Fuelling toxic relations

Oil sands and settler colonialism in Canada

Lena Gross

Lena Gross is a postdoctoral fellow at the Center for Sami Studies at the UiT The Arctic University of Norway. Her research interests include political ecology and environmental anthropology in Canada, Norway and the Arctic. Her email is lena. gross@uit.no.

Fig. 1. Lac La Biche Lake in summer 2014.

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1. I decided against naming the specific First Nation that interlocutors belonged to because it would make it impossible to guarantee their anonymity. All names have been changed.

Anderson, D.G. et al. 2017. Architectures of domestication: On emplacing human-animal relations in the North. Journal of the Royal Anthropological Institute (N.S.) 23 (2): 398-418.

Baker, J. 2019. Bear stories in the berry patch: Caring for boreal forest fire cycles of respect. In Extracting home in the oil sands: Settler colonialism and environmental change in Subarctic Canada (eds) C. Westman et al. London: Routledge. 'It's not only the bottles [of store-bought water]', Marc said. 'People swim in the lakes; we eat fish that lives in the water that we try to avoid. It doesn't make sense. Or, I mean, it does. It's about control, you see? [...] You see, the water here could be really dirty. And we can't tell. So, it's better to take control and to buy water. Still, it's very sad.'

These were the words of Marc, an Indigenous¹ interlocutor, during my fieldwork in Northern Alberta, Canada, in 2014. Marc was the uncle of one of my friends and respected in his nation for his knowledge about Cree history and traditions. We discussed the pros and cons of taking bottled water along rather than drinking from freshwater sources when going to 'the bush'.

Northern Alberta is infamous for its oil sands extraction, a process that is accompanied by large-scale deforestation, habitat destruction, toxic wastewater production and greenhouse gas emissions.

The density and types of carcinogens, hormone-disrupting chemicals and other harmful by-products released in the environment during oil sands extraction are not agreed upon among industry officials, independent scientists, governmental agencies, environmental organizations and the local population. However, people living in the region, many of whom are Indigenous and oil sands workers, have reported respiratory illnesses and skin reactions, and several communities have seen an increase in specific cancer types in recent years (Westman & Joly 2019).

Besides risks to their health, many other aspects of local inhabitants' lives are affected by industrial pollution, such as food security, cultural practices and beliefs. Indigenous people are often disproportionally impacted by environmental pollution in rural areas. Their risk of exposure also differs from other minority groups in North America. It is more common in Indigenous communities to have subsistence lifestyles, and for spiritual practices and other cultural behaviours to be land-based (Hoover 2017: 12). Additionally, more visible and indisputable pollution accompanies the growth of oil sands extraction: the workers' littering around the camps and extraction sites.

Water as relational

Northern Alberta is the homeland of Dene, Cree and Métis nations, and among its most distinctive physical features are its wetlands, lakes and meandering rivers. Waterways link settlements, human and non-human beings and landscapes to each other, and through this, they bring food, relations and life to everyone living in the region.

In Cree, Dene and Métis traditional worldviews, water is relational and full of meanings. For example, water is one of the Creator's first gifts to the people (LaBoucane-Benson et al. 2012). Waterscapes are also often seen as liminal spaces that enable communication and interactions between beings of all kinds, sometimes even access to the power of a non-human person. Lakes are like membranes and doors for powerful beings between different levels of reality (Wheatley & Westman 2019: 162-163). Drinking freshwater while being out on the land is one way to keep these relations alive. Without this background knowledge, Marc's decision to bring bought water would not be as significant when going to the bush. It becomes even more substantial as we were on our way to pick traditional medicine and as Marc was teaching me about relations throughout the day.

What happens to water passages when their water becomes contaminated, the water level is sinking or



the lakes are drained? What happens when lakes are no longer lakes but toxic ponds containing mining waste and Indigenous knowledge and cosmologies of water as lifebringer are threatened because consuming water suddenly is connected to cancer? What does it mean for Indigenous worldviews and environmental knowledge when life sources such as land- and waterscapes become toxic? What consequences arise from oil sands extractions that cause polluted, inaccessible or physically changed waterand landscapes.

This article engages with these questions by looking at different forms of dispossession connected with an Indigenous understanding of land and water as relational. The findings are based on 14 months of ethnographic fieldwork in Treaty 6 and 8 territories between 2013 and 2015, when I was based in Lac La Biche, Alberta, Canada.

Losing home

An older Métis woman called Mary told me, during a chat at a Christmas market at the historical site of Lac La Biche mission, how she and her family had lost their trapline. Traplines are hunting territories assigned to a specific person or family with various socio-cultural and historical meanings and with legal rights attached to them. Mary was selling homemade moccasins, and I joined her for coffee during a quiet moment. She explained how new infrastructure built for oil sands extraction had intersected her family's trapline and how some workers had deliberately destroyed her family's campsite, ultimately resulting in her family's loss of their trapline.

The workers' attitude was 'toxic', she said. According to Mary, they had no respect for the Indigenous population and thought it was a joke to throw empty beer cans and vodka bottles at campsites and demolish their cabins. The compensation Mary and her family got afterwards could not bring back their trapline. 'It was my home, you know,' she said after a minute's silence.

Mary continued the conversation, saying that other Métis families had sold their traplines to oil companies as they were told that they could get the land back after the oil sands extraction was finished. However, as the landscape was changed irreversibly and due to the prolonged period between selling the land and its reclamation, which disrupted the continuance of trapping traditions and transferal of trapping knowledge, this turned out not to be an option after all. Two other Métis women joining our conversation confirmed this was the case.

What I learned from my Métis and Cree interlocutors was that 'home' far exceeded the physical boundaries of their house. Historical sites and places of ceremony or



Fig. 2. Syncrude tailing ponds and upgraders, 2017.

Black Elk, L. & J.M. Baker 2020. From traplines to pipelines: Oil sands and the pollution of berries and sacred lands from Northern Alberta to North Dakota. In Plants, people, and places: The roles of ethnobotany and ethnoecology in Indigenous peoples' land rights in Canada and beyond (ed.) N.J. Turner. Montreal: McGill-Queen's University Press.

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land-based traditional practices similarly defined what was considered and experienced as home. Traplines played a significant role when I asked what interlocutors saw as their home. Especially older Métis interlocutors told me how they had grown up on the trapline when they were not at school and that the locations they lived in during trapping were not camps in a European sense but homes (see also McIlwraith 2012).

Disrupted relations

I was told repeatedly during my fieldwork that the disrupted relations to berry patches or other sentient beings through oil sands operations could not easily be repaired or regained, especially as reclaimed land looks different and because interactions were interrupted for a long time until the areas were accessible again. Marc and his niece explained to me that relations were also kept alive by storytelling. The land was like an archive, holding the past in its landscapes. Coming to certain places triggered the telling of specific stories linked to the land, and through telling these stories, knowledge about the land and its history was passed on.

Once the landscape became unrecognizably changed, the 'archive' it was holding was also in danger of getting lost. Without physical access to specific places, their stories would be forgotten. In short, the plants, animals and other sentient beings in reclaimed areas had lost their emplaced relationships with their human companions so that humans were forced to abandon rituals and practices like storytelling, harvesting, giving thanks and hunting that would have otherwise kept these relationships alive (see also Joly 2019: 145).

Tara Joly shows in her research on Métis land use, oil sands extraction and land reclamations in the same region that the process of reclaiming does not necessarily undo the previous displacement. Reclaimed landscapes result from processes in which landforms and ecological functions are reconstructed after oil sands extraction is complete. The overall aim of these processes is to create a functional, ecologically repaired landscape (Joly 2019: 143) without considering the particular cultural and social aspects of the affected communities. The focus on the usefulness of landscape also shows a view of land not grounded in reciprocal relationships but as reduced to its productivity. This focus erases the relational, cultural and spiritual aspects of land and neglects ecological complexity and diversity. The view that reclaimed landscapes are forever altered (see also Joly 2017) is also confirmed on a different level by biologists who have pointed out that it is impossible to re-create muskeg (boreal peatlands), one of the main characteristics of the region (Rooney et al. 2012).

Marc's doubt about whether we should bring bottled water pointed towards a different type of dispossession. He could no longer assume that the water out in the bush was drinkable, which instilled his traditional lands with a sense of alienation. Others were sceptical of clams and fish harvested and caught in certain areas. Many had stopped eating ducks as they could not know on which waters they had landed. While some Elders of one of the First Nations in the region had told me that water and fish no longer tasted as before, others disputed that. There was also disagreement about what could be safely consumed. All agreed, however, that freshwater still tasted better than bottled water. However, knowing what was safe to consume became a constant source of stress. It was easier when there were visible signs that something was not right, like skin rashes after being in the water or finding malformed fish.

As water contamination by hormone-disrupting chemicals, heavy metal particles or carcinogens is invisible or only detectable through secondary sources like malformed fish, one of its significant impacts is uncertainty. Without a thorough investigation, one cannot know if the water is drinkable or if it might harm one's health. Therefore, it is not the sensory perception that leads to alienation; instead, it is the mismatch between sensory experience and intellectual uncertainty that causes a sense of 'dysplacement'. Anthropologist Deborah Davis Jackson developed the concept of dysplacement to describe a type of displacement that is invisible and psychological rather than physical, and therefore is often overlooked. She describes dysplacement as a profound sense of alienation from ancestral landscape caused by environmental pollution. Her concept describes the constant tension between being simultaneously firmly 'emplaced' and eerily 'displaced' (Jackson 2011: 607-611).

The uncertainty about which direct, accumulative or delayed health impacts pollution would cause or which activities were riskier than others is linked to the constant experience of distress, especially as the danger was connected to the land that was home. I recognized this tension in my interlocutors' relationship to the land, as they were simultaneously deeply drawn into ongoing relations with and through the land and alienated by uncertainty about the multiple impacts of extraction and pollution.

Polluted relations

Cora, an Indigenous interlocutor, had type 2 diabetes, which started shortly after she took up work in the oil sands. While her doctor saw the 12-hour shifts, unhealthy canteen food and lack of exercise as the triggers for her illness, Cora disagreed. Although not disregarding the medical explanations, she talked about disrespect as the cause of her disease. When I asked what she meant by this, she told me about the misogynist and racist comments she experienced as an Indigenous woman on an almost daily basis. Additionally, she cited many of her co-workers' constantly dismissive remarks about the land, calling it ugly and boring and depicting it as a wasteland.

She also described how it hurt her to be part of the industry that destroyed so much of her homelands. 'How could I be healthy when it is like this?' she asked me. For her, grounded in traditional Cree thinking, health was not an individual phenomenon connected to the individual's physiology. Rather, she saw it as closely related to social relations with other people, the land, spirituality and cultural identity. The extraction sites and workers' camps themselves had become unfamiliar, and she felt alienated by the work she was doing. Even though she worked 'at home', she also lost parts of her home through her work. The relations she observed and experienced, both between people around her and between people and the land, had











(From left to right, above to below)

below) Fig. 3. Saskatoon berry flowers overlooking the Athabasca River, Fort McMurray, 10 June 2020. Fig. 4. Seismic cutlines viewed from the plane from Fort McMurray to Fort Chipewyan, November 2017. Fig. 5. The end of a good bush meal in northern Alberta, 2017. Fig. 6. Syncrude reclamation area, 12 September 2018.

Fig. 7. Boreal forest ground cover, 2015.

Fig. 8. Suncor Upgrading Plant, 29 August 2018.

Fig. 9. Building a pipeline, 2014. Fig. 10. Devon private road, 2013. Fig. 11. Blueberries and cranberries near Fort Chipewyan, 22 August. Fig. 12. Cowberry in northern Alberta, 2017.







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become 'toxic' instead of being a source of strength. The dysplacement she felt affected not only her mind but also her body.

Dispossession through pollution had led to the breakdown of relations, as Cora's example shows. Michi Saagiig Nishnaabeg scholar Leanne R. Simpson explains: 'Our knowledge comes from the land, and the destruction of the environment is a colonial manifestation and a direct attack on Indigenous Knowledge and Indigenous nationhood' (Simpson 2004: 377). Acceptance of land and water contamination as a by-product of extractive endeavours is evidence of processes that disrespect both land and people and render them pollutable (Voyles 2015). This rendering is grounded in settler colonialism and ideas of frontiers as resource storerooms, which are opposed to Indigenous concepts of home (see also Anderson et al. 2017: 401).

Environmental destruction, in whichever form, therefore, also pollutes relations between Indigenous nations and the settler state. The oil sands have been part of the land for as long as people can remember, and Indigenous Nations used bitumen traditionally to make canoes waterproof. Métis anthropologist Zoe Todd argues that they are also remains of ancestors of the non-human inhabitants of the land, and therefore relational. By their industrial extraction, oil sands become dangerous, deadly for fauna, flora and humans. Oily materials are not violent in themselves. However, these have been fashioned into a 'weapon against fish, humans, water and more-than-human worlds' through colonial and extractivist ideologies (Todd 2017: 107).

Dispossession by pollution

There is a pattern of dispossession through pollution (Shapiro & Kirksey 2017: 489) all around the oil sands extraction sites where berry patches (Baker 2019; Gross 2019: 88), plots of land (Baker 2019; Gross 2019: 90; Joly 2019) or bodies of water (Wheatley & Westman 2019) disappear, get changed beyond recognition or are made inaccessible to the local population. Dispossession is often caused by displacement and dysplacement, which occur through different mechanisms and do much more than force people away from their homes. Homes are, in this case, understood, as shown above, as more than one's registered address (see also Longley & Joly 2018).

Dispossession by pollution is justified as a measure of protection. Arguments from industry and state authorities are that the access restrictions are grounded in safety concerns and therefore imposed out of a concern to protect people. It is, however, a concern that has a paternalistic character, as it betrays the assumption that those wishing to enter cannot take care of themselves and need to be kept safe. Additionally, this argument contrasts with demands for specific knowledge about located, environmental effects of industry, whereby inhabitants of the land might continue to live in it while protecting themselves.

In the context of settler colonialism, dispossessions by pollution are signs of double domination, where land first gets appropriated and afterwards is made inaccessible to its original inhabitants to 'protect' them from the effect of the destruction to which it was subjected. Rather than seeing the invasion/colonialization as an event, settler colonialism refers to a structure of invasions that is still ongoing (Wolfe 1999: 2, 163).

Colonizers came as settlers, which points to the crucial issue that differentiates settler colonialism from colonialism. Instead of extracting the labour of its colonized people as its primary goal, settler colonialism aims to remove land and land resources from its Indigenous population to make this land a permanent home for settlers (Hoogeveen 2015: 122). Nowadays, the focus has slightly changed as, rather than settlement, an expansion of industrial endeavours is usually at the core of dispossessions. To achieve the legality of both settlements and industrial developments, Indigenous sovereignty, political authority and existence on the land need to be erased (Stark 2016).

Tending to relations in a toxic world

Marc took precautions, like taking bottled water to the bush, but he did not refrain from swimming or eating fish. Another time when he and his partner took me with them on the land, we picked berries, crushed them in a plastic bag to make berry juice, and mixed the result with the bottled water. They explained to me how the berries would gift us the strength needed for walking in the uneven and overgrown terrain and showed me how to give thanks back by saying a prayer and leaving a tobacco offering.

Marc, like others, refused to give up crucial practices necessary to keep alive relationships both with the land and with non-human beings. For him, these practices were tightly connected to Indigenous identity and sovereignty. However, he was as well informed as possible and balanced the need for tending to these relations with the attempt to protect his physical health.

Like Marc, Catawba Nation ethnobotanist Linda Black Elk and anthropologist Janelle Baker, who is of Métis ancestry, practise resistance to the dispossession of relations by expanding extreme oil and gas extraction in Indigenous peoples' traditional territories. Their opposition is also (partly) expressed through 'caring for, and tending to, our relationships with people and other species. For us, wild berries, as enduring sources of delicious, healthy food, symbolize these relationships' (Black Elk & Baker 2020: 173).

A more visible resistance-by-tending-to-relations can be seen in the annual Tar Sands Healing Walk between 2010 and 2014. During this event, founded by a coalition of Indigenous women and led by Elders, members of local communities and allies from all over the world undertook a 14-km prayer walk through a heavily polluted extractive zone close to Fort McMurray, the so-called heart of the oil sands extraction. The goal was to heal the land and its people by acts of tending and caring while simultaneously drawing international attention to the issue, interlinking Indigenous ways of tending with environmental activism. Tending to relations was in all three examples a way to resist dispossession, and therefore fight against settler colonialism.

Conclusion

As I have shown, pollution is much more than just an environmental issue for the local Indigenous population of Northern Alberta. Its invisible nature and unknown longterm health impacts are emotionally draining and affect how people living close to extraction sites relate to their surroundings. The need to not let pollution define their world is a constant balancing act. Tending to relations is often seen as just as necessary for good health as avoiding toxins entering their bodies. The polluting of water, air and land is disrespectful towards non-human beings and people who live in a reciprocal relationship with the nonhuman world. It attacks Indigenous worldviews, health and sovereignty.

Pollution is therefore not seen as a by-product of industry; it is made sense of as an act of settler violence and a tool for dispossession. The insistence on living in a homeland and not in an oil sands region, to see the land as living and not as a commodity, and to tend instead of extract has become an act of refusing the settler state's power to define the world Marc, Cora and others were living in. However, this refusal cannot reverse the irreparable damage already done to the land. Nor can it undo the experiences of ongoing violence.