that precedes western understandings of planetary health. Furthermore, human health as a part of the environment is experience based and has been passed down throughout generations of Indigenous practice, as opposed to being simply theoretical. The notion of human health as experiential is part of creating an understanding of human health as necessarily environmental and ecological. Horwitz and Parkes describe expanding calls for “integrative approaches to health and well-being that engage with ecological

context”, associated with an array of terminology spanning “biodiversity and health, ecohealth, one health, healthy parks, healthy people, ecological determinants of health, and planetary health”.<sup>3</sup> The crucial interplay between ecological and equity imperatives is fuelling calls for ecosocial approaches to health<sup>32</sup> and reiterating the wisdom of Indigenous insights into the interconnectedness of planetary health.

By centring Indigenous ways of knowing, and the expertise of Indigenous community members and knowledge holders, our call is to move forward with a planetary health that works towards addressing colonialism which, in our case, requires focusing on the Canadian policy and experiential space. We call for the amplification of Indigenous knowledges and governance systems that inform our understanding of the interconnectedness between health, environment, and Indigenous relationships and responsibilities to place. The interconnectedness of health and environment has been well covered by Baquero, Fernández, and Aguilar, who, in the Latin American context, argue that this means working outside of the hegemonic and capitalist foundations of planetary health. They describe the “colonial approach that disregards alternative knowledge that over millennia have accumulated experiences of sustainable and holistic lifestyles”.<sup>9</sup> Within Canada, scholars in Indigenous studies, such as Leanne Simpson<sup>33</sup> and Glen Coulthard,<sup>12</sup> have long argued for examinations of colonialism in tandem with capitalism to understand decolonisation, building on a long-standing trajectory of Indigenous activism and movements inside and outside academia. This examination of colonialism and capitalism together is relevant to a decolonial approach to planetary health.

Other relevant work includes recognising that the goals and ethics of planetary health are also increasingly grounded in notions of intergenerational equity. According to Vural Özdemir, “Planetary health is an attitude toward life and a philosophy for living. It emphasizes people, not diseases, and equity, not the creation of unjust societies.”<sup>34</sup> The foundational goal of striving towards an asset-based understanding of health equity necessarily requires an ethical space of engagement; it is scaled and reaches from the local to the global. To many thinkers in the domain of planetary health, there is a consensus that climate change is “the biggest global health threat of the 21st century.”<sup>35</sup> We concur that it will take grounded and experiential work, and innovative thinking across disciplinary divides, to work towards transformation, providing a great opportunity for global health in the 21st century, as articulated in *The Lancet Commission on Climate Change and Health*. Our conviction is that to do this in a way that is reciprocal and meaningful requires a decolonial approach.

There is an abundance of evidence to support the need for collaborative thinking to lead to transformation. For example, it is well understood that the health effects of climate change can include heatstroke and respiratory

and cardiovascular diseases.<sup>36–38</sup> Importantly, these exposures do not affect everyone equally and key populations such as older people and children are at higher risks than adult populations of the health effects from extreme heat events and low air quality, such as those experienced during the 2021 major heat events in British Columbia, Canada. People with pre-existing conditions have increased chances of complications from air pollution exposure.<sup>39</sup> Direct health effects of climate change, including air pollution, disproportionately affect Indigenous populations.<sup>40</sup>

Indigenous populations in British Columbia are heavily impacted by the cumulative effects of the historical and contemporary processes of colonisation and the subsequent climate crisis. Communities are faced with cumulative effects from defoliating insects (eg, the mountain pine beetle), resource extraction and industrial development (eg, oil and gas), mining, the construction of dense roadways, and modern forestry practices, such as decades of fire suppression. These cumulative effects have resulted in an accumulation of forest ground fuel and have increased the risk and severity of wildfires, causing devastating impacts on Indigenous territories.<sup>41–44</sup> Climate change affects the mental health and wellness of Indigenous communities, including cultural, spiritual, and land-based practices and access to resources.<sup>45</sup>

It is well documented that COVID-19 and climate change differentially affect people across axes of race, ability, gender, and socioeconomic status. These disproportionate effects are most often shared by communities exposed to pollutants and hazards from industrial and waste facilities that are located and built near them. Such communities bear a disproportionate environmental burden, described as environmental racism by Reverend Benjamin Chavis,<sup>46,47</sup> also understood through the lens of sacrifice zones.<sup>48</sup> When viewing planetary health as a way to understand environmental health justice, combined with the effects of COVID-19 and the ongoing climate emergency, the call for decolonial transformation and collaboration is apparent.

### Effects, transformation, and collaboration

We ask how decolonisation, including work in cross-cultural contexts, can lend itself to producing forward-thinking knowledge with transformative potential. Collaborations in planetary and public health that are focused on the public health implications of climate justice offer a direction for moving research in planetary health forward. Key to this direction is the need to improve health equity and respond to past injustices in rural, remote, and Indigenous communities.<sup>49,50</sup>

Global environmental and public health emergencies have negative short-term consequences and often long-term mental health effects. Moreover, the COVID-19 pandemic has shown the impact of insufficient social support on mental health. For example, stay-at-home

regulations during the pandemic produced many unintended consequences for mental health, particularly in young people, including disruptions to education, reduced opportunities to play and have social interactions, and loss of (or pause in) access to health, and mental health, services.<sup>51–54</sup> These regulations continue to affect various populations, further highlighting the importance of centring equity and justice in data collection, interpretation, and resource allocation. Learning from these mental health and health equity effects demands new kinds of collaborations, with the potential to enhance planetary health research, education, and practice.

Collaborative thinking is informed by public health practices that create opportunities to improve both environmental and health equity in ways that are equally relevant to climate justice and related challenges of the pandemic era. These practices bridge health promotion and health protection in ways that attend to climate justice and enable youth engagement, intergenerational knowledge exchange, and collaboration.<sup>55</sup> Our proposal foregrounds working together through ecosocial pathways, especially those that centre Indigenous knowledges where an ecological orientation can also promote intergenerational gender-based equity and anti-racism.<sup>56–58</sup>

To promote and uphold Indigenous knowledges and intergenerational gender-based equity and anti-racism, systemic and structural understandings of colonialism need to be in the foreground to address environmental and human health through a decolonial lens. Coupling colonialism with capitalism could avoid what Baquero and colleagues refer to as reinforcing the “myth of modernity”.<sup>9</sup> Planetary health needs to intentionally counter the tendency to reinforce colonial, capitalist orders and falling back on geographical imaginaries that are reliant on dominant core countries and a peripheral global south. These hierarchical notions of a third world in Latin America are well critiqued<sup>59</sup> and further supported by Biehl’s work on decolonial planetary health.

In colonial Canada, and particularly on the west coast, Indigenous political critiques provide decolonial entry points that build on efforts to better understand relationships and interconnectivity between the health of humans, non-humans, the environment, and planet. Considerations of local and global environmental health inequities and geographies that unsettle decolonisation, and engage respectfully with interdisciplinary fields of thought, are foundational for planetary health. Within such anti-colonial spaces, there is immense opportunity for an approach to planetary health that is rooted in reciprocity and respect; centres Indigenous sovereignty, rights, and title; and recognises the inherent interconnectedness of lands, peoples, and environments. For planetary health to fully realise its decolonial potential, it must be understood not as a metaphor, but as an embodied and reciprocal component of health sovereignty through intentional practice and research.

#### Contributors

All authors contributed fully to this manuscript. DH was the lead writer. AMK and MKG collaborated on initial formative notes and thinking. CGA, ML, LP, MWP, TKT, AMK and MKG assisted with the conceptualisation and writing with the team. CGA was instrumental in the final edits and the critical thought that informed this Viewpoint.

#### Declaration of interests

We declare no competing interests.

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