# Getting Out of the Epistemic Way: A modest proposal for eco-liberation 

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#### Abstract

Critical responses to the "Anthropocene narrative" have largely focused on deconstructing or reconstructing its narrative content, without close examination of social epistemic practices involved in the process of narrative production. In this paper, I address this gap by posing the question: How can epistemic-narrative practices reduce or eliminate environmental domination? To answer, I first draw on scholarship in the epistemology of ignorance to frame Anthropocene narratives as reproducing systemic ignorance in the service of anthropocentric domination. I argue that addressing anthropocentric ignorance requires a view of knowledge that values not only truth, but also building and sustaining epistemic trust. I then propose two epistemic dispositions for developing this view of knowledge, based on close readings of Staying With the Trouble: Making Kin in the Chthulucene by feminist scholar Donna Haraway and texts written by environmental ethics scholar Kyle Whyte. In the final section, I develop a case study based on a narrative-building project in Tiohtià:ke to demonstrate the value of these strategies to the struggle for environmental justice. Overall, this project contributes to research in the fields of environmental justice, feminist epistemology, and posthumanism by offering concrete practices for decentering the human in dominant Western ways of relating to others in epistemological communities. It emphasizes the value of thinking in and with specific communities, located concretely in time and space—and therefore seeks to connect directly with present, ongoing and future struggles for liberation in the settler-dominated communities of Turtle Island that I call home.


Keywords: social epistemology, ignorance, environmental justice, anthropocentrism, narrative

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In addition, I would like to acknowledge that I was born and raised on the ancestral lands of the Anacostans in the mid-Atlantic region of what is now referred to as the United States. I have inherited and directly benefited from the U.S. culture of ignorance and erasure of Indigenous peoples and cultures, and I brought that with me when I settled onto the unceded lands of the Kanien'kehá:ka Nation to study at Concordia University. Thanks to the under-paid and unpaid labors of Indigenous scholars and students in the Concordia community, I have begun re-examining which of my deeply held values, beliefs, and aspirations pose a barrier to their sovereignty and resurgence, and my own liberation. My hope is that this work reflects that ongoing, imperfect process and my gratitude for these teachings, the caretakers of the land, and the land that sustains and nourishes me every day.

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## 1. Introduction

To invite readers (and myself) into the repellent landscape (hidden, but not completely; deliberately buried, but not forgotten) was to pitch a tent in a cemetery inhabited by highly vocal ghosts. - Toni Morrison, Beloved (2004, xi)

Storytelling encompasses a great number of activities. Across cultures, diverse storytelling rituals play a central role in weaving together knowledges and values across community members to enable their collective cooperation, survival, and resilience. This research paper focuses on a specific aspect of storytelling: witnessing. Before the storyteller, there is the witness-seeing, hearing, feeling, or otherwise impressed upon. Witnesses are never alone, always socially embedded in material and political contexts that impinge upon the various mechanisms involved in experience, and later, narrative formation. My work is based on the idea that liberatory storytelling for environmental justice requires storytellers to become better witnesses (Oliver 2004). This work is intended to aid storytellers on Turtle Island who are committed to replacing interlocking systems of capitalism, white supremacy, and patriarchy that significantly reduce the possibilities of life, not just for oppressed groups of humans, but entire ecosystems (McBrien 2016). This is not to say that what I discuss here may not find use in other contexts, only that I can best speak to the ones I know.

I write this story from the island of Tiohtià:ke (Montréal). Here, I’m living along with many others through a pandemic, intensifying heat waves and droughts, major losses in biodiversity, and the constant looming threat of human warfare. Social unrest across Turtle Island continues in many forms, due to how each of the aforementioned compounds the precarity of those who live with intergenerational trauma from Indigenous genocide, slavery, and other forms
of violence. My personal entanglements with these events have shaped my thinking and desire to pursue this inquiry. I embody multiple overlapping histories as a female gendered, descendant of enslaved African, mestizo Colombian, and white French ancestors. I was incompletely assimilated into a culture of elite American imperialism in my home city of Washington D.C., and this project is an outgrowth of my desire to make sense of the overlapping, divergent, and often competing ways of viewing the world that I embody every day. My experiences have produced a curiosity about how collectives imagine themselves as belonging to one another, to place, and to time. I'm especially inspired by the resourcefulness and creative endurance of the imagination that persists in witnessing and weaving stories of survival in the face of annihilation.

This project is also, in part, a process of recovery from my time practicing a very narrow kind of witnessing and storytelling, working as a politics news editor in the U.S. As a leader in shaping national narratives during and after the 2016 presidential election, I saw first-hand just how much epistemic practices in mainstream narrative production constrict ways of understanding and addressing social inequality. Journalism in the U.S. has historically been plagued by racialized elitism and an obsession with so-called objectivity; the rise of media monopolies has only exacerbated these tendencies, gutting a storytelling enterprise once, for a small time, held as essential to democratic justice (Usher 2020; Alamo-Pastrana and Hoynes 2020). In today’s epistemic-narrative assembly line, it is extremely difficult for journalists to tell stories about domination and oppression in ways that do not reinforce them. In addition, reporting on environmental justice holds the reputation for being the "most deadly beat" in the world ("Red Alert for Green Journalism - 10 Environmental Reporters Killed in Five Years" 2020). Powerful forces silence many witnesses from telling their stories in the mainstream media. Thus, I am
turning my attention to the possibility of renewing practices of witnessing and storytelling from sites of collective resistance within communities living under domination.

As an academic endeavor located in a predominantly white male settler, Anglophone discipline, my research involved reviewing some of the stories authored by humanities scholars located in the West that testify to the ongoing ecological destruction on Earth. ${ }^{i}$ This literature centers around the concept of the "Anthropocene" that was popularized in the early 21st century, and refers to the name geologists proposed to describe the epoch that chronologically succeeds the Holocene. The so-called Anthropocene is distinguished by major geological and biotic transformations that scientific consensus attributes to the burning of fossil fuels, industrialized agriculture, and the release of toxic waste into the environment (Crutzen 2002). The related phrase, "anthropogenic climate change," has arisen alongside the Anthropocene. These terms import a narrative about the past that centers "anthropos," "mankind," or "humanity" as the agent driving these changes over time, at a rate that is accelerating faster than ever before. These changes are predominantly understood by scientists and experienced by affected communities as disruptive to and destructive of the conditions required to sustain Homo sapien life on Earth, as well as many if not most other terrestrial life forms (Kolbert 2014). This phenomenon is often narrated as an imminent catastrophe, and has woven its way into public and popular discourses, all the way from reports produced by Western governments to blockbuster movies (Colebrook 2017).

My attention has focused on critical responses to Anthropocene narratives. I've observed that these critical interventions tend to center on deconstructing or reconstructing the content of Anthropocene narratives (Malm and Hornborg 2014; Altvater et al. 2016; Craps et al. 2018). Many critical scholars emphasize how Eurocentric ontologies rooted in Enlightenment thinking
give rise to one of the Anthropocene's most significant problems: the way it assumes a dualistic separation between human and nature. For example, Malm and Hornborg (2014) explain how this dualism reinforces the way the Anthropocene narrative holds the human species uniformly responsible for ecological harms such as climate change. They write that climate change is anthropogenic in the sense that: "It has arisen as a result of temporally fluid social relations as they materialise through the rest of nature, and once this ontological insight - implicit in the science of climate change - is truly taken onboard, one can no longer treat humankind as merely a species-being determined by its biological evolution" (66, emphasis added). Climate change, they argue, is a causal result of the decisions of an elite European minority engaged in "highly inequitable global processes" in the $19^{\text {th }}$ century and the affluent high tech classes today (63-64). The "ontological insight" Malm and Hornborg draw attention to is recognizing the error of Anthropocene narratives that evenly distribute causal and moral responsibility for climate change across the entire human population. They note that evidence to support this insight is welldocumented in historiographical texts.

This begs a question. How, then, did the error first arise and persist into popular discourse despite substantial evidence to the contrary? Malm and Hornborg answer that it is merely an analytic error, born of "the general blunting of critical edges and narrowing of political horizons in the post-1989 world [rather] than of any malicious apologetics" (67). Curiously, the authors offer no account of how it is that they have managed to see beyond the blunted horizon.

Similarly, in Anthropocene or Capitalocene? (Altvater et al. 2016), historian Jason W. Moore writes that academics within the collection of essays are responding to the rise of Anthropocene narratives. They are creating new ways of thinking that produce an "ontological vision," which he calls the "world-ecology" paradigm (10). In this paradigm humans are
repositioned as part of nature ("humanity-in-nature"), and capitalism is redefined as a way of organizing nature (including humans). Moore's analysis makes a compelling argument for replacing the ontology of human/nature dualism with world-ecology. This ontological insight comes to Moore by locating the source of the dualist view in capitalism's organization of relations of labor and power-specifically, the historical "process of getting Nature to work for very low expenditures of money and energy..." (113). In passing, he acknowledges that the world-ecology paradigm emerges from "taking the centrality of work as central to our thinking about capitalism—ontologically (how it is defined) and epistemologically (how we know it and its history)..." (93). As with Malm and Hornborg, the ontological insight takes precedence.

Developing new ontological paradigms that reduce environmental domination is absolutely necessary for addressing current challenges to life on Earth. However, by focusing almost exclusively on the ontological, the various social epistemological dispositions and methodologies that make such a paradigm shift possible and fruitful, in the sense of producing ethical action, are left unattended. In addition, these accounts risk speaking as/for the universal Man of the human/nature duo these paradigms strive to overturn without incorporating an analysis of their own social epistemic positions. It is important that Malm and Honrborg do take care, however, to suggest that the rise of the Anthropocene narrative is likely not malicious. Perhaps that is so, but their analysis does not support this proposition any further. A fuller social epistemic analysis could aid other academics and non-academics who hunger for their own moments of ontological clarity, appropriate to their particular context and locations within the present capitalist world-ecology.

In this paper, I address the curious proposition raised by Malm and Hornborg, that important aspects of Anthropocene narratives are evidentially unsupported, yet not maliciously
so. I do this by framing the Anthropocene narrative in epistemic terms, namely as a form of systemic ignorance. Understood this way, the critic's challenge is no longer primarily about answering: What do Anthropocene narratives get wrong? Rather, the focus shifts to asking, for example: How do my own interests play a role in how I deconstruct and reconstruct historical narratives? Is it possible to invite their authors to relinquish some authority, in order to address the systemic ignorance built into their constructions and repair the harm it's caused? My answer will be a modest "yes."

In the following section (2), I will argue that Eurocentric epistemic practices produce systemic ignorance that enables environmental domination, drawing especially on Charles Mills’ epistemology of racial ignorance. In Section 3.1, I turn to Haraway and identify a recurring theme in her discussion of environmental justice: embodied curiosity. I offer one interpretation of this theme, reframing it as an epistemic disposition that enables environmental emancipation. In section 3.2, I develop an additional epistemic disposition from Whyte's work on crisis epistemology: coordination. In Section 4, offer a brief case study of how these three epistemicnarrative practices operate in tandem during a project that took place in the city where I live, Tiohtià:ke/Montréal. I conclude with a few reflections on the approach I have developed, and suggestions for further investigating how epistemologies of ignorance can be used for building the kind of collaborative solidarity that is required for (environmental) justice on Earth.

## 2. Anthropocene, ignorance, and domination

This research project seeks to answer the question: What kinds of epistemic-narrative practices might enable not just academics, but any storyteller, to reduce or eliminate
environmental domination? In order to answer this question, I will first argue that environmental domination is in part a problem of ignorance. To do this, I draw on Charles Mills’ essay "White Ignorance" (2007) in which he argues that belief among white people in the U.S. in the inferiority of black people (i.e. white supremacy) is a kind of systemic ignorance that authorizes racial domination. Extending Mills' concept of systemic ignorance to Anthropocene narratives, I develop the argument that anthropocentric narratives are also a kind of systemic ignorance that authorizes humans to dominate their beyond-human kin. ${ }^{\text {ii }}$ I end the section by raising the possibility that ignorance can be understood in less threatening ways that Mills originally suggests, thus creating an opening for the alternative epistemic dispositions discussed in the proceeding sections.

I'll begin by noting the epistemic significance of the 'Anthropocene' as a concept. The Anthropocene represents a chronological, linear ordering of the activities of one species on planet Earth. Constructing narratives such as this, what I count as storytelling, involves wielding epistemic power. That is, the power to influence what people think, what sources of information are accessible, and what sources are considered credible by others (Archer et al. 2020). This power is normative because it influences the epistemic resources available in a given society for moral thinking and action (Mills 2007). The power of the Anthropocene quickly moved beyond academic discourses, and entered dominant mainstream discourses in the U.S., Canada, Europe and elsewhere. Take, for example former U.S. Vice President Al Gore's documentary on global warming An Inconvenient Truth (Guggenheim 2006), released several years after the term was first coined by Crutzen. The film won two Academy Awards, and became one of the highest grossing documentary films in U.S. cinematic history. It is often credited with significantly increasing public awareness in the U.S. as well as Europe about the human role in climate
change, despite not actually producing long-term changes in behavior (and its erasure of Indigenous environmental movements that long labored to draw popular attention to these issues throughout the 80s and 90s) (Cook 2016; Clark 2002). Following Crutzen's death in 2021, The New York Times published an obituary of the Nobel Prize winner in which the former U.S. Vice President Al Gore is quoted as saying, "[Crutzen's work] continues to teach us that our collective human activities are now the most powerful geological force on Earth" (Schwartz 2021, emphasis added). The idea that individual humans hold equal causal and moral responsibility for climate change still holds sway in mainstream, Western discourses.

If Crutzen and the many others authoring this narrative mean to say that all humans are causally responsible for these wide-scale environmental transformations, it would be false as a matter of fact. By now, it's common knowledge that not all human activities have equal environmental impacts, and that patterns of human activity vary widely across time and space (Sharp 2020). A growing amount of evidence shows that human activities within specific cultures, especially Western and industrialized cultures, produce the vast majority of the environmental impacts to which the narrative refers. There is also consensus that on lands where indigenous peoples primarily reside, there is greater conservation of biodiversity (Schuster et al. 2019). Nevertheless, the ideas that humankind, vaguely speaking, is causally and morally responsible for ecological destruction and climate change still persists in many mainstream discourses in the West. And, this idea is one of the primary ideas driving the Anthropocene narrative (Altvater et al. 2016). If Crutzen and others mean to say that some humans are causally responsible, without differentiation, it's misleading at best. The latter case would be akin to a witness stating in court that they saw three suspects accused of robbery at the scene, without bothering to mention that one of them was bound and gagged the entire time. ${ }^{\text {iii }}$ Many scholars
have made compelling arguments about why ambiguous use of "human" is factually and morally problematic. ${ }^{\text {iv }}$ However, I find that these investigations don't go far enough in explaining why the narrative nevertheless persists.

When an individual authors a matter of fact that is later determined to be false, an epistemic community has grounds to question their credibility. The same applies for a statement that is severely misleading, as in the example of the three suspects above. However, if many members of a community endorse a false or misleading view so that it persists over generations, a dissenter has grounds to accuse them of collectively holding a false belief-call it ignorance. Critical race theorist Charles Mills (2007) draws special attention to cases in which the community is extremely unequal across social groups, and it is the most powerful among them who widely endorse a false or misleading view as true because it reinforces their superior social position. ${ }^{\mathrm{V}}$ I will refer to Mills’ concept as systemic ignorance.

In "White Ignorance" (2007), Mills’ argument focuses on how white supremacy produces false beliefs and absence of true beliefs regarding histories of racial inequality in U.S. society, and how this group-based ignorance enables the continued domination of people of color. White supremacy operates by enforcing "a closed-circuit of epistemic authority," restricting which racial groups are recognized as holding epistemic credibility, and therefore agency to contribute to broader social processes of meaning making (34). In the U.S., policies and practices across the criminal justice, education, and employment systems align to discredit the testimony of black people. Mills traces this tradition of unequal distribution of credibility from its Enlightenment origins to the present-noting the ongoing marginalization of the voices of scholars of color in academia.

Extending Mills' concept of racial ignorance to the Anthropocene, I argue that anthropocentric narratives are also a kind of systemic ignorance that authorize environmental domination. To do this, I'll offer a brief sketch of how systemic ignorance works according to Mills, along with examples of how similar mechanisms construct anthropocentric ignorance. Mills identified several mechanisms as complicit in white supremacy, three of which I will highlight because I believe they are the most relevant to storytelling. The first mechanism is distorted perception (27). Mills writes about cases of white supremacy interfering with perception, such as in the construction of the category of "savage," noting that, "In all of these cases, the concept [of white superiority] is driving the perception, with whites aprioristically intent on denying what is before them" (27, emphasis in original). Groups can develop defective perception when they are socialized within an ideologically homogeneous community. Individuals learn to filter perceptual input in ways that reinforce the dominant ideology in their community, and in effect, experience pleasure in sharing a sense of identity and belonging with others. Contrary evidence is discarded or discounted. Put simply, this is the operation of confirmation bias.

Consider, for example, historian William Cronon's (1992) observation that before the 1970s, historians had a habit of turning nature into "scenery and pushing to its margins such characters as Indians who play no role in the story-or rather, whose roles the story is designed to obscure" (1354). Such narratives tend to reinforce perception of things such as rocks and rivers as having neither moral standing nor agency; mere organic material that is more or less useful depending on the human needs at hand. In the case of human group interests in mainstream U.S. and Canada, this has often meant defining beyond-human kin "as if [their] existence were exhausted by its use-value to human beings" (Krause 2020, 453). For example, by a linguistic
sleight of hands the flesh of birds killed en mass and mechanically shredded to pieces is perceived by consumers as neatly packaged "poultry" (Podosky 2018). Put another way, anthropocentric ignorance strives to construct beyond-human kin as exclusively perceivable through Euro-American human values. ${ }^{\text {vi }}$

Perception overlaps significantly with the second mechanism involved in ignorance, which Mills calls the "management of memory" (28). Just as sociologists have identified various behaviors related to collective remembering, such as the creation of national holidays or public commemorative ceremonies, there are ways of enforcing collective forgetting. One of the primary ways is by associating some social groups with greater epistemic credibility, and other social groups with less. Testimony from social groups perceived as having less credibility are more easily forgotten or excluded from official accounts. Narratives in Indigenous discourses have been documenting and sounding the alarm about the destructive effects of colonialism on terrestrial ecosystems for centuries, long before the Anthropocene came on the scene (Craps et al. 2018). ${ }^{\text {vii }}$ Yet their voices have been, and continue to be, marginalized and often altogether discredited. Consider also how beyond-human kin remain largely absent from collective human remembering practices. In the past decade or so, public events in the West to remember and grieve extinct species or destroyed ecosystems have begun to emerge, though are far from mainstream practice (Hance 2016). Australian scholar Rosanne Kennedy recently developed the concept of "multidirectional eco-memory" to describe a storytelling practice that "would link human and nonhuman animals and their histories of harm, suffering, and vulnerability in an expanded multispecies frame of remembrance" (Kennedy 2017, 268). She argues that this practice can produce collective memories that offer alternatives to memories imposed by
dominant groups that enforce dispossession, erasure, and destruction of Indigenous peoples and their relationship to the land.

The third mechanism is group interest (31). For most of its history, epistemology had conceptualized human thought and action as motivated by individual self-interest. Mills insists that thinking is also motivated by the interests of the social groups (e.g. class consciousness) to which individuals belong. According to Mills, the driving force in widespread false belief or absence of true belief is a shared interest in power. Desire for group-based power, he argues, can in some cases lead to "motivated irrationality" (34). That is, group thinking that aims for dominating power, rather than truth. I will return to these three mechanisms in the final section, but for now I'll move on to address the question of power in Anthropocene narratives.

Power for whom? Anthropocene narratives reinforce a hard-line moral distinction between human and nature, elevating the human category (as constructed in the Euro-American cannon as white, elite, male Homo sapiens) as having superior moral value. That is, the narrative is strongly committed to anthropocentrism. However, I want to specifically draw attention to how this excludes beyond-human kin from being recognized as epistemic agents and epistemic community members. In contexts where anthropocentrism prevails, beyond-human kin are deprived of control and influence over how their beliefs are formed, how much of their knowledge they share, and how that knowledge is used in multi-species communities. Even though Anthropocene narratives are often concerned with how humans are causing harm to the so-called environment, they also position humans as uniquely capable of saving it due to their superior epistemic agency. This reinforces a view of the human species as all-knowing, capable of mastering knowledge of the object of nature and bending Her to the human will (Merchant 2004; Sharp 2020). This concept of 'Man' is a narrowly male, Western way of seeing the world
that authorizes not just intra-species harms such as racism and colonialism, as has been thoroughly discussed in the literature, but also inter-species harms-namely human epistemic domination over beyond-human kin (Braidotti 2016; Sharp and Taylor 2016; Warde 2018).

I want to take a slightly different position about the relationship between ignorance and domination that moves beyond Mills. Mills takes the traditional view among epistemologists regarding ignorance, which is that ignorance is always morally bad and should be reduced. I agree that systemic ignorance historically produced in bad faith should absolutely be reduced. At the same time, I think undoing the anthropocentric disposition toward knowledge is equally important. It is not merely a matter of handing someone the so-called facts so that they come to grips with reality. Today's anti-vaccination and climate denial movements demonstrate the insufficiency and potential widespread harms of this approach. As Cynthia Townley (2006) and others point out, maximization of truth (what she calls 'epistemophilia') is not the only worthy epistemic goal, and pursuing it alone can actually harm the epistemic relations on which community well-being and survival depends. Townley is writing in the context of human communities, but I believe the same might apply to communities of epistemic dependency between human and non-human kin.

Following Townley, I argue that ignorance-specifically, in cases of absence of true belief —should be viewed as sometimes necessary to building or sustaining cooperation based on trust. Trust is a building block of non-dominating cooperation within and across epistemic communities. Absence of true belief or full certainty among some can enable not just the epistemic credibility of others, but their epistemic agency. ${ }^{\text {viii }}$ That is, their control or influence over how their beliefs are formed, how much of their knowledge they share, and how that knowledge is used in their community. These are values that some communities imperfectly
strive to manifest in moral codes, such as website user data agreements and university ethics governing anthropological research in Indigenous communities, for example. Arguably, the emergence of these relatively new social contracts suggests dominant Euro-American cultures tend to incentivize knowledge extraction towards the goal of knowledge maximization in an economy in which information has high exchange value, and therefore disregards the value of trust and cooperation between epistemic agents on principle. ${ }^{\text {ix }}$

One example of this is eco-tourism, which broadly speaking refers to an industry that grants visitors predominantly from wealthy countries access to ecosystems with low human populations often as a national strategy for economic development in poor countries, and sometimes includes education on relevant ecologies. Not always, but in many such contexts the increased contact between humans who desire first-hand, experiential knowledge and already vulnerable beyond-human kin can cause further destruction. For example, one study found that increased boat-based ecotourism in the St. Lawrence River was causing major disturbances in the behaviours of beluga whales (Blane and Jaakson 1994). Another example is modern zoos and botanical gardens, that have their origin in the $18^{\text {th }}$ century menageries that promoted the scientific study of animals. Today, many advocates for such establishments often argue that the animals kept there serve an essential role in educating the public, while critics argue that the instrumentalization of the animals does not justify the end. As Tyson (2018) writes: "The vague suggestion that being close to animals will inspire an interest and concern for the natural world is not substantiated by evidence, and even if holding animals captive in zoos were to inspire a widespread and meaningful interest in nature, the benefit created (the new interest in nature) appears to be intangible, or trivial, when balanced against the lifelong captivity of the animals in question" (176). In such cases, the goal of maximizing knowledge is thrown into question when
accessing that knowledge requires instrumentalization, or otherwise causing harm to beyondhuman kin. This suggests the values of maintaining trust/care and cooperation can in many contexts justify maintaining a state of absence of belief (a form of ignorance), to an extent. In such cases, as I will discuss in the next section, awareness of both one's ignorance and the moral limitations to accessing knowledge create opportunities for mediated approaches to knowing, and diverse relationships to the concept of truth.

One useful way I have found of thinking about trust is that it is an act of getting out of an other's way. Philosopher Sharon Krause (2020) makes the point eloquently in her work to define environmental domination and liberation: "To emancipate something is to unhand it, to relinquish one's putative authority over it, to free it from bondage. It is a way of honouring the liberty of all things to live upon their own terms instead of making them live at the mere mercy of others" (460). Healing from anthropocentric ignorance requires rebuilding ways of knowing that do not depend on marking beyond-human kin as inferior or instrumentalizing them as a mere source of information. It also will require learning new ways of translating across epistemic worlds that are based in mutual cooperation.

In this section, I have argued that Anthropocene narratives reinforce anthropocentric ignorance and domination. Following Mills, I have pointed out how various cognitive mechanisms are involved in reproducing this ignorance, and must therefore be addressed in order to reduce false beliefs that are dominating. Moving beyond Mills, I argued that those concerned with justice must also take care to cultivate respect for the agency of diverse epistemic agents in their communities. What then might it look like for human storytellers to operate beyond the narrow mandate of truth-telling, while also getting out of the epistemic way? In the following section, I build on the work of feminist and Indigenous scholarship to answer this question. The
force of dominant, dominating narratives is strong but, they argue, not insurmountable. It remains not only possible but morally necessary for human storytellers to seek out practices of coauthorship in the telling and creating of a more just world.

## 3. Feminist and Indigenous epistemologies

This section builds on an idea held by some critical race theorists and scholars of ignorance, which suggests that surviving oppression often requires developing the capacity to see (and perform in) the world from one's own viewpoint, and that of one's oppressors. Think, for example, of the theory of African American "double consciousness" as developed in The Souls of Black Folk (Du Bois 1996). This is in contrast to the singular perspective of the oppressor, who Mills (2007) says "needed not to know" in order to maintain power (35). More recent scholarship has focused on how liberation might arise from turning this reactive survival strategy into a methodology. For example, Black feminist scholar Patricia Hill Collins (2002) frames it as an epistemic advantage: the capacity for "examining points of connection among multiple epistemologies" (270). She is careful not to suggest that oppressed groups have a clearer or better picture of reality. Only that, "because each group perceives its own truth as partial...each group becomes better able to consider other groups' standpoints without relinquishing the uniqueness of its own standpoint or suppressing other groups' partial perspectives" (271).

For this reason, my approach to addressing anthropocentric ignorance involves reaching beyond my own position of socialization and education within a predominantly white, maledominated Eurocentric discipline and department, and engaging with feminist and Indigenous standpoints that continue to be marginalized in mainstream Western philosophy (Stengers and

Despret 2014; Burkhart 2019; Whittaker 2021). In so doing, I affirm the partiality and ignorance of the white, male Eurocentric philosophical standpoint, and the need for others holding this standpoint to do the same, with gusto. By attending to feminist and Indigenous experiences, and connecting with their ideas, I both model and develop strategies for becoming a better witness, and tell more just stories.

In the first sub-section below, I will be building on the work of Donna Haraway (2016) in her most recent book, Staying with the Trouble: Making Kin in the Chthulucene (SWT). In the following sub-section, I will turn to thinking with several texts written by philosopher Kyle Whyte, who is a Potawatami community member and activist. From each of these engagements, I draw out specific strategies that they use for better witnessing and storytelling, and argue for applying them to interactions between humans and their beyond-human kin as a method for reducing anthropocentric ignorance in storytelling. I choose to engage with these particular authors within feminist and Indigenous standpoints from Turtle Island because they operate in traditions with relatively long histories of critiquing anthropocentrism, and are explicitly committed to environmental justice. The goal of this section is less to argue for the absolute value of any one of these epistemic dispositions, and more to demonstrate the relevance of developing epistemic strategies to address the problem of anthropocentric ignorance. It is an imperfect and finite exercise in translation, sending and receiving meanings across worlds, and doing so right along with those with whom we desire to equitably share a future on the same planet.

### 3.1 Haraway's Feminist Standpoint

Philosophers willing to engage with her undisciplined work generally situate Haraway’s projects within the Continental tradition. For example, Gavine Rae reads her as weakly or
indirectly related to a Heideggerian re-questioning of the meaning of being and rejection of Cartesian anthropocentrism (Rae 2014). Rosi Braidotti reads Haraway as more closely related to the tradition of French materialists and what is called process ontology, a view that assumes entities are defined by dynamic occurrences, rather than some underlying, identity-producing substance (Seibt 2021). In her more-cited oeuvres, such as "Situated Knowledges" (1988), and A Cyborg Manifesto (Haraway and Wolfe 2016), Haraway joins other feminists in rejecting claims to objective (as in universal) positions of knowing and abstains from making strong ontological commitments in order to rethink boundaries and bonds that morally bind. She advocates for the sufficiency of partial connections across beings, and what James Clifford calls telling "big enough stories" that account for epistemological limitations of any situated being or collective (Haraway 2016, 101).

In SWT, Haraway takes on the issues of ecological devastation and environmental justice through a posthumanist lens. Her positions resonate with those of ecofeminists, and also overlap in significant ways with themes in Indigenous thinking from Turtle Island. For example, she tends to think with a view towards intergenerational responsibility. Her focus is on developing practices for inheriting what she views as oppressive European-colonial narratives about "humans" and "nature," and passing them on in a way that widens the scope of possibilities for future life on earth. Building on themes from A Cyborg Manifesto (Haraway and Wolfe 2016), she moves beyond the transhumanist visions of augmenting human experience through a narrow definition of technology that many scholars have derived from her work, and authors possibilities for kinship with the beyond-human. Similarly, the account moves away from framing of questions of environmental justice as having primarily to do with technological fixes to
adaptation, mitigation, and sustainability, as mainstream Western media and a great deal of philosophical literature tend to (see for example, Caney 2021). Instead, Haraway insists that humans should focus on returning to specific sites of trauma and endeavor to do the much more difficult work of grieving, healing, and (re)building memories and understandings with the beyond-human kin to whom we are responsible. The goal at this particular moment, according to Haraway, should not be to return to some ideal state of nature. ${ }^{\text {a }}$ Rather, she writes, "My multispecies storytelling is about recuperation in complex histories" in order to "redo ways of living and dying attuned to still possible finite flourishing, still possible recuperation" (Haraway 2016, 10).

Haraway's concern with transforming human ways of approaching, communicating with, and understanding others is congruent with my understanding of at least some environmental injustice as arising from anthropocentric ignorance, and with an epistemic approach to emancipation. She is also centrally focused on storytelling, both as a method she uses and as the subject of her writing. Storytelling, she argues, is the most powerful tool for emancipation. During a talk in 2021, Haraway remarked: "You don’t have to affirm the ontological reality of anything in storytelling. You have to have a generous approach to the multiplicity of worlding that does not require an act of affirmation before state or church. Philosophical conventions do require ontological and cosmological and epistemological identification work. Storytelling loosens this, and the fables are true in some profound way" (Conversation with Donna Haraway and Vinciane Despret: Companion Species 2021). For her, the liberatory effects of storytelling come not from identifying and making known some Truth in the content of a text, at least not only. This would be to view storytelling as Townley's epistemophiliac for whom the good is
exclusively the maximization of knowledge. For Haraway, storytelling is a never finished, never perfect process that if sustained with care, can align beings together in formations that hold enough space for living and dying well. The focus is less on constructing knowledge, and more on challenging dominant knowledges and ways of being by building epistemic connections, alliances, and trust.

Haraway focuses on a specific mode of normative storytelling that she refers to as SF, which she argues has the effect of "re-worlding" or transforming the world in both matter and meaning. In SWT, SF is an acronym that alternately stands for string figures, science facts, science fiction, speculative feminism, speculative fabulation, among other things. Haraway provides no single definition, and the book as a whole could be read as an attempt to define or model the concept. Here, I define SF as an ethical mode of thinking/storytelling that involves weaving diverse abilities and partial knowledges together into new material-semiotic patterns, in order to create possibilities for recuperating non-dominating ways of living and dying on earth. I think of SF as Haraway's term for what other feminists describe as the work of translating across difference, that I described earlier. Further evidence of this conceptual overlap is Haraway's frequent reference to and emphasis on conjugation (110-114). "Like all offspring of colonizing and imperial histories, I—we— have to relearn how to conjugate worlds with partial connections and not universals and particulars," she writes (13). Conjugation in common English most often refers to the grammatical operation of producing different forms of a word with the same root, as they vary with number, gender, mood, tense, etc. Haraway plays with conjugation's other meaning, which is to yolk or join together, in order to elaborate a method of forming relations of care. Haraway suggests the problems pertinent to environmental justice actually lie in the ways
humans tell this story-which involves collaborative sensing and connecting to other beings that are actively co-creating life on earth. She does this in a modestly hopeful register, explicitly rejecting the nihilism of Anthropocene narratives that reinforces the impossibility of knowing or doing otherwise.

Several key themes emerge in SWT that make practicing SF possible. What follows is detailed examination of the one I see as most relevant to addressing anthropocentric ignorance in narrative storytelling.

## Embodied Curiosity

Haraway's stories about human and beyond-human kin often begin with encounters with human ignorance. One story she recounts begins with her own. The story weaves connections between the hormonal supplements she feeds her aging and incontinent dog, and pregnant female horses whose urine is harvested in Canada to mass produce estrogen-based drugs. Haraway questions her own absence of true belief, writing: "Somehow, a feminist science studies scholar and life long animal lover, my menopausal self failed to know much about the pregnant mares and their disposable foals. Did I forget, never know, not look—or just not care? What kind of conjunctivitis was that?... Shame is a prod to life long rethinking and recrafting one's accountabilities" (110-111). That shame can provoke moral reflection and action is supported in philosophical literature (Hu 2021). Shame is often defined as an emotional reaction to a perceived discrepancy between oneself and the standards of one's social context, or one's own standards (Thomason 2015). In this example, Haraway appears to feel shame after recognizing her prior ignorance contradicts either her personal standard for knowing, or the standard held within
critical white feminist communities of being responsible for knowing. Perhaps shame for failing both a personal and shared standard are at work.

The implied responsibility is to know how her life and death—which includes intimate companionship with canine species-is intimately entangled with the living and dying of many others, including beyond-human kin in distant places. In the context of discovering one's own ignorance, and I would add one's participation in systemic ignorance, experiencing shame can be a catalyst for change. What kind of change? Haraway draws particular attention to (re)developing a capacity for curiosity. In this section, I name this theme in her work embodied curiosity, and frame it as an epistemic disposition appropriate to the task of addressing one's participation in systemic ignorance for which one might feel shame.

Mourning and rebuilding life on earth in an age of mass extinction, Haraway says, "demands the ability to find others actively interesting, even or especially others most people already claim to know all too completely, to ask questions that one's interlocutors truly find interesting, to cultivate the wild virtue of curiosity, to retune one's ability to sense and respond..." (Haraway 2016, 127). The goal, as she describes it, is an intellectual and embodied opening that allows individuals and collectives to once again feel desire for and a literal sense of (as in a capacity for perceiving) responsibility toward others, including beyond-human kin. In the chapter entitled "Awash in Urine," Haraway invokes the image of the cyborg to emphasize the material and embodied entanglements of multi-species kin in the construction of subjectivity. ${ }^{\text {xi }}$ The plane of subjects is leveled with that of objects in this view, and are always already in the process of becoming-with one another. In A Cyborg Manifesto, Haraway wrote that "Cyborg politics are the struggle for language and the struggle against perfect communication, against the one code that
translates all meaning perfectly..." (D. J. Haraway and Wolfe 2016, 57). Embodied curiosity then involves a struggle against the language of anthropocentrism, which tends to place "nature" outside the realm of humanistic intelligibility.

One example of this struggle comes from the work of memory studies scholar Lucy Bond, who is examining progressive "pioneering" narratives in Texas that are substantially funded by Big Oil (Bond 2021). Petrochemical companies have flooded institutions in communities near their processing plants with funding, including local schools and museums, to propagate a narrative that views organic matter as a commodity essential to a fetishized carbon economy of the future. Over time, this narrative has desensitized individuals in the community to the severe, intergenerational health effects of oil extraction and production. It produced a kind of systemic ignorance. Bond points out that grassroots organizers expend tremendous energy drawing people's attention to the day-to-day sensory experiences of living next to oil production facilities that these dominating narratives have normalized ("Toxic Tours" n.d.). Using a language of embodied grounding, organizers engage in the kind of critical curiosity about their material entanglements that I believe Haraway has in mind as an ethical response to group-based ignorance.

It's also important to note that Haraway's curiosity does not mean a disposition of naive, innocent wonder about the world. In SWT, Haraway's epistemology remains grounded in her earlier work on feminist standpoint theory. In "Situated Knowledges," (Haraway 1988) she argues that what one can know and do is conditioned by one's social, physical, and temporal location, or situatedness. She seeks to tame the Enlightenment desire for knowledge through mastery without also lapsing into relativism. ${ }^{\text {xii }}$ In part, this means rejecting ideal theorizing as a
dominating narrative practice. As difficult as it may be to accept, Haraway asserts, life on earth is dying and irreversibly tainted by a history willful violence and oppression. ${ }^{\text {xiii }}$ Embodied curiosity is not a path of return to some utopic Eden, and there never was one. Such innocent thinking is a symptom of the amnesia of systemic ignorance. Haraway repeatedly mentions the importance of practices of mourning irreversible losses and co-presencing the dead. ${ }^{\text {xiv }}$ These practices hold the living accountable to those who have succumbed to ongoing destruction. Embodied curiosity in this sense emphasizes the relation between living in a non-innocent world and a duty to history, that forcefully grounds humanist impulses toward achieving transcendence through ideal theorizing.

This modest approach to embodied curiosity also implies sustaining a finite level of optimism. Modest curiosity resists both the assumed certainty of the end of the world in Anthropocene narratives and boundless optimism of ideal theorizing. Thinking with an apocalyptic, doomsday affect forecloses consideration of any response that is not surrender. It also reinforces the notion that humans are inherently and irredeemably bad, and therefore cannot possibly contribute to earth's regeneration. Haraway views both as abdications of responsibility and as complicit in maintaining the status quo of environmental domination. ${ }^{\text {xv }}$ It is both true that the self-made, hero-Man of the humanist tradition can no longer be the protagonist, and that human activity still matters very much to what happens next. Measured optimism enables curiosity about what is possible, given a grim reality.

In the context of environmental justice, the partiality of being situated also admits of a need for allies (or as Haraway would say, companions) to live curiously with. Cue Haraway’s notion of companion species. In the Companion Species Manifesto (D. Haraway and Wolfe
2016), she writes that relations across kinds of beings are "co-constitutive relationships in which none of the partners preexists the relating, and the relating is never done once and for all" (103104). In SWT, Haraway tells many stories of such co-creation or what she often refers to as sympoeisis. That this is in contrast to the concept of autopoeisis-the idea of the self-made man, the idea that the world has made itself. Autopoetic systems (like cybernetics) "are not quite good enough models for the mortal SF world" (Haraway 2016, 37). The term sympoeisis (a term she attributes to M. Beth Dempster) refers to "'collectively producing systems that do not have selfdefined spatial or tempral boundaries. Information and control are distributed among components. The systems are evolutionary and have the potential for surprising change'" (37). Haraway emphasizes collectivity, thinking-with, composting (in the sense of both a messy muddle, and also generative).

Haraway's view of how embodied curiosity can structure sympoetic relations fits nicely with Townley's idea of ignorance. If we conceive of ignorance as demanding trusting alliances, rather than instrumentalizing others in order to extract knowledge, embodied curiosity is an appropriate resource. Trusting alliances of co-production resonates with historical theorist Timothy J. LeCain's work to describe the world as filled with objects, both biotic and abiotic, that are "fundamentally and irrepressibly creative, in ways that are both good and bad for humans" (LeCain 2018). He echoes Haraway when he argues that this non-human generated creativity has been historically rendered unrecognizable in cultures dominated by anthropocentric narrative practices. Opening oneself to this creative energy in some cases may create a shift in the way humans experience what in Anthropocene narratives is often described as an overwhelming burden to act in the face of ecological destruction. This ties back to the kind of epistemic trust

Townley describes as necessary to building cooperative, non-dominating epistemic communities. Embodied curiosity, when practiced with modesty and trust, may result in a lightening of the load not by moving humans out of the frame, but rather moving humans of the epistemic way, so to speak.

### 3.2 Whyte's Decolonial Standpoint

Philosopher Kyle Whyte writes extensively on environmental justice from his perspective as a Potawatomi community member, scholar, and activist. I find Whyte's work relevant to the question of epistemic-narrative practices for eco-liberation because of its focus on epistemology, narrative, and environmental justice (Whyte 2017a; 2018; 2020). Although he was formally trained in the Western tradition of philosophy, his work explicitly seeks to renew Anishinaabe philosophical traditions to which he remains deeply connected (Whyte 2013). Anishinaabe are a group of First Nations, including the Potawatomi, whose traditional homelands extend from the Ottawa River Valley including parts of western Quebec, west to Saskatchewan, and south into northern parts of North Dakota, Minnesota, Wisconsin, and Michigan. Whyte's work is a gift to Western scholars of critical theory who seek to build connections and alliances across traditions of thinking and knowing. Now, as Whyte in fact writes about, Western scholars must be careful not to approach this with an extractivist mindset—cherry-picking what in Indigenous philosophy serves our immediate needs and discarding the rest. Rather, we must work to integrate our scholarly work into a more global effort to build long-term epistemic relations that are based in care, consent, and reciprocity. I will now turn to the theme I found particularly insightful in Whyte's work, and seek to reframe it as an epistemic disposition for addressing the kind of systemic ignorance described in the previous sections.

## Coordination

In the paper "Against Crisis Epistemologies," Whyte (2020) argues for the need for ways of knowing the world that avoid the presentism of Anthropocene narratives. Presentism drives collective attention toward crisis, which Whyte defines in part as "the automatic assumption of imminence. By imminence, I mean the sense that something horribly harmful or inequitable is impending or pressing on the present conditions people understand themselves to be living in. There is a complexity or originality to the imminent events that suggests the need to immediately become solutions-oriented in a way believed to differ from how solutions were designed and enacted previously" (54). While Whyte does not refer explicitly to epistemologies of ignorance, I believe the epistemology of crisis is an obvious case of the kind of systemic ignorance that Mills had in mind.

Building on Whyte's observations, I will elaborate how the two primary cognitive tendencies at work in a state of crisis relate to systemic ignorance. The first cognitive tendency is framing current problems as unprecedented, and therefore fundamentally of a new kind. This is only possible through a kind of willful forgetting of previous cases that, in reality, are rich sources of information that is directly relevant to the present (55). The effect of this forgetting is the fabrication of demand for expertise. The catch is that the kind of expertise needed to address an allegedly unprecedented problem cannot be based in mere experiences of the past. Rather, what is called for is so-called innovative thinking-technology. This removes the authority to resolve or manage the crisis from communities that will be most impacted, and places it in the hands of a few elite scientists, technologists, and bureaucrats-who stand to gain social and
economic capital from "solving" other people's problems in the absence of relationships of care, consent, and reciprocity.

The second cognitive tendency embedded in crisis epistemology, Whyte points out, is framing a current problem as urgent. This implies both that there must indeed be a solution, and that finding and carrying out the solution supersedes any and all other concerns-e.g. collateral damage. Urgency implies much more than a scarcity of time (which itself is an odd concept). It also implies a forceful narrowing of collective focus that is almost entirely influenced by what is imagined to be most threatening to the status quo. Through Whyte's decolonial lens, the status quo is in fact the continuation of centuries of settler colonial domination-what many have described as a kind of long-term, ongoing crisis. The only social groups who would have an interest in prioritizing its preservation are the oppressors. Any insistence on drawing attention, priority, and resources away from other problems that are not labeled in mainstream discourse as a "crisis" must be understood as systemic ignorance at work.

Drawing once again on Anishinaabe philosophy, Whyte seeks to distinguish between the modern conception of crisis used as an operation of power, and a conception of crisis that is oriented towards justice. The modern crisis is defined as a disruption to relations of domination. A better definition, Whyte proposes, is "interpreted through a deeper history, and traced to the moral bonds of relationships among the diverse beings and entities dwelling together in shared environments" (57). In other words, a true crisis is a disruption to the moral bonds between beings where "members [of a community] have the capacity to respond in coordinated ways to change that are supportive of their mutual well-being, whether the members humans, animals, and diverse other" (59). Kinship relations can take generations to build, or restore when broken.

This mode of perceiving and responding to change differs significantly from that which is triggered by the invocation of crisis. It is attuned to a wide, and complexly connected range of problems that constitute the web of life. While it does not preclude the possibility that some problems may need to take priority over others, such an operation happens with a view towards a more positive view of the conditions that make life more possible, rather than fear of imminent death and destruction. There is an understanding that deep bonds require thinking on larger time scales than the crisis mindset has conditioned in the minds of many.

## 4. Towards Anti-Oppressive Narratives

As an island between two great rivers, and with water both above and below ground level, Montréal's state is one of water. If flooding is the overflow of water on land that is usually dry, then can we ever call Montréal flooded? We might suggest that with the burial of rivers across the expanse of the island, Montréal is in a state of permanent drought. — Excerpt from "Water Out of Place," ("Ghost River" n.d.)

My primary goal in this paper is to identify ways in which storytellers can reduce environmental domination by adopting alternative epistemic dispositions for addressing anthropocentric ignorance. I have now introduced and fleshed out two different epistemic dispositions based on the works of two key scholars in the philosophical and environmental humanities literatures. The preceding discussion of each articulates a theoretical argument for how these dispositions could reasonably become part of a remedy for systemic anthropocentric ignorance. To this, I will now a more pragmatic vision of how they work cohesively together.

So to round out this proposal, I will provide an example of how these two values might work in tandem. In what follows, I develop a case study based in Tiohtià:ke, where living and dying happen within a community of anthropocentric domination. In 2017, a group of ethnographers decided to take up the challenge of contending with a strand of their own ignorance. This encounter led them to the grave site of a river that had long been buried-a ghost river. The epistemic dispositions I named in the preceding section are embedded in their methodology, which they refer to as an "ethics of hauntology" (Toso, Spooner-Lockyer, and Hetherington 2020). I map these onto the three domains of Mills' model of systemic ignorance that I focused on in Section 2-perception, memory, and group interests.

## Context of the Ghost River Project

Epistemic rituals of ignorance are in most cases semi-willfully or willfully initiated by members of a group in the process of establishing dominance over other groups during a particular historical moment. Yet, once ignorance-dependent dominance has been established, those complicit in carrying out the rituals in subsequent iterations and generations may hold lesser degrees of responsibility for the domination they perpetuate. At the same time, buried being and beings resist. Traces remain. If we recognize the current epoch to encompass an era of collective ignorance that is resulting in massive, wide-scale ecological destruction, a duty remains to be on the lookout for the trace, to act on the possibility of recuperation of that which has been buried, and to reintegrate the buried into our knowledge systems. These three domains of recuperative work track Mills' emphasis on the three domains of ignorance-perception, memory, and group interests.

Traces may appear in isolation, or they may be surviving and finding sustenance within an island community of resistance operating under another logic—what Maria Lungones calls a logic of resistance (Sullivan and Tuana 2007). On the island of Tiotiah:ke, traces of a nearlyburied past were resurrected in public discourse during the construction of the largest provincial roadwork project in Quebec around 2016 (Symon 2016). A highway called Turcot Interchange passes through an archaeological site called Tannery Village. This site contains traces of a past involving intense interaction between colonists, Indigenous peoples, and beyond-human kinincluding what was known as the St. Pierre River. This unearthing and re-burial piqued the attention of ethnographers working at a university settled just within one kilometer's distance from the path of the river. Members of the Concordia Ethnography Lab at the Milieux Institute
embarked on a journey of recuperation that they have named the Ghost River Project. They spent one year studying archival, legal, and other public records that documented traces of the now buried river, and subsequently went out into the city locating hidden traces of the river's existence (Toso, Spooner-Lockyer, and Hetherington 2020). ${ }^{\text {xvi }}$ Their findings were published in the journal Anthropocenes, and on an online multimedia website with a reconstructed interactive map of the river, detailed narratives about sites of interest, as well as short audio recordings from the field ("Ghost River" n.d.).

The Ghost River Project is tied to a practice sometimes referred to as "stream daylighting," which involves uncovering buried waterways especially in urban or suburban settlements. The practice began to be formally documented in academic literature in the 1970s. The goal of stream daylighting is generally "to directly or indirectly enhance the ecological, economic and/or socio-cultural well-being of a region and its inhabitants" (Khirfan, Peck, and Mohtat 2020). The Ghost River project's outcomes were specifically oriented towards developing "a political epistemological practice, concerned with the production of new modes of existence: ways of living that are sustained and transformed by the recognition that we are all in relation, even to those spectres insensible to us" (Toso, Spooner-Lockyer, and Hetherington 2020, 10). How, then, did the three ethnographers from Concordia go about rendering a previously insensible river sensible?

## Perception

Calls to human responsibility from beyond-human kin are not so rare. Take, for example, the browning leaves of a house plant that calls us into response-ability for forgetting to provide water. Or, the strained meowing and pacing of a domesticated feline that call for feeding. Yet in
the average Western urban environment, it is unusual to perceive the call of entities that extend beyond our daily, extremely narrow field of vision. In Tiohtià:ke, we might wash and excrete daily using water from the St. Lawrence River. Yet, I would wager that the health of the fish and algae within it rarely crosses the average city dweller's mind. This is despite the fact that the St. Lawrence River remains in our presence, although substantially altered through centuries of urban development and pollution. Thus, I find it remarkable that a team of researchers clearly identified a call to response-ability from a river teetering at the edge of existence, buried deep under concrete. The researchers of the Ghost River Project describe their first encounter with the St. Pierre River by saying that "the river beckoned," and they felt an obligation to respond/answer its invitation/call—despite not initially knowing what that might entail (Toso, Spooner-Lockyer, and Hetherington 2020, 1). This suggests a capacity among the researchers for the kind of embodied curiosity Haraway says is essential—"the ability to find others actively interesting, even or especially others most people already claim to know all too completely" (Haraway 2016, 127). Embodied curiosity is involved in the perception of the river's agency to beckon. No human voice is audible, and so curiosity invokes the imagination. Not in the service of ventriloquism, but rather, imagination serves to disrupt the researchers' notions of what a river looks and sounds like, and what its flowing or non-flowing means. Myriad sounds of gushing, trickling, and gurgling produce a foreign language to which they become attuned, without also forcing the violence of a direct translation. The meaning they make from it remains tenuous and open-ended.

Embodied curiosity also shows up in the research group's methodological choices. At first, they conduct traditional documentation research ("Our first perceptions of, and speculations about, the river were informed by a range of documents, digital and material," Toso, Spooner-

Lockyer, and Hetherington 2020, 2). Yet later they employ a more "embodied experience" of "walking-with" the ghost river (2-3). The researchers ventured out and walked along the ghost river's path, taking detailed notes on their sensorial experiences: the "predictable smell of sewer" as well as the sounds of water gushing in a storm drain that now transports waste water toward the St. Lawrence River, the "deafening noise of big machinery," and also areas "riotous with the songs and calls of a multitude of species of birds" in the shadow of a "towering interchange" (57). They note the swarms of mosquitoes breeding in puddles where the river once flowed, and even the "images and sounds of a French village being plundered and burned by Iroquois 'invaders'" that constitutes a museum exhibit now situated along the ghost river's banks. They note the presence of a breed of snakes that tend to inhabit "non-places that we often perceive as wastelands, as uninhabited, waiting to be 'rescued' and developed" (8). The disruption of the snake's habitat raises the team's awareness of its precarity. This practice of multi-sensorial thinking in the presence of others diverges from common ethnographic methods in that the presence in this case is a ghost. Thus, embodied curiosity augments perception from awareness of the immediate present to awareness of that which is no longer, or will not be much longer.

Embodied curiosity is woven together with curiosity about their own location within dominating systemic ignorance. Their investigation was deepened by their capacity to develop and respond to curiosity about their own, personal relations to the city in which they work and live. They note that they are all settlers, indicating a degree of self-reflexivity about how their positions of power influence the work they're carrying out. The researchers allowed the inquiry to disrupt their settled experiences of time and space, and transform a familiar world that reinforces their power and privilege, into something otherworldly that might disrupt that
dynamic. They describe it as "defamiliarizing urban places through a heightened awareness and discovery of previously undetected features" ("Ghost River" n.d., Walking-with Methodology). As their practice of embodied curiosity progresses, their perception of the city transforms from static image to a carousel: colonial settlement, unceded ancestral homelands, burial grounds, Tiohtià:ke, Montréal, urban island, floodplain.

Inscribed within the above is a strong dose of modesty. The flexibility of imagination in practices of embodied curiosity is impossible to achieve if one is over-confident about what one perceives at first glance. In addition, the team acknowledges that no matter how much imagination is involved, some of the losses that come with living in a region suffering the effects of ongoing colonial violence are irrecoverable. For example, they point to the fact that the only publicly known name of the river is the one given to it by French settlers. Thus, the walking-with methodology modeled in this study offers a concrete example of the kind of embodied curiosity that attends to ignorance-and is deeply attuned to the agency of the oppressed.

## Memory

Just as collective remembering of events critical to a particular society's history and culture is often practiced through public commemorations, memorials, and special holidays, collective amnesia is associated with a number of rituals. Building on what has been discussed thus far, rituals of forgetting might include the destruction of material-semiotic objects related to the events in question, narrowing the distribution of epistemic credibility, framing other events as crises, and valorizing of instrumental rationality in contexts where overwhelming emotions such as fear or grief might otherwise seek release. Destruction of the St. Pierre River through its contamination with human sewage and its subsequent burial by settlers during the $19^{\text {th }}$ century is
the most obvious erasure. The destruction of the archaeological site in the $21^{\text {st }}$ century to make way for the Turcot interchange is a renewal of the collective practice of forgetting. So too will a new plan to cover up what's left of the river at the Meadowbrook Creek site, which was ordered by a court to be completed in 2018.

Even in the face of such powerful erasure, the ethnographers found opportunities for recuperating narratives of the past and for the future through strategies of coordination, as I described in Section 3.2. Their narrative of the St. Pierre River puts the past, present, and future in non-linear contact, consequently disrupting the temporality of crisis in which the present dominates past and future. On the website, the path users travel is spatial rather than temporalalong a blue line representing where the river once flowed. Along that line are points of information that one can click on. The information that appears in each of the dozens of entries is descriptive of the interactions between various elements of the human and beyond-human communities that live(d) along the banks of the river spanning millennia, including speculative futures. It also contains oral histories from folks who belong to these communities, audio soundscapes, as well as recent and archival photographs from various sites. For example, an entry titled "The Myth of the Lachine Massacre" ("Ghost River" n.d.) describes a narrative they came across frequently in their research. It tells the story of how the Iroquois strategically traveled down the St. Pierre River in order to attack the French colonial village of Lachine in 1689. The event is often described as a "massacre," but the researchers challenge this received narrative and its colonial assumptions, and suggest re-framing it as an act of resistance to colonial aggression. In this example, uncovering a buried river became an exercise in not just recollecting the past of
those communities, but as Whyte suggests, engaging in a dialogue with it to restore communal bonds and disrupt crisis epistemologies.

## Group Interest

Conjuring the dead is a risky business. It is precisely the risky efforts to restore intimate bonds of responsibility in the Ghost River Project that ties in Whyte's strategy of coordination. For example, the group discusses how they gradually developed an attachment to the snakes that live in the falaise along the ghost river's path. Embodied engagement with a species in danger that occupies spaces in the city that overlap with their daily lives enabled them to become aware of how their own knowledge or ignorance of its precarity influenced its chances of survival, and their own ability to carry on unperturbed. The narrative representation of the St. Pierre that the researchers produced takes care to incorporate a coordinated vision of the city, in Whyte's sense of coordination. It includes a great amount of detail about the ecological history of various species, including the snakes, but also ground hogs, insects, bacteria, and plant life.

Mills argued that white group interest, in the U.S. context, was causally responsible for white ignorance. Human group interest, might similarly be said to be causally responsible for human ignorance. One approach to addressing such ignorance would be to reconceptualize the salient groups. In the human case, it involves deconstructing human as a separate and independent group from the rest of existence. The representations of the St. Pierre and the city it continues to haunt does precisely this-it challenges the merely human maps we use to navigate a city with a view towards efficiency.

## 5. Conclusion

One man from a tribe that lives near the Bering Sea stood up and smiled gently upon the crowd. "Hello, my other self," he said into the microphone. "The afternoon tastes good." Then he said, "People of good heart around the world are asking the wrong question. They are addressing the symptom and not addressing the reason." He said that our hearts have closed and our minds can't understand, and that the way through this mess we're in is to take the journey from the head to the heart. It's a short journey, he added. Less than a foot.
"But how do we do that?" asked someone in the audience. The CEO of the chocolate company cleared his throat and asked the same thing.
"There are many ways," he said. "Try crying for an hour every day for a month. That will confuse your head. The head needs some rearranging."

One after the other, they said, "We're still here, we’ve retained our culture. You haven’t erased us yet, and, it turns out, you might need us because you've forgotten the truth that we are all connected." - Christina Nichols (2020)

In this paper I have asked: How can storytelling reduce or eliminate environmental domination? I have sought to answer both by using the practices with which I have been trained, and through acts of storytelling. The former emerges from a set of predominantly solitary, ergonomic-algorithmic practices of engaging with other delocalized, disembodied theoretical frameworks. Doing philosophical research in the context of a pandemic has only exacerbated the limitations of these approaches, and the dualistic Western thinking that enforces a bright line distinctions between fact and fiction, rationality and emotion. My proposal, based on what I know so far from where I'm sitting, affirms feminist, posthumanist, and decolonial scholarship that endeavors to replace these dualisms. At the same time, my intervention suggest that offering up new paradigms, no matter how well reasoned and evidentially supported, is insufficient to the task of achieving large-scale social transformation. What is required is careful attention to the dispositions, specifically toward knowledge and ignorance, that can enable various communities
to arrive at the paradigms that fit their context. The epistemic dispositions proposed here could be read as a quite immodest proposal to have identified the practices that always-everywhere will lead to eco-liberation. On the contrary, I only propose the above based on what I know so far from where I'm standing as, what Collins called, an outsider within (Collins 2000). In relinquishing any delusion of exclusive authority handed down to me from my intellectual ancestors, I seek to disrupt a paradigm within Western philosophy that tends to deny granting credibility to outsiders, especially Black and Indigenous students and scholars with rich, valuable intellectual canons of their own (Whyte 2017b).

At the height of the pandemic and my research for this paper, a kind of curiosity manifested for me in reaction to what these days is called burnout. In the rubble of deep exhaustion, I identified within my body a deep curiosity my relationship with the land on which I live. Tugging on this thread, I've encountered what have felt like obstructions. Some I encounter through physical limitations, such as the small amount of public space with direct access to one of Tiohtià:ke (Montréal)'s most intimate elements-the rivers whose banks gently cup the city into an island formation. Other obstructions present in more obviously epistemic-narrative forms, such as throwing my voice onto the martin I encountered on a hike, in the way a ventriloquist voices her puppets. Anthropomorphism enables my ongoing deafness; it constructs in my imagination a "silent wood" as the ideal setting for a vacation chalet with the hope of reconnecting with a tranquil(ized) nature.

I have begun to tally these obstructions, and respond with curiosity. Most of them lead to an uneasy proposal: "I don’t actually have any earthly idea..." Kinship ignorance appears allencompassing. Old habit kicks in, and I seize the solitary path back to my desk, diving into yet
another ergonomic-algorithmic rabbit hole until pale rays of sun begin falling through the cracks of Tiohtià:ke sky. Google: "How do rivers feed oceans?" Embodied practice, and the work of Indigenous and feminist scholars, are unsettling the way I ask questions. I'm curious how I might ask a better one, rooted in my specific location. I take a step further: "How does the St. Lawrence feed the Atlantic Ocean?" A few steps further, becoming curious about how Anishinaabe linguistically articulate ontological and epistemic paradigms that arise from caring cultivation of relations of reciprocity with beyond-human kin in this specific place over millennia, erased in part by my present occupation. My question transforms again: "How does Kahrhionhwa’kó:wa feed Kaniatara’kehkó:wa?" Something about formulating and speaking this question aloud is jarring, and I become once again acutely aware of the limitations of the epistemic practices that I’ve inherited through the Western cannon. Nevertheless, I feel a partial connection across entangled worlds, of the kind I believe Haraway hopes for, has been initiated. Embodied curiosity has granted me modest insight, and I believe as an epistemic disposition it is powerful enough to carry forward further critical inquiry into anthropocentric ignorance, and environmental domination, along with coordination. Attending to ignorance as a problem of building trusting epistemic relations can surely reveal many other epistemic values or attitudes that can reduce domination. I urge others to take what I have shared and return to your own community, teachings, languages, land, and Elders to engage in a process of embodied curiosity and coordination to develop modest proposals for what epistemic-narrative practices of eco-liberation could mean in that place. ${ }^{\text {xvii }}$

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i In the U.S., philosophy consistently ranks lowest among humanities disciplines granting Bachelor's degrees to women. This has been the case since at least the mid 1960s, according to the American Academy of Arts and Sciences. Only about one-third of academic philosophers today are women. In the U.S. only about $3 \%$ are black or African American. See Bradburn and Townsend n.d.; Schwitzgebel 2020. Data for diversity in philosophy within Canada was difficult to find.
ii In literature on environmental justice, scholars use various concepts to refer to the parts of Earth that are not human. Of the variations I have encountered, "beyond-human" first struck me as most suitable because it avoids the negative connotation associated with "non-human," and sounds broader and more inclusive than "more-than-human," which to my ear invokes adding to the human (e.g. transhumanism). However, I also realize that beyond-human may fundamentally reinstate the binarism of human/nature under the guise of using different words. Thus, I defer to Indigenous ways of thinking about the human place on Earth by adding "kin," which I believe captures desire for a concept that holds both the possibility of distinction without the violent ontological separation of binarism pervasive in Euro-American thought (Fix, Burnam, and Gutteriez 2019).
iii By this example, I do not mean to import neoliberal notions of justice into the discussion. I only use it make this specific point about the value of access to credible information in moral deliberations.
iv Crutzen uses human and mankind interchangeably, as well as frequent references to the global population.
v Mills argues that this is usually a historical process with uneven development. This means that although the original creators and adopters of the false belief might be said to have had ill intent, as time passes, ill intent is not required in order to hold false, dominating views (i.e. systemic ignorance).
vi This most commonly means constructing beyond-human kin as objects with merely instrumental value. Within a handful of legal institutions on Earth there has been (uneven) development of legal frameworks for representing the interests of beyond-human kin before legal authorities (Tanasescu 2016). However, dependence on borrowing language from "human rights" frameworks may reinforce the tendency to impose Euro-American norms in contexts where they ought not apply.
vii Scholars in memory studies have suggested the concept of 'planetary memory' as a prompt to imagine re-telling human histories as a chorus of different perspectives on the past.
viii For example, Fricker's framing of epistemic injustice focuses narrowly on how "someone is undermined in their capacity as a giver of knowledge" (Fricker 2007, 30 emphasis added). Understanding epistemic agents as merely providing information could very easily lead to a view of knowledge exchange as transactional, or worse, extractive.
ix When referring to some epistemic relations between human and beyond-human kin, care may be a more appropriate term than trust, since trust seems to involve mutual understanding.
x Narratives of linear technological progress merely repeat what Carolyn Merchant (2004) calls the Recovery Narrative, in which rationality—and, it follows, increasingly 'smarter' technology—single-handedly enables humans to return the earth to its prelapsarian state.
xi Haraway strongly states this feminist commitment to a certain kind of social constructivism in the first chapter of SWT when she writes, "Natures, cultures, subjects, and objects do not preexist their intertwined worldings" $(2016,13)$. Asdal (2003) uses the term post-constructivism to describe this aspect of Haraway's work in order to avoid misunderstanding her approach with mainstream social constructivism. Social constructivism tends to depend on an a priori separation between matter and meaning, a separation to which Haraway wholeheartedly unsubscribes. See also (Prins 1995).
xii Braidotti (2006) describes Haraway’s view this way: "She specifies that not only is a feminist notion of modesty not allergic to power, but also that it provides an enlarged definition of scientific objectivity as a local, partial and yet valuable achievement" (206).
xiii Haraway cites an instructive scene from Ursula Le Guin's novel The Word for World is Forest, in which a chief leader involved in oppressing the a society of planet is held accountable by rebels not by being sentenced to death, but by the much more difficult work of continuing to live in the aftermath of his deeds. Haraway (2016) writes: "[T]he consequences of the freedom struggle bring the lasting knowledge of how to murder each other, not just the invader, as well as how to recollect and perhaps relearn to flourish in the face of this history" (emphasis added, 121).
xiv It's worth noting that while Haraway insists that we must "become-with the dead and the extinct" through practices that "solicit the absent into vivid copresence," she also mentions the impossibility of effectively mourning such traumas (2016, 101, 132, 92-93). To my knowledge, she does not elaborate on this further.
xv Braidotti writes that Haraway's style resists institutional asceticism that instills and rewards "the reproduction of negative passions forcing the oedipal subjugated participants to labor under the twin logic of narcissism and paranoia" (2006, 205). I would argue these two narratives, Anthropocene or Capitalocene, have received more widespread engagement than Haraway's Chthulucene because they fail to break away from institutionalized ways of thinking.
xvi I first learned about the Ghost River project during my time working as Director of Communications for the Milieux Institute.
xvii I draw this wording directly from how Nishnaabeg scholar Leanne Simpson invites readers from other locations to engage with her work on defining "resurgence" within the Anishinaabe context in Simpson 2011, 25.

