Article

Society and Space

EPD: Society and Space
2023, Vol. 41(5) 888–909

DOI: 10.1177/02637758231198293
journals.sagepub.com/home/epd
Sage

Repair and the 2014 Mount Polley Mine disaster: Antirelationality, constraint, and legacies of socio-ecological disruption in settler colonial British Columbia

Neil Nunn
University of British Columbia, Canada

Abstract
In this article I situate the 2014 Mount Polley Mine disaster within centuries-long relations of colonial-modernity in the region currently known as British Columbia, Canada. Guided by the work of Gilmore and Moten, I argue that repairing colonial systems of mass disruption and death requires attending to the logics that enable and normalize these systems of violence. To support this argument, I turn to British Columbia's early settler colonial history—a violent and destructive history forged through mining—and outline large-scale socio-ecological violence that occurred throughout this period. By turning to this history, I show how these disruptions are connected to the Mount Polley Mine disaster through ongoing and pervasive logics that enable, and often even celebrate, these processes of violence and disruption.

Keywords
The 2014 Mount Polley Mine disaster, antirelationality, environmental justice, reparative planning, BC gold rush, settler colonialism, colonial modernity, 1862 smallpox epidemic

> Relation cannot be defined, only imagined. (Edouard Glissant, *Poetics of Relation*, 1997: 170–171)
> What if we could detach repair not only from restoration but also from the very idea of the original—not so that repair comes first but that it comes before. Then, making and repair are inseparable, devoted to one another, suspended between and beside themselves. (Fred Moten, *Black and Blur*, 2017: 168)

Corresponding author:
Neil Nunn, Allard School of Law, University of British Columbia, Allard Hall, 1822 E Mall, Vancouver, BC V6T 1Z1, Canada.
Email: neilnunn@mail.ubc.ca

Introduction: When the dam fails on Secwépemculewc

On 4 August 2014, in Northern Secwépemc Territory, in what is currently known as the central interior of British Columbia (BC), a failing retainment wall of a brimming tailings storage facility released ~25,000,000 m^3 of mine waste into adjacent ecosystems. A torrent of industrial slurry surged out of the Mount Polley Mine's lake-sized tailings facility. Mine waste flowed into the lower-lying Quesnel Lake for weeks after the disaster. Prior to the disaster, Quesnel Lake was considered a pristine salmon producing ecosystem at the heart of a unique inland biodiverse temperate rainforest ecosystem (Petticrew et al., 2015; Valhalla Wilderness Society, 2018).

The day after the disaster, the Consortium of Regional Shuswap (Secwépemc) Chiefs held a press conference to speak out against this "disastrous breach" at the heart of their territory (SNTC, 2014: 00:15):

> First Nations People, we live off our land. We have cultural ties to our territory, we've never ceded, surrendered, or given up any of our interest in our territory . . . we're here to stay and we are not going to let any company disrupt our natural ecosystems. (SNTC, 2014: 06:40)

By highlighting the Secwépemc Nation's cultural ties to their territory, the statement from the Chiefs connects what is often viewed as simply an ecological disaster to a broader political and historical context. This is a context in which extractive industries have, and continue to, benefit from colonial logics that disavow and permit the devastation of socio-ecological life. The statement from the Secwépemc Chiefs invites those in BC (and beyond) to think about the broader implications of the spill and its connections to centuries-long patterns of socio-ecological disruption. "This is not just a First Nations problem" the Chiefs added, "it is a problem for all residents of British Columbia."

When the earthen dam that contained the vast amounts of waste from operations at the Mount Polley Mine collapsed on Secwépemc territory, this violence was enfolded with centuries of colonial disruption on the same lands (Nunn, 2022). For the broader public, the disaster evoked general anger at the scale of the damage and resentment towards politicians and industry representatives who claimed that the waste was inert, likening the disaster to an avalanche, water erosion, or urban development (Anglin, 2019; Hoekstra, 2014). Two years after the disaster, Environment and Climate Change Canada (2016) published a report entitled *Releases of Harmful Substances to the Environment* that confirmed what many felt to be true. The Mount Polley Mine disaster accounted for the release of 2.14 tonnes of mercury and 134 tonnes of lead into adjacent ecosystems, 92% of the lead and mercury polluted into waterways *in all of Canada* in 2014. While the Mount Polley Mine Corporation asserts that the heavy metals from the disaster are not bio-available, research undertaken independent of the mine has proven that, in fact, these heavy metals remain suspended in the lake (Granger et al., 2022) and are bioavailable and potentially toxic to both epibenthic invertebrate (Pyle et al., 2022) and fish species (Klemish et al., 2019: ii).

Following the disaster, there has been a tendency by the mainstream media, provincial and federal governing bodies, and some scientific experts to attribute the disaster to a fault of engineering, inadequate policy and enforcement, or simply the blatant overloading of the tailings facility (Knight Piésold Consulting, 2011). These perspectives have been limited in scope and scale, offer little consideration to larger historical and environmental contexts. These narrow orientations to the disaster have been easily mobilized by industry and government seeking to occlude the causes and effects of the disaster (Anglin, 2019; Hoekstra, 2014). There has been little effort to consider the Mount Polley Mine disaster in relation to

broader patterns of ecological and social disruption throughout BC's extractivist history (see Beckett and Keeling, 2019 and Beckett, 2020 who make a similar argument in the context of mine-waste remediation).

This lack of attention given to the Mount Polley Mine disaster's place within BC's larger extractivist history is especially apparent when juxtaposed with the ease by which Secwépemc voices connect the disaster to centuries-long relentless attacks on the capacity of Secwépemc People to live unconstrained on their territory (Sellars, 2019; Shandro et al., 2017; SNTC, 2014). A few months after the Mount Polley Mine disaster, Nuskmata (Jacinda Mack, Secwpemc/Nuxalk), the newly appointed Mining Response Coordinator for the Northern Shuswap Tribal Council, delivered a presentation entitled, "When the Dam Fails: Responding to the Mount Polley Mine disaster." At the beginning, Nuskmata introduced the concept of Secwépemculewc, what she described as her "favorite word in the whole world." Secwépemculewc describes *all* the relations and living systems within Secwepemc territory (Asch et al., 2016; Ignace and Ignace, 2017; Mack, 2014: 05:20; see also Ignace, 2008). As Nuskmata (2014: 05:20) further described:

> This is the territory, this is the language, this is all of the relationships, it is the interconnectedness. It is our history, this is our future, it is our past. It is everything that makes us who we are. It's the land. It's the water. It's the air we breathe. It is the place names. All of these things are integrated into one living system in the area that we call Secwépemculewc. It includes all of us. This is our way of life. This is our existence that we are working so hard to protect.

This stark juxtaposition between the beauty and power of and Nuskmata's assertion about "our existence that we are working so hard to protect," speaks to the ideological forces that violently disrupt socio-ecological relations. Mack's centering of Secwépemculewc in the wake of the Mount Polley Mine disaster not only confirms that violence on land is also violence against Secwépmec People (see also Asch et al., 2016; Ignace, 2008; Ignace and Ignace, 2017), but is instructive on how to think about repair in the context of Mount Polley Mine disaster. Repair, in this context, cannot exist without full consideration of Secwépemculewc, as well as the details by which all the relations inherent within Secwépemculewc have been disavowed, disrupted, and eroded.

Given the immense socio-ecological disruption gestured to by both the Consortium of Regional Shuswap Chiefs and Nuskmata, important questions arise about this mass contamination and the future of this region. What does the immediacy and ease by which these Secwépemc Chiefs acknowledge the connection between the Mount Polley Mine disaster and longer histories of industrial colonialism reveal about the ideologies that enable these patterns of violence? How does bringing Secwépemculewc and Secwépmec legal orders into the discussion of the disaster change how the effects of the disaster are viewed and ultimately how to respond to them? How can placing the Mount Polley Mine disaster within a broader historical context of systematic disruption throughout BC's colonial history invite new lines of thinking about repairing moments of disruption like the Mount Polley Mine disaster? Answering these questions requires grappling with normalized Euro and human supremacist ideologies of colonial domination that enable and facilitate moments of disrepair that pattern settler-colonial history. Colonial ideologies destroy broad swaths of life in ways that become understood, through discourses of progress, as learning opportunities, meaningful sacrifice, or even celebrated events.

To think further about repair in the context of centuries long relations of control, I place the 2014 Mount Polley Mine disaster—the largest mine waste disaster of its kind in Canadian history—within broader patterns of settler colonial disruption and disrepair.

From this orientation to the Mount Polley Mine disaster, I argue that efforts to repair patterns of mass destruction must first attend to the logics of colonial modernity that normalize systems of socio-ecological violence and destruction. When dismantling colonial-modern ideologies of domination becomes a priority for achieving repair, this implies an approach to addressing disruption that is proactive and enduring.

In this article, I engage this orientation to repair and seek to better understand patterns of devastation that emerge from ideologies of control that enable, normalize, and celebrate patterns of violence against life. To achieve this goal, I join discussions on environmental justice, reparative planning, and abolition ecologies that stress the importance of underscoring centuries-long relations of domination to confront existing manifestations of violence and disruption (Heynen and Ybarra, 2021; McGregor, 2018; Whyte, 2018; Williams, 2020).

According to Fred Moten (2017: 168), there is a need to think about repair not in terms of restoration, which seek to "fix" historic problems according to subjective, often power-laden, ideas about which design and arrangement of life is "best." Instead, Moten suggests an orientation to repair where life flourishes when ideologies of domination are confronted and abated. In line with Moten's orientation to repair, Ruth Wilson Gilmore's work provides important detail about how relations of domination function, and as such how to meaningfully repair them. With a similar attention to repair that focuses on systems of power, Gilmore's notion of antirelationality outlines the relational functioning of global capitalist ideologies that both produce and rely upon patterns of disruption (2007, 2022; Gilmore, 2002a, 2002b; Melamed, 2015). Together, Moten's and Gilmore's work offers insight into the complex nature of domination and the consequent steps that can be taken for life flourish.

To support my central argument—that repair requires confronting powerful colonial-modern ideologies that allows for, and even celebrate mass disruption of life—this discussion exists in four parts. In the next section, I bring Gilmore's notion of antirelationality in conversation with Indigenous feminist and Black scholarship on colonial-modern control for insight into a patterning of constraint that operates across socio-ecological life. I then provide a historical–geographical account of BC's Gold Rush period and highlight two major sources of disruption that took place at this time. To conclude, I revisit an approach to repair that begins by confronting the reality that myriad ostensibly unrelated manifestations of disruption are structured according to narrow, but pervasive, European and Human supremacist logics of control.

Antirelationality and the mess of colonial modernity

I have spent much of my life in peripheral parts of BC. I grew up in the northern towns of Prince George and Vanderhoof and have spent over two decades working seasonally in BC's silvicultural sector. Legacies of colonization are everywhere in these places: systems of enclosure through "public" and private land tenure arrangements; ongoing toxic and dispossessive effects from extractive logging, mining, hydro-electric, oil and gas industries; and everything else, to borrow from Billy-Ray Belcourt (2022: 36), that is "bound up in colonial policy, in the process of racialization and settlement."

When I first began engaging empirical research on the Mount Polley Mine disaster in 2014, a significant challenge I faced was bringing my personal understanding of the complex, longstanding, and normalized systems of colonialism to help make sense of the MPMD. I struggled to articulate how the disaster was interconnected with disruptions and disturbance, enclosure and confinement, and rapaciousness and violence of the colonial

systems that I had come to recognize as everyday aspects of settler colonial life in the interior of BC. I was unable to get at what I felt laid at the core of this matter: the historic relational interconnectivity of lives, families, communities, ecosystems, and bodies, disrupted, foreclosed, obstructed, and torn apart. This is the systematic and patterned disruption of lives and living within colonial-modernity that I now make sense of with the concept of antirelationality.

Antirelationality is a nascent concept developed through Gilmore's work on racial capitalism, which underscores how capitalist power works to create racial difference, and in doing so, renders life disruptable, exploitable, and subject to death (Gilmore, 2002a, 2002b, 2007). At the core of the concept of antirelationality is an understanding that there are enduring supremacist ideologies that create difference, and it is these cultural constructed notions of difference that enable broad patterns of violence and constraint.

The idea of the patterning of disruption is central aspect to the notion of antirelationality and is evident in Gilmore's well-known definition of racism. Racism, Gilmore asserts, is the "state sanctioned and/or extra-legal production and exploitation of group differentiated vulnerabilities to premature death, *in distinct yet densely interconnected political geographies*" (2002b: 261, my emphasis). While the first part of this quote generally garners the attention, it is the second part of this quote that is important here. For Gilmore, these "distinct yet densely interconnected political geographies," distinguish what might appear to be random, singular, unrelated effects of domination from myriad manifestations of disruption connected by the logics that render broad swaths of life disruptable.

While Gilmore's thinking about antirelationality has generally been oriented to dynamics of racial capitalism, Gilmore's approach is relational, and as such, offers a lens to understand broader patterns of mass socio-ecological disruption that is enabled by socially constructed categories of difference. To think about antirelationality in broader socio-ecological terms, I bring antirelationality in dialogue with Indigenous feminist thinking on colonial-modern conquest and constraint.

A key focus of Indigenous feminism is the interconnection between gendered and ecological violence within larger contexts of colonial ecocide and genocide. This gendered orientation to colonial violence offers an expansive land-based, anti-colonial ethic, that includes building relations of consent with "nonhuman kin," which include, as Daigle describes, "land, water, and animal nations" (Daigle, 2018: 202; see also Anderson, 2020; Daigle, 2016, 2018, 2019; Goeman, 2017; Hunt, 2014; LaDuke, 1999 [2017]; Maracle, 2013; Suliman, 2019; Whetung, 2019).

While Indigenous feminist approaches effectively outline how patterns of disruption operate relationally across human and more-than-human life, Indigenous feminists have also been clear about the limits by which land-based resurgent approaches can be taken up by non-Indigenous allies (Coulthard, 2014; Daigle, 2018, 2019; Lawrence and Anderson, 2005; Ross, 2009; L Simpson, 2017). This is, in part, due to the tendency among benevolent 'allies' to appropriate Indigenous knowledge and strategies in the very efforts to 'help' those impacted by colonialism (see de Leeuw et al., 2013; Gahman, 2016; Gorski, 2008; Haig-Brown and Nock, 2006; Nunn, 2015, Nunn and Whetung, 2020). Such efforts are, in effect, subtle (and sometimes not so subtle) expressions of colonialism. To combat these expressions of colonialism, some Indigenous feminists have suggested non-Indigenous people focus on power structures themselves, rather than seeking to 'help fix' specific struggles. As Tallbear (2019) suggests, rather than turning to Indigenous bodies, territories, and relationships to address colonialism, "White people need to study themselves" and give more attention to the "White Problem."

Antirelationality is precisely about addressing the "White Problem." It does so by examining the complex ways that structures of power function, rather than its effects. Gilmore's commitment to fighting against the "White Problem," rather than its effects, is evident in her ideas on power/difference that forms the core of the concept of antirelationality (Gilmore, 2002a). Power/difference conceptualizes how difference is constructed by ascribing normative values that render broad swaths of life disposable and exploitable. These *power*-laden cultural values produce *difference and work to ideologically* abstract life from the abundance of relations of which all being in the universe exists. This process of power/difference creates normative cultural beliefs that render much, but not all, of existence destroyable, disruptable, and displaceable to feed the insatiable impulses of colonial-modernity. Because these relations of domination rely on this fatal coupling of power/difference, Gilmore describes such processes of difference-making as "technologies of anti-relationality" that subject "forms of humanity" to exploitation, dispossession, and death (Gilmore, 2002a, 2002b; Melamed, 2015: 78).

Power/difference is a meaningful contribution to understanding the White Problem as it breaks down the mechanisms that enable wide-scale disruption and death within (White supremacist) structures of colonial modernity. Black and Indigenous Studies scholars have offered insight into the violence inherent within colonial modernity by turning to the scale of conquest. Black studies scholar T.L. King (2019: 11), for example, describes how ideologies of conquest have produced a history "marked by mass carnage" wherein both land and racialized lives were rendered disruptable and disavowable. In a similar vein, Mack and Na'puti (2019) and Arvin et al. (2013: 17) argue that orientating to the scale of conquest makes legible how the construction of the archetype of Man has been used to justify mass violence on various forms of life seen as different, or not closely aligned with the archetype of Eurowestern Man (e.g., race, gender, disability, animality) (see also T.L. King, 2016, 2019; Lugones, 2007; Nunn, 2017).

Black studies on conquest, Indigenous feminism, as well as anti-colonial discussions on toxic geographies, together, make the point that, within colonial modernity, moments of ecological violence, like the Mount Polley Mine Disaster, are never simply about "The Environment" (see e.g., King, 2016; Liboiron, 2021; Murphy, 2017; Nunn, 2018). Violence against more-than-human relations is always connected to patterns of violence against categories of life constructed as less-than-human.[1]

Antirelationality offers a lens to understand structures of power/difference that impact an array life. To take the concept of antirelationality a step further, I consider the language that might be used to discuss how power functions, as well as its effects. To capture both the functioning of power and its effects, I draw from Audra Simpson's thinking on constraint and use the term antirelational constraint. If antirelationality describes broad patterns of disruption within relations of domination, constraint describes the effects of these patterns. In *Mohawk Interruptus* (2016), Simpson uses the term constraint to describe the effects of broad patterns of imperial and settler colonial control that restrict and delimit bodies, communities, and systems of life (2014, 2016). Placing both power, and its effects, within one concept offers clarity on the relationship between ideology and constraint, and importantly, how fundamental it is to address systems of ideological power when thinking about repairing legacies of violent constraint.

Building upon both Gilmore and Simpson, I define antirelational constraint as the disproportionate and patterned, restriction, repression, and disruption of the life/lives, systems, and relationships that are at once produced and enabled by colonial-modern logics of domination. What is valuable about Simpson's orientation to constraint, and Gilmore's notion on antirelationality, is they both outline relations of domination without direct

preoccupation with the sites of devastation themselves. When one focuses on sites of violence, there is a risk of distilling broad patterns of disruption down to specific stories of violence, trauma, and injury (Hunt, 2016, 2019; Tuck, 2009). Simpson, for example, describes refusing to "tell the internal story of [Mohawk] struggle," and instead, "consent [s] to telling the story of their *constraint* (A Simpson, 2016: 328, my emphasis)."

Furthermore, turning to a broader lens of antirelational constraint to think about repair, rather than specific instances of violence, offers flexibility to think about disruption, relationally, across a diversity of life. Antirelational constraint describes impact to life both great and small and on singular or plural beings, thing/things, systems, or networks. In the context of the Mount Polley Mine disaster, for example, vast quantities of mining byproducts constrain life broadly. The bacterial cycles in lakes (Hatam et al., 2019), forests (Miller and Simard, 2015), and various other fish and animal species adjacent to the site of the disaster are constrained by heavy metal uptake from the spill (Klemish et al., 2019). The People of the Secwépemc Nation have been constrained from engaging freely, with self-determination, on their land and have been marred by immense psycho-emotional and health harms from the disaster (Shandro et al., 2017; see also Nunn, 2022). The lens of antirelational constraint captures all of this disruption. And it does so while considering how this diversity of constraint is co-produced with larger layers of colonial-modern histories that permit, facilitate, and celebrate the uninhibited destruction of vast socio-ecological landscapes.

Finally, due to this relational approach to understanding constraint and its effects, the lens of antirelational constraint helps to capture contexts when there is a reduction of constraint, without assuming that relations of domination have been removed entirely. Take, for example, the end of systems of Jim Crow in the US, or residential schooling in Canada. These significant changes represented the potential for life to, as Melamed (2015: 79) puts it, reconnect with the "terms of relationality" and "nurture" a "greater social wholeness." However, despite the end of these violent systems, the structures of supremacy that produced them endure. In this sense, turning to antirelational constraint offers a lens to think about repair that is less about arranging and making, and more about a becoming, flourishing, and repair that occurs when systems of constraint are confronted. This approach, that as a rule begins by addressing ideologically driven relations of domination, offers an alternative to post-colonial, post capitalist, and decolonial debates from those in privileged positions about which post-domination state should be adhered to (see Ahluwalia, 2012; Gilmartin and Berg, 2007; Manuel, 2015 who critique this trend; Tuck and Yang, 2012). While dreams, and visions of futures liberated from constraint may be important acts for those in privileged positions, more important are attempts to directly fight tricky and totalizing modes of colonial-modern domination.

To demonstrate further how antirelational constraint functions, I next turn to 1858, the year of the BC Gold Rush, a period in which inseparable relations of mass socio-ecological violence unfolded in the name of "progress". Taking this era as a key historical moment in the history of antirelational constraint in BC, I outline an array of mass disruption that took place and discuss the Human and Eurosupremacist ideologies that enabled this disruption.

1858 and the patterned mess of modern colonial power

It is difficult to overstate how significant 1858 was for the formation and maintenance of the settler colonial state of BC. The year 1858 marked the beginning of the BC Gold Rush which triggered an abrupt shift from colonial relations of trade and exchange to patterns of settlement and extraction (Fisher, 1992; Harris, 1997, 2011; Ignace and Ignace, 2017; Tennant, 2011). As a result of knowledge of an abundance of gold in Nlaka'pamux territory reaching

San Francisco, in just a few months, an estimated 20,000–30,000 people seeking wealth from mining flooded the region. In response to this unprecedented migration, in August of 1858, Great Britain established the Colony of British Columbia, further formalizing settler-colonial structures of colonial dispossession across these territories (Barman, 2007; Harris, 1997) and enshrining into colonial law state-sanctioned genocidal and ecocidal practices that sought to liberate access to resources by eliminating Indigeneity (Harris, 2011; Simpson, 2014).[2]

In this section, I take 1858 as a point of departure to better understand an enduring era of state-facilitated mass socio-ecological violence. To see how disruption is relationally connected, across human and more-than-human life, and through BC's settler-colonial era, I first briefly outline the ideological systems that produce indivisible patterns of ecocide and genocide. I then draw on historical materials to outline specific socio-ecological disruptions that have been enabled by settler-colonial ideologies. This approach supports my main argument—that repairing patterns of destruction requires attending to the logics that normalize socio-ecological violence—by showing how ideologically driven disruption came to pass in the earliest days of settler-colonialism in BC.

Ideologies that produce antirelationality

While gold was undoubtedly a major factor in the establishment of the colony of BC in 1858, settlement and the formation of the colony were enabled by colonial modern ideologies that justified and celebrated settler colonialism. Beliefs that processes of "progress" and "civilization" would liberate harsh and unrefined lands from a state of "wild waste" worked to celebrate widespread patterns of socio-ecological devastation (Ballantyne, 1858; De Cosmos, 1858; Waddington, 1858; see Allen, 2016, Nunn, 2022 for further discussions on progress). Ideas of progress and civilization worked to justify intensive ecological extraction and transformation, as well as the elimination, dispossession, and exploitation of racialized populations (see Ballantyne, 1858; Waddington, 1858: 49; as well as Dillon, 2021; Fujikane, 2021; Loo, 1994 for contemporary discussions of wild waste).

These ideas of "wildness" that worked to exalt Eurocentric beliefs in "civilization" can be traced to the work of early modern political philosophers like Locke, Rousseau, and Kant. Hobbes' (1668) *Leviathan*, for example, outlines a process whereby Euro-western political formations, technologies, and cultures worked to rescue Western society from a state of violence and chaos, what Hobbes refers to as a "state of nature." These same human and Euro supremacist ideologies underpinned the idea of *terra nullius* and the 1493 Doctrine of Discovery that sanctioned and provided the legal justification for centuries of death, dispossession, and destruction. And as King (2019: 18) has described, the interconnection between the "invention of Blackness . . . as heathen under the fifteenth-century Christian humanism," and "Black land as *terra nullius*" and "torrid and inhabitable," were *both* requisite in establishing "the terms of conquest."

As I outline next, violent disruptions across vast arrays of life in the name of Western civilization and conquest enabled and produced broad patterns of antirelational constraint and death in BC. The story of 1858 reveals how ideologies of power can enable broad and pervasive patterns of mass disruption. It is not just that these beliefs that modernity would "rescue" the world from threats posed by an "empty" and "wasted" state were deeply pervasive. But what makes these modern features especially powerful is that these foundational colonial beliefs are deeply normalized—and frequently celebrated—and as such, lie beyond the realm of critique (Loo, 2004, 2011; see also Ormsby, 1958).

Mass socio-ecological disruption and the formation of BC

The context surrounding the formation of the colonial state of BC is unique due to how recently permanent settlement happened compared to other regions in North America, and how rapidly this settlement occurred. This recent and rapid settlement was sparked by the discovery of gold in the region and was catalyzed by an abundance of underemployed labour from a declining gold rush in California. The result of this gold discovery was an intense fervor to extract valuable metals from the earth. The 1858 gold rush brought tens of thousands of people into Nlaka'pamux territory. It also represented an abrupt transition from pre-existing political relations that generally adhered to and respected Indigenous Law, to the beginning of an era characterized by violence and disruption of non-European lives and ecosystems (D Harris, 2001, 2009; Ignace and Ignace, 2017; Nunn, 2022). As Cole Harris (2004: 168, see also Fisher, 1992; C Harris, 1997; Reid, 1994;) has described, prior to 1858, the region was overwhelmingly controlled by Indigenous political and legal systems of which "small amounts of agricultural land" and "palisaded forts" for trade, like Forts Langley and Victoria, represented small pockets of British control. Before 1858, there was little incentive for colonial powers to control territory or enact wide-scale permanent settlement, and as such, relations were characterized by and relied upon an adherence to Indigenous legal orders (Ignace and Ignace, 2017).

In BC, since 1858, colonial processes have worked to enable, and celebrate, the destruction of life in the name of profit, state building, and progress. To begin outlining mass ideologically driven disruption and death that occurred at this time, I turn to the 1862 smallpox pandemic that speaks powerfully to the immense ideologically driven disruption and violence in the earliest days of widespread settlement in BC. Between 1862 and 1863, mortality rates for most Indigenous Nations in the region currently known as British Columbia ranged between 50 and 80% (Belshaw, 2009; Boyd, 1999). This vast level of death aided colonial efforts. As Boyd (1999: 172; see also C Harris, 1994) describes, disease paved "the way for the colonization of [Indigenous] lands by peoples of European descent." The common narrative about disease in the early days of BC's settlement was that due to unprepared immune systems, disease was accelerated among Indigenous populations.

It is still a commonly held belief that the epidemic of mass death from disease was sad, but inevitable (see Barman, 2007; Belshaw, 2009). As Barman describes, because of the belief that Indigenous People would eventually die off due to disease, it "made little sense" for colonial governments "to spend great sums of money or even take much care of Indigenous People" (Barman, 2007: 167). But contrary to popular belief, ample evidence exists that this mass death both could have been *prevented* and was *intentionally perpetuated*.[3]

In light of common explanations about settlers at the time feeling like it did not make sense to take care of Indigenous populations, it needs to be restressed that, in two years—just two years—50–80% of all Indigenous populations in the regions currently known as BC died from disease.

As Boyd (1999: 172) has suggested, "this epidemic might have been avoided, and whites knew it." Let us start with the point that in 1862 an effective vaccine was being used around the world for decades. In fact, in BC, small pockets of successful immunization efforts took place among religious institutions and the Hudson's Bay Company (Belshaw, 2009; Swanky, 2013). In Nanaimo, where missionaries were motivated to vaccinate local Indigenous populations, the smallpox death rate was 18%; among Tsilh'qhotin, Haida, and Nuxalk populations, where no vaccinations campaigns were carried out, death rates ranged between 85 and 90% (Swanky, 2013). What's more, at the time of the great epidemic of 1862, it was commonly known that for decades, the Hudson's Bay Company had been operating a very

successful and effective smallpox vaccine campaign on the prairies (Boyd, 1999; Riedel, 2005). As Daschuk (2013: 69) explains, across the prairies the Hudson's Bay Company had been engaged in Indigenous vaccination program as early as 1811 and eventually developed this use into a relatively "comprehensive vaccination program."

But the epidemic was not just the result of vaccine inaction; the virus was spread intentionally. The virus arrived in Fort Victoria on a ship from San Francisco and spread to a nearby community of Indigenous coastal traders (Boyd, 1999). In response to the infections at this camp, the military and police forced infected people, at gunpoint, to return to their home villages, in some cases even towing smallpox-infected people to their homes by canoe (see Belshaw, 2009; Boyd, 1999; Ostroff, 2017; Swanky, 2013).

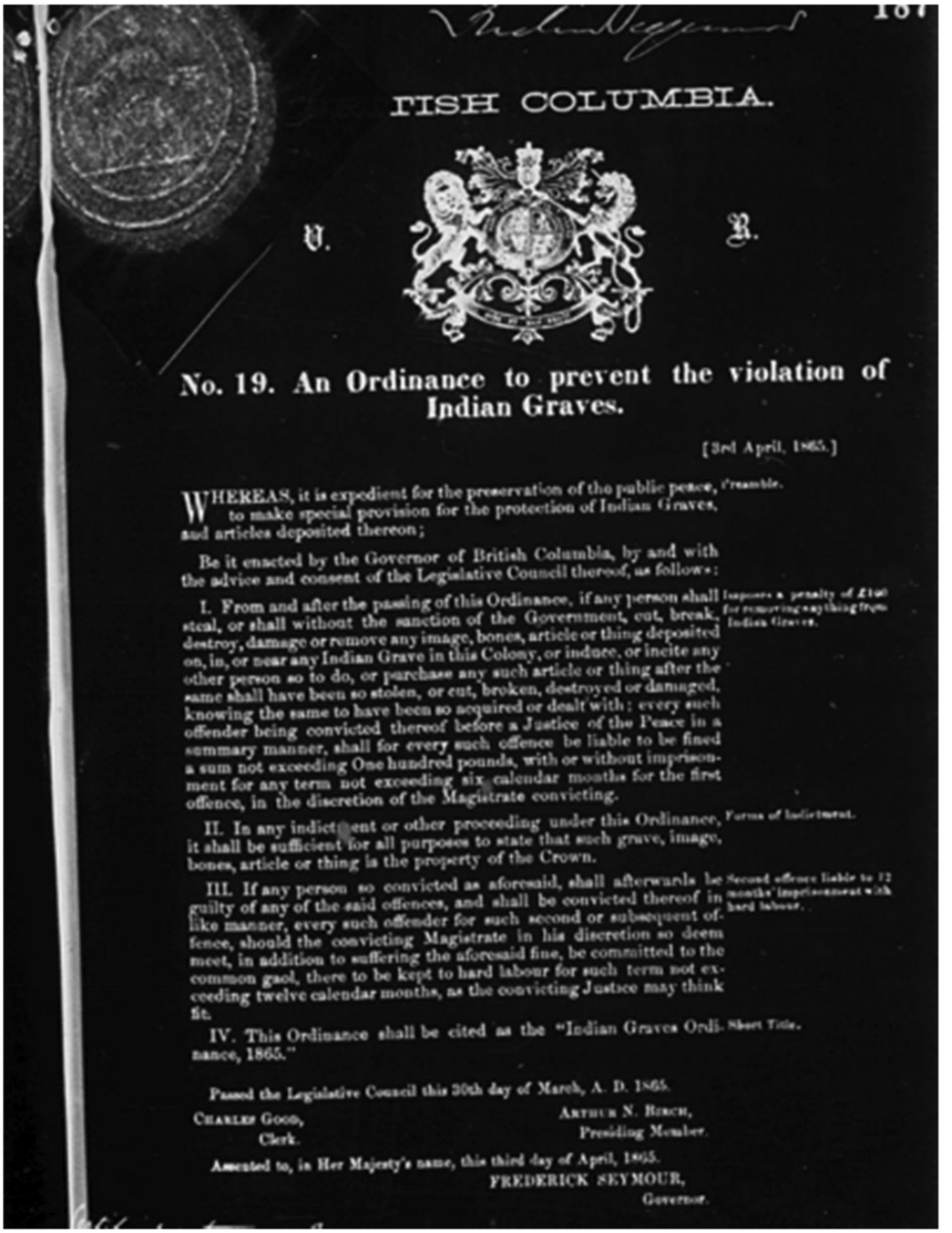
In their 1914 book, *British Columbia: From the Earliest Times to the Present*, historians Howay and Scholefield highlight the common practice of "unscrupulous white men" who had "removed from [Indigenous] graves the infected blankets and sold them to the unsuspecting natives" (1914: 52). This practice of violating Indigenous graves was so widespread that in 1865 the BC Legislature passed the "Ordinance to Prevent the violation of Indian Graves [3rd April 1865]." The Ordinance states that if any person shall "steal" or "without sanction of government, cut break destroy, damage or remove" any item "deposited on, in, or near any Indian Grave in this Colony" and/or incite an individual to "purchase any such thing after the same shall have been so stolen" could result in a fine "not exceeding one hundred pounds, with or without imprisonment." While today it is recognized that smallpox is spread via bodily fluids and contaminated objects like bedding or clothing, debates continue about whether smallpox could have been spread from this frequent practice of settler grave robbing. This settler practice of Indigenous grave robbing, evidenced in the 1865 Ordinance, speaks clearly to how deep and widespread the disregard from settlers for Indigenous life, and death, was at the time (Figure 1).

The colonial-modern ideologies that enabled genocidal patterns of antirelational constraint rings clarion in the writing of George Dawson, celebrated Canadian geologist, and fellow of the Royal Society of London:

> It is often said that the ultimate fate of the Red Man of North America is absorption and extinction: just as European animals introduced into the Australia and other regions, frequently drive those native of the country from their haunts, and may even exterminate them, and European wild plants accidentally imported, have become the most sturdy and strong in our North American pastures; so the Indian races seem to diminish and melt away in contact with the civilization of Europe . . . ever returning into itself. (Dawson, 1877: 30)

This quote is a powerful example of Eurosupremacist ideologies that create the cultural conditions that constrain life and result in unthinkable death. Building from these examples, I next show how this violence is inseparable from widespread and enduring patterns of ecological destruction by outlining the ecological devastation that also resulted from these same antirelational cultural conditions.

The 1858 gold rush era is evidence of how death-delivering human and Eurosupremacist settler-colonial ideologies that marked mass Indigenous death also produced ecological devastation. Geophysical studies by Nelson and Church (2012) and Ferguson et al. (2015) estimate that between 1858 and 1909, approximately 58,000,000 m^3 of excavated sediment were deposited into the Fraser River (see also Church, 2016; Kennedy, 2008). This quantity of byproduct amounts to nearly two-and-a-half times more than the Mount Polley Mine disaster.



TISH COLUMBIA.

V. R.

No. 19. An Ordinance to prevent the violation of Indian Graves.

[3rd April, 1865.]

Preamble. WHEREAS, it is expedient for the preservation of the public peace, to make special provision for the protection of Indian Graves, and articles deposited thereon;

Be it enacted by the Governor of British Columbia, by and with the advice and consent of the Legislative Council thereof, as follows:

Imposes a penalty of £100 for removing anything from Indian Graves. I. From and after the passing of this Ordinance, if any person shall steal, or shall without the sanction of the Government, cut, break, destroy, damage or remove any image, bones, article or thing deposited on, in, or near any Indian Grave in this Colony, or induce, or incite any other person so to do, or purchase any such article or thing after the same shall have been so stolen, or cut, broken, destroyed or damaged, knowing the same to have been so acquired or dealt with; every such offender being convicted thereof before a Justice of the Peace in a summary manner, shall for every such offence be liable to be fined a sum not exceeding One hundred pounds, with or without imprisonment for any term not exceeding six calendar months for the first offence, in the discretion of the Magistrate convicting.

Forms of Indictment. II. In any indictment or other proceeding under this Ordinance, it shall be sufficient for all purposes to state that such grave, image, bones, article or thing is the property of the Crown.

Second offence liable to 12 months' imprisonment with hard labour. III. If any person so convicted as aforesaid, shall afterwards be guilty of any of the said offences, and shall be convicted thereof in like manner, every such offender for such second or subsequent offence, should the convicting Magistrate in his discretion so deem meet, in addition to suffering the aforesaid fine, be committed to the common gaol, there to be kept to hard labour for such term not exceeding twelve calendar months, as the convicting Justice may think fit.

Short Title. IV. This Ordinance shall be cited as the "Indian Graves Ordinance, 1865."

Passed the Legislative Council this 30th day of March, A. D. 1865.

CHARLES GOOD, Clerk.

ARTHUR N. BIRCH, Presiding Member.

Assented to, in Her Majesty's name, this third day of April, 1865.

FREDERICK SEYMOUR, Governor.

Figure 1. "No.19 An Ordinance to Prevent the violation of Indian Graves" (Seymour April 3, 1865). Accessed October 2019, microfilm record, B.C. Archives 23160–20/N 19924.

In the early stages of the gold rush, miners targeted precious easy-to-access gravel bed deposits. Often these were the same gravel beds that salmon depended on for spawning and reproduction. Once the accessible deposits were exhausted, massive alluvial deposits—mostly hills and riverbanks—were the target of systematic dismantling and along with it processes of mass-wasting.

Compounding the impacts of the $\sim$58,000,000 m^3 of byproduct was the everyday use of mercury. Mercury was used at the time to extract fine particles of gold from alluvial sediment. Core sampling studies on the lower Fraser River Delta have confirmed the proliferation of mercury into ecosystems, finding spikes of mercury in sediment layers coinciding with the gold rush period (Hales, 2000: 125; Johannessen et al., 2005; see also Lamothe-Ammerlaan et al., 2017).

The images produced by early BC settlement photographer Frederick Dally (1866–1870) captured the scale of ecological disruption. Dally's 1868 photo "The Canadian Company Grouse Creek," for example, depicts 23 miners in the Cariboo Region posing in front of a gravel bank and towering pile of rocks, with two cloudy creek branches weaving between the group. The pile of rocks reflects the amount of material that would have been sorted through to extract gold. The water is murky from a process known as sedimentation where fine organic and clay particles become suspended within water. Sedimentation is recognized as a major ecological threat to healthy salmon reproduction (see Greig et al., 2005; Moring, 1982). In another of Dally's photos, "Cornish Hydraulic claim, Williams Creek, Cariboo," Dally captures the hydraulic mining processes that enabled the efficient dismantling of ecosystems. The depth of the canyon in this image reveals just how much sediment would have been washed into nearby creeks, rivers, and streams. As is the case with current industrial mining operations, this dismantling of landscapes to extract desired metals relied on capital investment, technology, and infrastructure. Capital, technology, and infrastructure enabled permanent settlement by providing the ability to access capital far beyond the earth's surface for extended periods (Figures 2 and 3).

Other historical records speak to how deeply Nlaka'pamux life had been impacted from the dismantling of salmon-bearing ecosystems from mining. Correspondent letters from the Fraser Canyon to San Francisco Newspapers from 1858 describe how mining practices disrupted the capacity of the Nlaka'pamux people to carry on their fishing practices. As Marshal (2000: 235) notes, in the wake of 1858 "from every conceivable angle, gold mining and salmon fishing were to become incompatible." In a letter to the *San Francisco Evening Bulletin* on 12 August, regular correspondent H.M. Snyder, describes two Nlaka'pamux men asserting that the arrival of miners "and their steamboats had stopped the salmon" (Snyder, 1858a: 2). Two weeks later, Snyder observes that "the miners all seem determined to keep the Indians off the river and as the Indians sole resource here is salmon, they must come to terms, if they cannot succeed in driving the whites from the river" (Snyder, 1858b: 2). In a 6 April 1859 letter from gold commissioner George Cox to British Columbia Police Commissioner Chartres Brew, Cox speaks of the outcome of this disruption, describing encountering several Indigenous families that communicated "by speech and gesture" that they were "destitute and starving."

Not surprisingly, these patterns of large-scale ecological disruptions also had enormous social impacts. This fact speaks to the indivisibility of patterns of social and ecological disruption within systems of settler colonial ideology. And, returning to the central argument of this article, repairing the type of devastation outlined above demands addressing the normalized colonial modern ideologies that enable, and continue to enable, this violence. Bringing the notion of antirelationality in conversation with the 1858 gold rush era further reveals how central processes of antirelationality have been to the establishment and

Figure 2. "The Canadian Company Grouse Creek", B.C. Archives item A-05192. Frederick Dally Collection c.1868.

maintenance of the colonial state. This nearly overnight formation of the colonial state, alongside mass socio-ecological disruption, further shows an inseparability between: (1) the formal establishment of the colony of BC, (2) intensive, widespread, and genocidal social disruption, (3) and the widespread destruction of abundant ecosystems. This abrupt transition not only speaks the indivisibility of mass ecological destruction and genocide during this time, but illuminates how central settler colonial ideologies were, and continue to be in upholding each of these entangled patterns that endure into the present (Figure 4).

To be sure, the historic accounts of violence and disruption outlined in this section are not meant to simply rehash colonial violence. Rather, with the framing of antirelationality, I have sought to draw attention to the ways that patterns of mass disruption endure through time, upheld by ideologies of power/difference. This is evident today in the way that land is torn apart in the name of capital and how Indigenous life remains systematically disavowed in many aspects of colonial life. Therefore, curtailing these patterns of violence requires attending to the deeply engrained ideologies of colonial modern domination.

Conclusion: Towards reparative planning

In this article, I have argued that efforts to repair patterns of settler-colonial mass disruption, which the Mount Polley Mine disaster is a reflection of, must attend to logics of colonial-modernity that enable, normalize, and even celebrate, modes and patterns of less-than-human and more-than-human violence. To support this argument, I opened with Secwépmec insights on the disaster that speaks directly to the tight linkage between

Figure 3. "Cornish hydraulic claim, Williams Creek, Cariboo", B.C. Archives item A-03853, Frederick Dally Collection ca. 1868.

the Mount Polley Mine disaster and myriad forms of socio-ecological violence throughout BC's settler colonial history. I engaged Gilmore's work on antirelationality to think about how large-scale violence and disruption are patterned and relationally connected by the ideologies that enable broad manifestations of disruption, what I describe as antirelational constraint. I then turned to the year 1858 to detail historic examples of mass socio-ecological destruction and death that have been enabled by totalizing settler colonial ideologies.

To think further about planning for repair amidst the reality of widespread and enduring antirelational constraint in BC, I return to Fred Moten's (2017: 168) reflections on repair that opened this discussion:

> What if we could detach repair not only from restoration but also from the very idea of the original—not so that repair comes first but that it comes before. Then, making and repair are inseparable, devoted to one another, suspended between and beside themselves.

For Moten, repair is not about planning for or engineering a specific future, but about confronting the normalized ideologies that abstract life from a particular relational context, and through relations of colonial-modern power, render life exploitable, disruptable, and subject to death. The reparative approach that I have outlined in this article joins Moten by centering colonial modern ideologies of power/difference to begin thinking about repair. To have spaces where an unbounded diversity of socio-ecological relationships thrive, it is

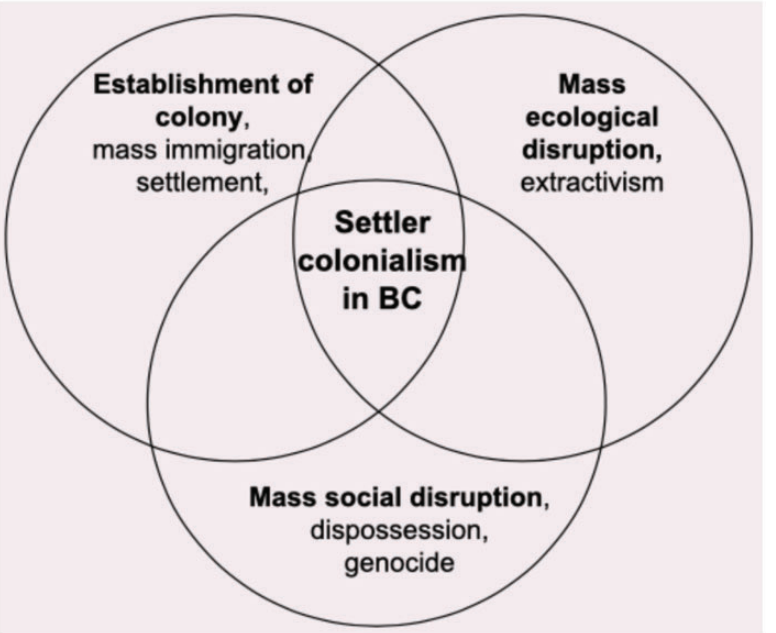


Figure 4. Venn diagram showing the inseparability between mass social disruption, mass ecological disruption and the formal establishment of the colony.

paramount to address the structural forces that systematically disrupt and constrain life. To put it simply, repair flourishes when the structural conditions for disrepair are addressed.

The stakes for taking this approach are significant. Given that restoration, and many forms of reconciliation, tend to be fixes for systems of acute, widespread, and enduring violence and disruption, most often these efforts do not seek to address the fundamental underlying sources of widespread disrepair. What's more, prescribing a specific idea of restoration requires a cohesive vision of what a state of restoration might look like. But often these visions of restored states are subject to power, even with the most benevolent gestures to fix disrepair. Without addressing the highly normalized ideologies that enable, and too often celebrate, these practices, the patterns of ecocide and genocide that have characterized the entirety of BC as a settler state will endure.

Take the context of the Mount Polley Mine disaster, for example. If the solution was to simply focus on planning for, engineering, and reconstructing life-affirming relationships, then spending vast sums of money to rebuild habitat and restore terrestrial ecosystems following the disaster would be a sufficient solution. In fact, the Mount Polley Mine Corporation appears to have done all of this. In the wake of the Mount Polley Mine disaster, ostensibly earnest efforts by Imperial Metals and the Mount Polley Mine Corporation to "restore" and "fix" the effects of the disaster have been imbued with the mining corporation's desires to benefit from these efforts. Indeed, despite the enormous amounts of heavy metals that were released into adjacent environments, the Mount Polley Mine Corporation terrestrial restoration efforts have been featured as an exemplary model for restoration by the British Columbia Technical and Research Committee on Reclamation (TRCR), an industry-, government-, and university-led institution that promotes mine reclamation in BC.

In BC's current colonial extractivist context, restoration has become a necessary device for extractivist interests that seek to thrive within structures where the primary goal is the large-scale and efficient disruption and death to life. But the problem of simply focusing directly on restoration and the rebuilding of life as a solution is that this approach fails to proactively address the power structures that continue to produce patterns of disruption. The case of the Mount Polley Mine disaster reveals that the sum of restoration efforts cannot match the entirety of the disruption it seeks to restore. No matter how thorough or sincere restoration planning efforts might be, restoration does not equate repair.

In closing, I want to provide an example of what an approach to repair that I have outlined above might look like in practice by returning to Secwépemcelew and wisdom from Secwépemc Nation. Since the Mount Polley Mine Disaster, the Stk'emplupsemc Te Secwépemc Nation (SSN), a southern Nation within the larger Secwépemc Nation, has demonstrated a form of repair that has come from both rupturing and resisting colonial mining practices and centering extant Secwépemc laws and belief systems.

In 2011, the Polish Mining company KGHM made an application to the Federal Government for the AJAX mine. The plan for this mine was that it would be built just beyond the city limits of Kamloops, on an important traditional site known to the SSN as Pípsell. In 2015, through the Federal Government's environmental assessment (EA) process, the government invited the SSN to submit evidence of the impacts of the project.

In what is now recognized as an important act of refusal, in 2016, the SSN declined the invitation to submit evidence through the EA process. Instead, the SSN insisted on assessing the project according to their own Secwépemc legal orders (Lloyd-Smith, 2016). The SSN conducted their own 14-day EA process, a process which considered Indigenous and Western knowledge, teachings, and legal processes together, which they referred to as "walking on two legs."

The outcome of this Secwépemc-led process was that the SSN rejected the mine proposal. The SSN's landmark decision was followed in June 2018, with the Federal government's EA process also rejecting the EA proposal for the Mine claiming that "the environmental effects" of the project were "too great," for "the current use of lands and resources for traditional purposes by Indigenous Peoples" (Gov Canada June, 2018).[4]

It cannot be said for certain how much influence the SSN's Indigenous-led EA process had in the Federal Government's decision to reject the mine. However, what can be said confidently is that this Secwepemc-led two-legged process worked to disrupt colonial modern systems of governance that have placed enormous constraint on Secwépemc people and lands since 1858. This fight to disrupt colonial legal systems offered powerful life-affirming alternatives to the closed domain of hierarchical colonial systems and laws that have enabled the destruction of lives and landscapes. If an approach that considers all perspectives—children, salmon, trees, birds, microbial life, Secwépemc, Industrial capitalists'—equally, relationally, with one never above the other, free of hierarchy, free of domination, the mass devastation and death that currently characterizes BC's settler colonial reality would be untenable.

By shifting from a culture characterized by hierarchy, difference, and antirelational constraint, to one characterized by relationality, care, and consent, life would flourish. And to return to the words of Moten, making and repair would be inseparable, devoted to each other. This approach to repair is not about a precise goal or definitive state. It is instead a process and a guiding principle that invites one to imagine an outside, a prior to, or an abolition of, supremacist and hierarchical notions of the archetype that characterizes modernity and enables the patterned disruption of life. Antirelationality is a valuable part of thinking about repair in this way, as it demands engaging with the myriad ways that relations of

modern colonial domination constrain life. Confronting antirelational constraint, then, requires seeking to understand and dismantle hierarchical relations that enable modern colonial domination. It is from this relational orientation to addressing patterns of domination and antirelational constraint, that life can repair, that life might flourish.

Acknowledgements

Special thanks to Douglas Harris, Shandell Houlden, Zannah Mattson, and Rylee Zondervan for your feedback on previous drafts of this article. Thank-you to Sue Ruddick, Nik Heynen, Sarah Wakefield, Matt Farish, Michelle Daigle, and Sarah De Leeuw who provided care-filled feedback and guidance on my research that helped to shape this article. Gratitude also to Kate Derrickson and the two anonymous reviewers for your detailed and thoughtful feedback on previous drafts.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. In taking this expanded approach to relations of domination, it is important not to lose sight of the formation of racial difference. As King (2016, 2019) argues, to de-center racial violence would be to lose sight of the mechanisms, discourses, and technologies by which carnage, disruption, and disrepair exists. As Walcott (2014: 93) further describes, the global category of "anti-Black" and "Black social death" has been fundamental in shaping the "post-Columbus era" of conquest and "modernity's project of unfreedom" (see also Moten, 2017).
2. Two notable legal frameworks that formalized genocidal policy and practice in British Columbia include, but certainly are not limited to, Canada's *Gradual Civilization Act of 1857* and the *Indian Act* of 1876.
3. It is important to note that this outbreak was only one of numerous recurring waves of smallpox, and only one of the deadly infectious diseases that devastated Indigenous populations. However, it is the confluence of settler colonialism ideologies and this disease at this time, that resulted in levels of death that far exceed numbers associated with other infectious diseases or previous waves of smallpox.
4. The SSN produced a series short documentary communicating this Indigenous-led environmental assessment process and its significance. They can be found here: https://stkemlups.ca/process/

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Neil Nunn (he/him) is postdoctoral fellow at UBC's School of Law and Senior Cultural Researcher with Reciprocity Research. Neil completed a PhD from the University of Toronto's Department of Geography and Planning. His doctoral research took the 2014 Mount Polley Mine disaster, the largest of its kind in Canadian history, as an entry point to consider the disaster's connection with patterns of devastation throughout British Columbia's colonial history. Neil is currently working on a book project that builds on his PhD research, which is under contract with UBC Press.