

Against crisis epistemology

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Crisis and colonialism

Colonisation is typically pitched as being about crisis. People who perpetrate colonialism often imagine that their wrongful actions are defensible because they are responding to some crisis. They assume that to respond to a crisis, it is possible to suspend certain concerns about justice and morality. Nineteenth-century European and American imperial colonialism in South America involved forcing Chinese persons, among other affected groups, into tortuous work conditions to extract and export guano, resulting in the devastation of ecosystems on guano islands. The goal of such violence to people and the environment was to resolve a crisis in soil chemistry caused by the intensive agricultural methods being used in some parts of Europe and North America (Foster and Clark 2020). The United States even passed the Guano Islands Act in 1856, which stated that Americans can seize control of any, “island, rock, or key, not within the lawful jurisdiction of any other Government” that has “a deposit of guano” (US Department of State 1856: online). In US settler colonialism, Americans in the first half of the 20th century constructed many dams that flooded Indigenous peoples such as Seneca and Lakota peoples. They did so because they believed the United States needed energy and irrigation to lessen the perceived threat of the Soviet Union in the Cold War (Barber 2005; Lawson 1994; Bilharz 2002; Rosier 2006; Rosier 1995). Or in the 19th and 20th centuries, US missionaries and teachers with particular religious values believed that it was morally acceptable to break up Indigenous families for the sake of saving Native persons’ souls and averting spiritual catastrophe (Stremlau 2005; Archuleta et al. 2000). In these US cases, direct and indirect harms of settlers’ crisis-response actions have devastating impacts on Indigenous peoples across ancestral, living, and emerging generations (Duran et al. 1998; Brave Heart 2000).

Colonial oppression that is allegedly defensible by real or perceived crises happens right now too. Today, people perpetrate colonialism in the name of responding to environmental crises – *climate change* being one prominent case. Responses to scientifically understand and mitigate climate change can harm or threaten Indigenous peoples. From scientific reports that provincialise Indigenous knowledge systems to wind power projects that desecrate Indigenous lands, there is no reason to believe that colonialism today is something other than an evolved practice of a familiar form of power. What are the practices of knowing the world that make

it possible to understand why someone would use crisis to mask colonial power? In this essay, I will focus on contemporary environmental *crises*, mainly climate change. But I understand that my speculations are possibly relevant to other *crises* as well as to other literatures on states of exception and necropolitics (Agamben 2008; Mbembé 2003). By climate change, I mean the destabilisation of ecological systems caused, to a significant degree, by the industrial emissions of greenhouse gases. Destabilisation is exacerbated by industrially aggressive (ab)uses of land and water, including certain extractive and manufacturing enterprises, methods of energy production, intensive agriculture practices, and resource-hungry travel, consumption, and recreational habits. One approach that I will take up involves how current crisis rhetoric on climate change is mediated by certain presumptions about the unfolding of time. By *unfolding of time*, I mean how the narrative of the significance of climate change is arranged according to a past, present, and future. As Candis Callison has shown, such presumptions of temporal unfolding affect how people come to know climate change, whether as crisis or as something else (Callison 2014).

Epistemologies of crisis involve knowing the world such that a certain present is experienced as new. Indigenous Studies scholars have done significant work on the temporal assumptions behind settler colonial power, such as ‘firsting’ (O’Brien 2010), ‘settler time’ (Rifkin 2017), and the ‘settler colonial present’ (Simpson 2017). They have critically exposed the liberal assumptions about the primacy of the settler state in national origin narratives (Turner 2006; Bruyneel 2007; Nichols 2013). I seek to add to these ongoing conversations by focusing in particular on *crisis*. I seek to unravel some dimensions of the structure of newness that permits the validation of oppression. In particular, I will discuss the presumptions of *unprecedentedness* and *urgency*. In contradistinction to an epistemology of crisis, I will suggest that one interpretation of certain Indigenous knowledge traditions emphasises what I will just call here an epistemology of coordination. Different from crisis, coordination refers to ways of knowing the world that emphasise the importance of moral bonds – or kinship relationships – for generating the (responsible) capacity to respond to constant change in the world. Epistemologies of coordination are conducive to responding to mundane and expected change without validating harm or violence. Epistemologies of coordination are not offered here as some sort of ultimate solution to the current challenges people across the globe are facing. Although I’ve no problem claiming that epistemologies of coordination are much needed approaches to knowledge in education, culture, and society. Their practice would go a long way to transform unjust and immoral responses to real or perceived crises.

Epistemologies of crisis

In public Anishinaabe intellectual traditions, there’s a story of history and futurity that I’ve heard widely and read about too in several places. The story discusses seven or eight fires, depending on the telling. Each fire relates to a particular era of time. One of the foci of the story as it unfolds across the fires is the persistence and flourishing of Anishinaabe peoples in the face of diverse challenges, including social and environmental challenges. One such challenge is the emergence and increasing power of the settler population in North America. During several instances of the story, Anishinaabe people are expected to make critical decisions about how to interpret the newcomers’ intentions. There is concern about whether the settlers will show the face of death or the face of kinship and allyship. One of the warnings of the story is that the face of kinship can be superficially presented to mask what’s really the face of death. There is also a time of false promises that are tempting to accept, but the ramification of acceptance is suffering (Benton-Benai 1988; Gaikesheyongai and Keeshig-Tobias 1994).

The exact time in which this story may be referring to is not important to me here. Rather, the story generates insights we can all discuss about different periods of time in which colonialism occurred in North America. Sometimes in these periods, settlers and other exploiters showed the face of kinship as a way to induce Indigenous persons to help them avert real or perceived crises. The Meriam Report in the United States (1928) declared an emergency regarding the impact of poverty on Indigenous peoples, blaming Indigenous ‘lack of adjustment’ but also US agricultural and land tenure policies and the funding for the Indian Service. One response, however, was for the Bureau of Indian Affairs under then director John Collier to rescue Tribes by corporatising Tribal governance. One of the vehicles of such corporatisation in the 1930s was the Indian Reorganization Act. The corporations were intended to facilitate the Tribally controlled lease of Indigenous lands, broker deals with extractive industries, and replace diverse Indigenous forms of governance with a one-size-fits-all American form of corporate governance. These measures were phrased as reform, economic development, and wealth generation, and partly inspired by forms of colonialism practiced in other parts of the world (Hauptman 1986). Of course, the outcomes of the Indian Reorganization Act, depending on the Tribe, often involved the undermining of valuable traditional forms of governance, increasing dependence on extractive industries and commercial agriculture, and instigating divisions within Tribal societies between the interests and privileges of elected officials and Tribal citizens. The policies of this era are in some cases looked at as affirming dimensions of self-determination that have been denied under previous US regimes. And Collier is a complicated historical actor to interpret, given their advocacy of Indigenous cultures and Tribal sovereignty (Rusco 1991). Yet today it is true that some Tribal governments struggle to diversify their economies, protect health, and implement culturally relevant programs and forms of governance due to some of the barriers to self-determination that can reasonably be attributed to the Indian Reorganization Act period (and evolving since then through other policies) (Rusco 2000; Clow 1987; Ranco and Fleder 2005). In terms of the Indian Reorganization Act, the crisis of the impacts of poverty served as a basis for some settlers to show themselves (problematically) as kin or allies. Under the guise of addressing poverty, it can be argued that US settler society expanded its control over Indigenous peoples.

A crisis epistemology, in the context of settler colonialism, might look something like this. A crisis is believed to be happening, whether real, genuine, or perceived. The crisis may be articulated as related to many problems, including health, economic well-being, environmental sustainability, cultural integrity, and religious salvation. But what makes some state of affairs of the world *crisis*-oriented is 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.

One possible structure of a crisis epistemology that I’ve sometimes seen is a presentist narrative. By structure, I just mean how something (here, a way of knowing the world) is organised, which includes what it’s made up of and how it’s put together. As a structure of crisis, a narrative is made up of time. A narrative is a way someone arranges the unfolding of time and articulates that arrangement to others. That a narrative is *presentist* means that time is put together (arranged) to favor a certain conception of the present as a means of achieving power or protecting privilege. Presentism of different kinds has been examined in Indigenous Studies as an exercise of colonial power and an effacement of the realities and conditions of that power. Audra Simpson, for example, writes that the ‘settler colonial present’ is one of ‘purported newness’. It is “... revealed as the fiction of the presumed neutrality of time itself, demonstrating the

dominance of the present by some over others, and the unequal power to define what matters, who matters, what pasts are alive and when they die” (Simpson 2017: 21). In this way, someone becomes so concerned with the *present* crisis as *new* that they question neither their own perspective nor where their perspective may derive its social origins.

In terms of epistemologies of crisis, I want to discuss two presumptions about the presentist unfolding of time. There are of course more presumptions. I focus on the following. The crises are *unprecedented*. That is, they are ones in which there are few usable lessons from the past about how to cope with the problems of today generated by crises. Sometimes today’s crises are considered to have the novelty of being complex beyond anything previously encountered. The next presumption is that the crises are *urgent*, which means that they must be responded to quickly. When responsive actions are taken urgently, certain harmful consequences of the actions to humans or any other beings, entities, or systems are considered to be unfortunate, but acceptable. Each of these two presumptions of presentism, and there are of course more, can easily be abused for the sake of advancing colonial power, even in cases where the perpetrators would swear they have only the best intentions.

The presumption of unprecedentedness makes it possible to willfully forget certain previous instances or lessons related to a crisis. Regarding climate change, for example, media, scientific, and political discourses proclaim that this the first time in which the United States has engaged in the resettlement of Indigenous communities due to coastal erosion in the Arctic, Pacific Northwest, and the Gulf of Mexico. These discourses reference conflicts about power (i.e. who gets to decide whether to resettle and how). They reference concerns expressed by Indigenous persons that *climate change resettlement* is just the latest term for further territorial dispossession. They cite complex legal, bureaucratic, economic, cultural, and political hurdles Indigenous peoples are facing in resettlement processes sponsored by the United States, state, and local governments. Of course, the unprecedentedness is not true. Going back *at least* to the 19th century, the United States has used complex laws, policies, tax codes, property rights, and financial instruments (i.e. mortgages, leases) to remove and resettle Indigenous peoples in ways that imposed conflicts of power, hurdles, and territorial dispossession. Cases include long (many hundreds of miles) removals, such as the forced resettlement of Tribes to Indian Territory (Oklahoma), but also policies to relocate Indigenous families to live permanently in large urban centers. They include the shrinking of vast Indigenous territories to exponentially smaller reservations and the complete liquidation of entire Tribal homelands into private property or public lands (e.g. national parks), which led to major demographic shifts. These resettlements ultimately served to further entrench the territorial power of the United States in Indigenous homelands. The reality that the United States has been in the *resettlement business* for generations is lost in discourses about climate change. Lost too are the lessons Indigenous peoples learned across their histories of resistance and problem-solving having experienced different forms of resettlement before those associated with climate change today (Marino 2012; Creppelle 2018; Krakoff 2011; Watkinson 2015). So the crisis of climate change resettlement perceived through a presentist narrative obscures how the United States has yet to come to terms with numerous historic instances of forced resettlement. When people get caught up in the imminence of presentism – which absents the violence and tribulations of diverse ancestors – their actions run severe risks of retrenching colonial power through evolved but familiar practices that will be harmful to living and future generations.

The presumption of urgency suggests that swiftness of action is needed to cope with imminence. There either may be moral sacrifices that have to be made or ethics and justice are not elevated to a level of serious attention. The urgency of the cold war and national security, for example, made it somehow acceptable for US politicians to be open about the sacrifices that

they believed were justified. In one case, during the inundation caused by the opening of Dalles dam in Oregon in the 1950s, a major fishery, Celilo Falls, was inundated. A US Senator stated, “our Indian friends deserve from us a profound and heartfelt salute of appreciation. ... They contributed to [the dam’s] erection a great donation – surrender of the only way of life which some of them knew” (Barber 2005: 4). Regarding climate change, there is a similar suspension of the consideration of ethics and justice. Rapidly growing literatures and technical reports are showing that, in the United States and globally, clean energy solutions for mitigating the rise in global average temperature are unjust or harmful to Indigenous peoples across the planet. The injustices and harms include economic deprivation and land dispossession and desecration. They also include the silencing of Indigenous leadership, knowledge, and voices in law, policy, and administration pertaining to mitigation measures (Suagee 2012; Bronin 2012; Beymer-Farris and Bassett 2012; Dussais 2014; Avila 2017; Nguh and Sanyanga 2013; Tauli-Corpuz and Lynge 2008; Howe 2019; Hoang et al. 2019). Victoria Tauli-Corpuz and Aqqaq Lyne document some of the early precedents of this injustice in climate mitigation programs. In the 1990s, the Forest Absorbing Carbon Dioxide Emission Foundation (FACE) of the Netherlands and the Uganda Wildlife Authority (UWA) created a carbon offset plantation of eucalyptus trees at Mount Elgon National Park of Uganda that would offset energy utilities in the Netherlands. They write that:

While project coordinators claim that the plantation has improved the lives of the people around the park, the indigenous people themselves (the Benet) say the exact opposite. After the declaration of Mount Elgon as a national park in 1993, the UWA violently forced the residents of Mount Elgon to leave the area and move to caves and mosques in neighboring villages. Park rangers killed more than 50 people in 2004. In addition, the project took away what little income the people had from their lands and crops. The villagers are not allowed to graze their cows and goats in the area or to obtain food or important traditional materials from the forest.

(Tauli-Corpuz and Lynge 2008: 16)

While the conditions that make such violence possible persist today, many climate change advocates are adamant that such morally uncontrolled and unwise measures must happen now to avert crisis before oppression can be addressed. Expression of this adamancy is a daily occurrence in some places. I recently read an article in *Vice* in which the journalist interviewed Jonathan Morgan of the advocacy group Extinction Rebellion, who said in 2020: “I can’t say it hard enough. We don’t have time to argue about social justice” (Dembicki 2020: online). Yet, if a forest conservation project displaces Indigenous peoples from their lands, for example, where is the better environmental future for that Indigenous peoples? A similar question can be posed to energy coming from wind, solar, biofuel, and nuclear sources. Catherine Sandoval shows in their research how the United States never fairly included Indigenous peoples in the energy grid system (Sandoval 2018). Given this reality, ‘social justice’ would be necessary for Indigenous peoples to benefit from and be leaders in renewable energy. In British Columbia, the Site C mega dam was conceived in ways that violated Indigenous peoples’ rights and treaties and had numerous negative environmental impacts (Hendriks, Raphals, Bakker and Christie 2017). The dam will provide energy to the province that will crowd out from energy markets some First Nations who were building renewable energy projects on their own (Gilpin 2019; Cox 2018). So, again, projects for clean or renewable energy or carbon footprint reduction will repeat the moral wrongs and injustices of the past. Hence the presentist narrative gets caught up in immi-

peoples, and retrench colonial power. Again, we must make careful judgements about the face of kinship (stopping climate change) when we seek to take action to mitigate and prepare for climate change.

In thinking through the implications of unprecedentedness and urgency, climate change, as a concept, is a rhetorical device that people invoke so they can believe they are addressing a crisis without having to talk about colonial power. Epistemologies of crisis are presentist in their narrative orientation. Presentist orientations can favor dimensions of experiencing time in ways that presume unprecedentedness and urgency. Epistemologies of crisis then mask numerous forms of power, including colonialism, imperialism, capitalism, patriarchy, and industrialisation. The literature on colonialism and environmental crises is conveying just this point (Stein et al. 2017; Gergan et al. 2018; Anson 2017; Hurley 2020). Mabel Gergan, Sara Smith and Pavithra Vasudevan refer to certain apocalyptic and catastrophic deployments of the anthropocene and climate crisis as “temporal sleight of hand” (2018: 2). In their study examining “scientific debates and cultural representations”, they claim that many “imaginings of apocalypse” work to “escape specific culpability (for instance, in processes of settler colonialism, capitalism, or imperialism) and instead center a universal human frailty that ends with triumph, a clear moral, and a clean slate” (Gergan et al. 2018: 2). The feeling of imminence that accompanies presentism leads people to obscure and overshadow how their actions relate to the persistence of different forms of power.

Epistemologies of coordination

Basil Johnston, from their work with Anishinaabe elders and archives, describes an Anishinaabe story that discusses one of the origins of humans. Humans and animals live interdependently: “[w]ithout the animals the world would not have been; without the animals the world would not be intelligible” (Johnston 1990: 49). Animals provided nourishment, ‘shelter’, ‘joy’ and voluntary ‘labor’ on behalf of humans. Humans and animals could communicate directly with one another. Yet humans subjected animals to abuse, taking for granted the services that animals had previously performed ‘without complaint’. Johnston writes that:

At last, weary of service, the animals convened a great meeting to gain their freedom. All came at the invitation of the courier. The bear was chosen to be the first speaker and to act as chairman of the session. He explained the purpose of the meeting. ‘We are met to decide our destiny. We have been oppressed far too long by man. He has taken our generosity and repaid us with ingratitude; he has taken our labors and repaid us with servitude; he has taken our friendship and fostered enmity among us’.

(1990: 50)

In this excerpt, humans couldn’t possibly survive and flourish without animals. Yet animals were being abused. There is an ecological crisis. Yet what generates the crisis in the story is when one group – humans – abused the relationships of interdependence. Humans took domineering actions against animals that failed to demonstrate care, reciprocity, or respect for consent. If the interdependence of species can be related to environmental protection, then repairing relationships of justice and equality are inseparable from actions needed to achieve biodiversity conservation and climate change mitigation. This story is not a presentist narrative. For crisis 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. Something like a crisis cannot be understood without appealing to the history of moral bonds between the beings and entities affected by a real or perceived crisis.

Stories like this one published by Basil Johnston suggest to me an epistemology of coordination, not an epistemology of crisis. Epistemologies of coordination emphasise coming to know the world through kin relationships. There are certainly a lot of ways to talk about and define the meaning of kin. Here I want to take a particular focus. Kinship relationships refer to moral bonds that are often expressed as mutual responsibilities. The moral bonds are similar to familial relationships in the sense of local and broader families that can engage *responsibly* in coordinated action together to achieve particular goals that they have. Examples of kinship relationships are care, consent, and reciprocity, among others.

Indigenous scholars have written about how Indigenous communities came to know and address US settler colonialism through harnessing kinship to generate coordinated responses. Mishuana Goeman has interpreted a wide range of contemporary and historic Indigenous women writers and artists. Goeman's work shows how Indigenous communities develop and renew kinship relationships to achieve coordination in challenging times, such as during the era where the United States relocated many Indigenous families to large urban areas (Goeman 2009; Lone-Knapp 2000). They write that:

As Seneca scholar Faye Lone suggests, it is important to look at our social, political, and certainly cultural relationships in a 'frame-work that allows relatedness to a flexible spatial community, one that allows for strong, mobile, symbolic identity that underlies, and perhaps even belies, external influences'.

(Goeman 2009: 185)

In the same article, Goeman also writes:

Often, it was necessary for women to practice gendered relations outside the cultural forms learned from their mothers, aunts and grandmothers. These practices of relating to each other were not 'outdated' in the city, but instead the elements of these practices that persisted were and continue to be vital to Native navigations in urban centers. In many ways, the lack of the dominant culture's understanding of Native peoples' capacity to reach out to others beyond their specific Tribal Nation was a major flaw in the goals of Relocation policy. In fact, the propensity for sharing where one is from and learning to live with each other comes from thousands of years of experience living on this continent together – it is as instinctive as breathing.

(Goeman 2009: 175)

Goeman's work focuses then on understanding how new networks are formed that rely on moral bonds that can be associated with different people and practices. For Goeman, what defines Indigenous peoples are not only particular cultural practices. Rather, it is a capacity to renew important kin relations in ways that support coordination in response to change (Goeman 2009).

Goeman cites Susan Lobo's work on urban clan mothers. Lobo writes that urban clan mothers are leaders and facilitators in networks of relationships:

Key households that provide a degree of permanence in the swirl of constant shifts and changes in the highly fluid urban Indian communities. These households gathering spots often provide short term or extended housing and food for many people, health and healing practices and advice, a location for ceremony emotional and spiritual support,

entertainment, and transportation and communication resources. They are also often vital spots of linkage with more rural communities and tribal homelands.

(Lobo 2003: 505)

In my view, these households and places are based on kinship relationships that are valued because of their capacity to be responsive to change. This includes the crisis-like changes of urban relocation in the mid-20th century. Goeman's and Lobo's work, read in relation to Johnston's story, at least suggest for me what I interpret to be epistemologies of coordination. There is a presumption of constant change (not presentism). But the strategy for response involves fostering kinship relationships. And kinship relationships have high standards responsibility, with special attention to relationships of care, reciprocity, and consent, among others.

Diverse Indigenous Studies research has demonstrated epistemologies that I would interpret as centering how to organise a society to be coordinated in the face of realities of constant change. Vicente Diaz's research Micronesian seafaring knowledge discusses the relationship between the science of navigation and motion. Instead of humans being knowers who move around stationary islands, it is rather the islands that move. Kinship relationships are critical to the formation of coordination in a constantly moving world (Diaz 2011). Brenda Child's historical research on women and conservation traditions (e.g., wild rice) demonstrates how Ojibwe women exercised central responsibilities in networks of coordination that were critical to navigating crises caused by colonialism. Ben Colombi's work with Nez Perce people on their resilience and adaptive capacity emphasises the kinship relationships, including leadership traditions, that supported coordinated responses to harsh colonial conditions (Colombi 2012).

Epistemologies of coordination are focused just as much on responses to crises. Relocation, for example, was an actual crisis for those who experienced it. Colonialism has inflicted numerous crises on Indigenous peoples. At the same time, there is no presentist interpretation of crisis and no sense of imminence. Rather, epistemologies of coordination come to know the world through the state of kinship relationships. A world or situation that has members with active kinship relationships of care, consent, and reciprocity is one where the members have the capacity to respond in coordinated ways to change that are supportive of their mutual well-being, whether the members are humans, animals, and/or diverse others. A world or situation lacking in these bonds is one in which some members will respond to change in ways that lead to deeply unjust and immoral actions and outcomes. To see the world through kinship relationships that are central to coordination requires a non-presentist mode of knowledge and a capacity to not be caught up in imminence. For one has to have a sober and detailed conception of the history of kinship relationships and how they have changed or evolved over the years based on changes like, say, US colonialism. As a massive breach of kinship, especially in terms of violations of care, consent, and reciprocity, it becomes clear that today's situation or world must attend to the establishment or repair of those relationships: whether that is a process that Indigenous peoples do on their own, no matter what the rest of the world does, or whether that process is one that allies also participate in.

No solutions without kinship

Indigenous scholars and leaders acknowledge that the world today is far from being a place where what I am calling epistemologies of coordination are common. People do not come to know the world through the degrees of kinship relationships. Mary Arquette writes reflectively

their views of how Haudenosaunee people have altered their relationships with some non-human relatives, violating ancient kinship relationships in certain cases, such as the over-harvesting of fur-bearing animals (e.g. beavers) during the transatlantic fur trade period several hundred years ago. They write in the context that Haudenosaunee were responding to complex colonial forces during the fur trade. Arquette traces out what the implications are for environmental sustainability today, without apologising for the ramifications of kinship that may have been violated historically:

When a person decides to forget ethics requiring respect for the natural world, it is not difficult for that individual to also lose respect for themselves, their families, and other human beings. In this case, not only did the fur bearers suffer from this destruction, but Haudenosaunee elders, women and children also suffered as a result of the violence, alcoholism, jealousy, mistrust and family and community breakdown that resulted. It took a reminder from our Creator and a spiritual revival for our people to begin to move away from these destructive behaviors. Many believe that if we had not been reminded to return to our own spiritual beliefs, then the Haudenosaunee may not have survived as distinct people. The struggle goes on to this day. In fact, some may question whether our communities will ever recover from the wars that we waged on the fur bearers. We certainly will never forget what happened and to this day, continue to have a special obligation to the fur bearing animals to make amends for our past mistakes.

(Arquette 2000: 92–3)

For Arquette, the relationship between humans and animals, among other beings of non-human world, has been changed over time to the point where many moral bonds are absent. For the war waged against the beavers – at least in my interpretation – was a violation of kinship in terms of care, consent, and reciprocity.

In Arquette's philosophy, it is critical to note that they have no reason to believe that the relationships with nonhumans will be repaired: "[i]n fact, some may question whether our communities will ever recover from the wars that we waged on the fur bearers" (Arquette 2000: 92–3). This statement resists an epistemology of crisis. If the focus of knowing the world is on kinship relationships, then it is quite possible to wonder whether in today's time that it is possible to restore kin. For kinship relationships cannot be established overnight. Many of the most important kinship relationships take time to develop. There is no guarantee that during the time it takes to develop those relationships, that certain issues within ecological systems will simply be repaired. The weight of kinship is very different from the sense of imminence in crisis epistemologies.

The skepticism inherent in a number of Indigenous authors is intertwined with their adamanacy about seeking sustainability and justice in the face of climate change. Skepticism is not necessarily the right word. It is more of a realism, where realism contrasts with crisis-oriented feelings of imminence. As Dan Wildcat discusses:

In North America many indigenous traditions tell us that reality is more than just facts and figures collected so that humankind might widely use resources. Rather, to know 'it' – reality – requires respect for the relationships and relatives that constitute the complex web of life. I call this indigenous realism, and it entails that we, members of humankind, accept our inalienable responsibilities as members of the planet's complex life system, as well as our inalienable rights.

(2009: xi)

Relationships and relatives are precisely those kinship relationships. For Wildcat, what I read as an epistemology of coordination emphasises the significance of kinship (e.g. ‘relatives’, ‘complex web of life’) for the coordination needed to live in a complex world.

Jeanette Armstrong, who has written and organised widely on the importance of caretaking for the land (Armstrong 1998), expresses realism about whether humans will be able to be sustainable:

That issue in our traditional teachings is: every year, continuously, the people who are caretakers, and people who are careful of the harvest, whoever they might be, are reminded at our ceremonies and at our feasts, that that is what our responsibility and our intelligence and our creativity as human beings are about. That’s what the gift of being human is about. If we cannot measure up to that, and we cannot live up to that, we’re not needed here, and we won’t be here. It’s really becoming evident that we’re a huge percentage in that direction of not being here.

(Armstrong 2007: 4)

Armstrong’s statement resists an epistemology of crisis and has a sense of realism. Similar to previous authors, they speak of kinship and coordination, including care, reciprocity, responsibility, ceremony/feasts, and intelligence/creativity (autonomy).

In my reading of their work, de Oliveira Andreotti, Stein, Ahenakew and Hunt (2015) have outlined an approach to living in times of crises that emphasise what I am referring to as kinship. ‘Crisis’ and ‘unpredictability’ can, “... leave little time and few spaces for exploring the complexities, tensions and paradoxes of decolonizing work without an immediate need for resolution, coherence and prescriptive action” (de Oliveira Andreotti et al. 2015: 22). Their “social cartography approach” emphasises “hospicing”, among other approaches, which:

Would entail sitting with a system in decline, learning from its history, offering palliative care, seeing oneself in that which is dying, attending to the integrity of the process, dealing with tantrums, incontinence, anger and hopelessness, ‘cleaning up’, and clearing the space for something new. This is unlikely to be a glamorous process.

(de Oliveira Andreotti et al. 2015: 22)

Their work suggests that what I am calling epistemologies of coordination are likely to be rather incompatible with epistemologies of crisis. For part of an epistemology of crisis involves their being solutions that can occur quickly, maintain the current state of affairs, lack any sense of realism, and further entrench power. Moreover, though I did not focus on this here in this essay, there is an underlying conception of heroism involved in epistemologies of crisis that is morally problematic (de Oliveira Andreotti et al. 2015; Whyte 2018).

Epistemologies of coordination are not presentist. They accept the realism that some kinship relationships take time to develop, which means that they are not necessarily going to always buy into imminence. The sense of imminence in epistemologies of crisis makes some people believe that it is possible to make a transformation in the world in ways that ensure societies can bounce back to some current state of affairs. Given that, for many Indigenous peoples, the current state of affairs is one that people are trying to move beyond given how it has been shaped negatively by oppression. This means that what appears as an acceptance of an inevitable end is more akin to a deep motivation to create a better world. For a better world must arise through actions that honor the significance of ethical and just relationships and that remain vigilant to the operation and repetition of oppression. Epistemologies of coordination have a sense of realism to them.

Epistemologies of crisis are likely to be incompatible with this way of knowing. People caught up in epistemologies of crisis place an emphasis on presentism. This emphasis makes it so that they are obsessed with saving some conception of the current state of affairs because they feel the imminence of crisis. The obsession obscures how everyone else may experience today's world. And the sense of imminence overshadows the realism needed to remember how colonial and other forms of power engendered the current state of affairs and how these forms of power are poised to retrench.

Conclusions

Indigenous responses to *crises* are certainly adamant and compelling. But they are not reliant on certain epistemologies of crisis. Such an epistemology organises knowledge in ways that emphasise some narrative of the imminence of a threat to *the present*. Without any emphasis on kinship relationships and the time it takes to develop them, epistemologies of crisis can validate the violation of moral bonds. Epistemologies of coordination are very different – but not less responsive to serious changes that can be deemed crisis level. Epistemologies of coordination organise knowledge through the vector of kinship relationships. They do not tradeoff kinship relationships to satisfy desires for imminent action. As crises like climate change continue to motivate people to take swift, solution-oriented actions, epistemologies of coordination draw attention to the problems of how presentism and imminence can betray ethics and justice. They have a realism to them. Epistemologies of coordination assess the impacts of actions by their contributions to the quality of kinship relationships.

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