

Refracting the State Through Human-Fish Relations: Fishing, Indigenous Legal Orders and Colonialism in North/Western Canada

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Abstract

This piece explores how human-fish relations in a) Paulatuuq, NWT in arctic Canada and b) amiskwaciwâskahikan (Edmonton, Alberta, Canada) in Treaty Six Territory act as a 'micro-site' where Indigenous peoples have negotiated, and continue to negotiate, concurrent and often contradictory 'sameness and difference' vis-à-vis the State and its ideologies about lands, waters and the more-than-human in order to assert and mobilize imperatives of reciprocity, care and tenderness towards fish as more-than-human beings. I put forth a theory of fish 'refraction' and dispersion, which is a process through which Indigenous peoples in Paulatuuq and amiskwaciwâskahikan bend and disperse state laws and norms through local relations to fish and waters. Exploring the ways that humans and fish alike work to navigate the complexities and paradoxes of colonialism in Alberta and the Northwest Territories in the past and present, I theorize a fishy and watery form of refraction of state laws, imperatives and colonial paradigms by Indigenous peoples in Canada. In a time of rapid fish decline across the country --which some argued is tied to the global realities of the Sixth Mass Extinction Event-- I argue for the urgency and necessity of centering human-fish relations, alongside other fleshy engagements, in contemporary and future political struggles.

Keywords: Paulatuuq, amiskwaciwâskahikan, human-fish relations, refraction, law

Western science is largely aimed at exploration, Native science is aimed at sustainability. We exist in a very narrow gap, as we've mentioned. And the fish, for instance, nobody's talked about the fish in this Congress, not that I know of. But, the fish has been around--think about it--way before the dinosaurs, way before the Neanderthals, way before our time. The fish is still around. I wonder what scientific formula the fish has discovered. We should ask the fish. They've survived.

Leroy Little Bear, speaking at the 2016 Congress of Humanities and Social Sciences, Treaty 7 Territory, Alberta.

Introduction

This article, at its core, is a meditation on a) urban-prairie and northern human-fish relations over time, and b) the ways that Indigenous philosophies and legal orders continue to live and animate people's relationships, duties and obligations to place even in urban contexts. Second, this piece is an intervention into imaginaries of politics as existing without responsibility to the waterways and the fish we share time and space with. Third, this piece is a meditation on the ways that fish can be, and should be, integral to our discourses about what it means to live accountably, thoughtfully and tenderly in unceded and unsundered territories across the country today. And finally, this article is an examination of fish stories, human-fish relations, and refraction in Paulatuuq and amiskwaciwâskahikan as a form of insistent and creative survivance (Vizenor 2008). This piece takes up Blackfoot scholar Leroy Little Bear's (2016) thoughtful urging, quoted in the epigraph to this article, for humans here in the territories that Canada claims, to ask the fish *what they think*.

Human-fish relations in Canada span across and are woven into lives and livelihoods in every single territory. Though we may be more inclined to imagine coastal sites and the Great Lakes as fishy places, fish inhabit every Indigenous territory across the lands and waters that Canada claims as a nation-state. However, even with this ubiquitous and foundational presence in every territory that humans also occupy, fish are often obscured in the day-to-day political imaginaries of Canada as a country, and specifically, human responsibilities to fish are frequently obscured in the legal-governance paradigms of the prairie lands in the province of Alberta in which I grew up as a Métis person (Fitch 2015). Though the prairie province of Alberta, Canada is home to 63 species of freshwater fish which swim and undulate and glide through bodies of water throughout it (Alberta Fishing Guide 2016), you would be hard-pressed to find public settler imaginaries which centre the prairies as a *fish place*.

This article draws on insights and stories about fish, water, and human fish-relations from two locales: Paulatuuq, Northwest Territories, in the western Canadian Arctic, and the Lake Winnipeg Watershed that spans across the Canadian prairies. First, Paulatuuq is an Inuvialuit hamlet of 321 residents (NWT Bureau of Statistic 2016: 1) located on the coast of the Beaufort Sea, and it is nestled at the base of Darnley Bay at the southern tip of Cape Parry. In Paulatuuq, hunting, fishing and trapping and human-environmental relations are important and central aspects of community life. And within the community, fish and water--as Inuvialuit interlocutors in Paulatuuq taught me, including Andy and Millie Thrasher, Annie Illasiak, Edward and Mabel Ruben--are embedded in every aspect of life.¹ The lakes and rivers and streams that surround

¹ Though fish are far from the *only* more-than-human being that Paulatuuqmiut have socio-legal relationships to, this paper only touches on one aspect of the rich and dynamic ways that Paulatuuqmiut mobilize their legal orders and assert self-determination within their community.

Paulatuuq stand in such contrast to so many other Indigenous communities throughout Canada which cannot safely rely on the water around them to drink (CBC 2015). The state of water emergency in Indigenous communities in Canada is ironic. Consider the paradox of cities like Winnipeg, which draws its drinking water from Shoal Lake 40 First Nation while Shoal Lake has long been denied infrastructure to serve local needs such as a road that connects the community to the mainland (CTV 2015). Water is a site of, and is used as a manifestation of, settler colonial violence in Canada (Perry 2016; Simpson 2016). In a country where one manifestation of colonialism rests on the destruction of, and denial of access to, clean and untainted water, Paulatuuq stands in stark contrast with its abundant waterways and fish (Simpson 2016).

Paulatuuq is where I learned about how people and fish, together, work to disrupt, refuse and challenge the ways in which the Canadian state imposes *its* understandings of land, property, conservation, and law (Simpson 2007, 2014, 2016b). This is very evident in the local assertion of Inuvialuit law and human-fish relations which Paulautuuqmiut mobilized in the 1980s to shut down a commercial fishery which had been implemented by the Federal government as an economic development project in 1968 (Ayles et al. 2007; Community of Paulatuk 2008; Todd 2014). In Paulatuuq, I also learned that fish exist and operate in pluralities--fish are simultaneously food; specimens of study for scientific research; sites of memory and stories; non-human persons with agency. Fish are dreamers and have humour. Fish can be stingy or generous, depending on how you behave and reciprocate their behavior, as Millie taught me. In this work, I call human-fish relations a ‘micro-site’ of engagement (the idea of ‘active sites of engagement’ is an idea I borrow from arctic anthropologist Ann Fienup-Riordan (2000: 57)), and through these micro-sites, interlocutors in Paulatuuq taught me that not only do fish bear witness to the colonial relations that humans experience and resist, but fish *themselves* are actively involved—paradoxically—in both fueling and resisting colonial incursions in northern Canada. I say paradoxically because through stories shared by interlocutors, and by consulting archival materials at Library and Archives Canada and the archives of the Oblates of Mary Immaculate, I found that colonial agents relied heavily on fish for sustenance as they built and operated Missions and Hudson’s Bay Company posts and moved through arctic landscapes around Paulatuuq in the early to mid-twentieth century (Todd 2016: 168-201). At the same time, however, in Paulatuuq in the late 1920s and early 1930s, Inuvialuit were also consciously applying their own legal orders and principles of reciprocity, care, kinship, and skill/competence in land/water engagements in teaching the Missionaries of the Oblates of Mary Immaculate to fish in the lands around the base of Cape Parry. Some of this is explored in works I have published already regarding human-fish relations, colonialism, refraction and Indigenous legal orders in Paulatuuq (Todd 2014; Todd 2016b).²

² It is cheeky to cite oneself and to return to the same stories repeatedly in Euro-western academe. We are taught, as students and apprentices, that this is verboten (a well-meaning mentor even cautioned not to waste my good stories on the wrong journal, which is generally good advice for Euro-Western scholars). New is always better, as the fictional television character Barney Stinson would argue. However, Leroy Little Bear (2016) reminds us that “in Native ways, we always retell our stories, we repeat them. That’s how they sink in and become embodied in students and in the people.” It is through returning to the fish stories shared with me by interlocutors in Paulatuuq, and by re-engaging the fish stories my family and friends share with me in amiskwaciwâskahikan, that I am brought back into my reciprocal relationships to people, moments, and responsibilities both in my research and in my engagement as a citizen of my home territory. By returning to the same moments time and time again, I unravel new facets of the relationships these stories contain and enliven. This article is a product of years of thinking with, alongside and about fish both in Paulatuuq and in amiskwaciwâskahikan. And it is still only a partial explanation and exploration of the ways that fish and humans, together, become and exist through space and time in North/Western Canada.

Let me turn now to the second location that this article draws insights and stories from. The Lake Winnipeg watershed comprises of 17 rivers that wind their way through Alberta, Saskatchewan, Manitoba, North Dakota, Minnesota, Montana, and parts of the very eastern region of Northern Ontario (Canadian Geographic 2016). As a Métis woman, I draw my attention to this watershed precisely because I am bound to it by multiple generations of my Métis (otipemisiwak) family who have moved along its major waterways since the early 19th century. Though at one time the abundance of fish on the prairies drew colonial agents to what we today know as the prairie provinces and fueled the operations of colonial institutions such as the Hudson's Bay Company and the Oblates of Mary Immaculate, the absence of large-scale prairie fisheries in Alberta on par with those on Canada's coasts and Great Lakes arguably render fish largely invisible in the Alberta consciousness, an issue which dogs fish biologists trying to raise the alarm about the rapid and devastating decline of many fish populations throughout the province (Fitch 2015; Sullivan cited in Pratt 2015). The settler-colonial erasure of fish from prairie life renders palatable large-scale resource extraction, commercial agriculture, municipal development, forestry and other activities which severely impact fish habitats (Fitch 2015). As fisheries biologist Lorne Fitch (2015) recently argued, this erasure of our relations to fish in Alberta has dire consequences.

In this piece, I build on a talk that I gave in March 2016 at the Daniels School of Architecture at the University of Toronto, explicitly drawing together narratives of human-fish relations, colonialism and refraction in the Northwest Territories and Treaty Six Territory in Alberta, Canada. First, I examine the legal-governance relationships which Paulatuuqmiut (Paulatuuq people) mobilize in the Inuvialuit hamlet of Paulatuuq in the Northwest Territories in arctic Canada in the last thirty years. Second, I theorize that the strategies and practices employed by Paulatuuqmiut to protect the well-being of Hornaday River char within the community--which I gloss as the 'refraction' of colonial land, water, and fisheries policies--are instructive for the purposes of re-building reciprocal and ongoing responsibilities to fish in Alberta. Drawing on the philosophical work of Paulatuuq elders I worked with, including Andy Thrasher, Millie Thrasher and Annie Illasiak, as well as the work of Indigenous scholars and thinkers John Borrows, Dwayne Donald, Rosemarie Kuptana, Val Napoleon, and Gerald Vizenor, I sketch out a theory of refraction and diffusion which aims to nurture and support the work of those in Alberta working to restore, re-engage and acknowledge the current and ongoing devastation of fish and fish habitats in the province.

What I argue here, and flesh out in the sections that follow, is that much as Andy Thrasher, Millie Thrasher, Annie Illasiak, Edward Ruben, and Mabel Ruben taught me about the legal-governance relationships and responsibilities between humans and fish in Paulatuuq, fish are embedded in every aspect of life in the prairies, though you would be hard-pressed to find public settler imaginaries which acknowledge and centre reciprocal responsibilities to fish and water in the prairies.³ We have a responsibility to pay attention to the ways that communities and collectives of people tend to, care for, and work reciprocally with fish to build and sustain relationships which disrupt the State's attempts to 'command and control' the terms upon which Indigenous peoples, and Canada more broadly, interacts with the lands, waters and atmospheres within its reach (see Cruikshank 1998; Nadasdy 2003). In other words, the world has a lot to learn from the creative and ongoing work of Paulatuuqmiut (Paulatuuq people) in applying their own governance practices and Indigenous legal order vis-à-vis fish and humans in the face of complex and cumulative and inter-

³ Biologist David Schindler has critiqued the Alberta government's past unwillingness to conduct robust and replicable monitoring of Alberta waterways, which denies us tools with which to measure impacts of resource extractive industries on fish habitats (CBC 2010; Kelly et al. 2010).

twined colonial and environmental challenges. I turn now to a narrative from Paulatuq to situate the reciprocal relationships to fish and water which Paulatuqmiut articulate in their own fishing and legal-governance relationships.

Drink This

In June 2012, my friend Millie Thrasher dips my neon yellow Nalgene bottle into a small tundra lake and fills it up with fresh, cold, and clear water. She hands it to me and says 'here, drink this'. I take a sip and the cold-water rushes down my throat and I note how crisp and how fresh it tastes. This is the last taste of unfiltered water I have tried without hesitation since my Dad stopped by a mountain spring on a summer road trip nearly thirty years ago and filled up his water cooler with water gushing next to the Yellowhead Highway. Even then, he warned, we had to know which springs to trust, because it was not that hard to get giardia (beaver fever). "Never drink from a stream or a spring below where people live", he warned my sisters and me. I hardly realized at the time that this was, in fact, a teaching, one warning me of the dwindling number of unpolluted waterways and water sources in Alberta. Here, in Paulatuq in 2012, the water is clear and safe to drink. Hunters and fishers alike can drink water straight from the lakes and creeks and rivers outside of town without fear of bacteria, amoeba or parasites. As I drink the water, Millie talks about past fishing trips to this lake and we wait for the kettle of water to boil for our tea on the small fire her daughter Sandra has built next to the lake. I can hardly remember the last time I saw water this heart-achingly clear.

Though it is surrounded by abundant waterways, Paulatuq has one lake you cannot drink from—First Water Lake. It stands next to the community landfill and the community does not draw water from it. It is alone in the landscape—surrounded by dozens upon dozens of named and unnamed lakes that community members can drink from, fish from, and visit. One of the activities that young people participate in is the delivery of fresh lake ice to elders throughout the winter, so that elders can enjoy the crisp, clear water they grew up drinking while they were out on the land. A sip of the cool, clear water that melts from the chiselled chunks of ice is refreshing in ways that treated tap water is not. And it binds people to memories and stories of trips out on the land or specific moments where they engaged and engage with the many lakes, creeks, rivers that surround the community to the east, south and west of the hamlet.

In February 2012, I had coffee with Andy and Millie in their kitchen as we pored over maps and explored the places that they have fished in the last forty or so years since moving back to the community to raise their family. We discussed how fish are a part of every aspect of life in Paulatuq, and they shared stories about their own fishing lives, and about how children learn to fish from a very early age. Andy illustrated the abundance of fish, water, life, and stories within the lands around Paulatuq as I chatted with him and Millie over a cup of coffee in their kitchen. As we examined a map of the region donated to my project by Parks Canada, Andy pointed out the places where fish exist:

And in Paulatuq, all of these big lakes have fish. Even the smaller ones, the small lakes have fish. People start fishing in the middle of March or around April, going out jigging

through the ice. No nets at that time of year because the ice is too thick for most people anyway. (Andy Thrasher, Paulatuq, February 2012)

As Andy taught me, the water around Paulatuq is rich, abundant, and *alive*. Paulatuq is the last place I have visited where one can trust the water enough to drink it straight out of lakes, rivers and streams and where the water remains clear and unturbid. It is a place where you can watch 20-pound lake trout swim up to your boat on quiet tundra lakes and stare in awe as they circle the boat before swimming away. With barely a ripple on the water, the large fish are visible but still difficult to catch (at least for a greenhorn like me). The surface of the water bends and distorts the visibility the fish worlds below, making it necessary to understand how fish move and behave and tend to what fish like and need in order to catch one. In Paulatuq, as I watch interlocutors manoeuvre that clear summer water with deft skill and patience, and as I listen to friends explain *how* you have to move and think in order to catch a fish through the ice or on the water, depending on the season, I start to think about a specific kind of fishy *refraction* (which I explain below). All that bending and scattering of light between the air-water interface makes for a series of ongoing challenges and responsibilities that my fishing interlocutors—Andy and Millie Thrasher, their daughters Sandra Thrasher and Lanita Thrasher, and non-Inuvialuit visitors who join us on our many fishing trips throughout the year—mobilize and tend to in their work. The clear water offers promise but also labour. And as Millie and Andy taught me through eight months of fishing and talking about fishing in their hamlet in 2012, the relationship between fish and fishermen is more than a physical or utilitarian one; working with fish and water is also deeply bound to social relations and Paulatuq articulations of Inuvialuit legal orders. In other words, to engage with fish in Paulatuq is also to engage with, refract, and disperse the complex layers of territorial and federal understandings of how to treat fish. These colonial understandings and imperatives are complicated by the Canadian nation-state's imposition of its own ideas of fish conservation, land-use, water governance and resource extraction (Nadasdy 2003: 88-120).

The juxtaposition of clear northern waters with turbid and polluted southern ones is a deliberate gesture in this article. However, this action is not without its problems. Water can be polluted in other ways—polluted with memories of colonial events, littered with shipwrecks and other materials that we have yet to know the long-term social or spiritual or physical impacts or implications of (as I learned from interlocutors in Paulatuq). By providing the story of Millie offering me clear water from the lands around the hamlet of Paulatuq, I risk concretizing the water I experienced in my time in Paulatuq as untouched and pure. This is of course not the case—arctic regions are well-documented to be sites of pollution by persistent organic pollutants (POPs) and other contaminants which travel along prevailing wind (AMAP 1997). The water I experienced in Paulatuq is of course impacted by contemporary environmental phenomena that stretch across great swathes of the globe. Nonetheless, there are important lessons to be learned by southern activists, thinkers, policy-makers, scientists, politicians, artists and many others from the ways that Paulatuqmiut continue to assert Inuvialuit legal orders, and enact survivance, through and with fish and water.

I want to take a moment here to situate what I mean by 'Indigenous legal orders', 'ethical relationality' (Donald 2009), 'principled pragmatism' (Kuptana 2014), and 'survivance' (Vizenor 2008). In my work, I draw on the scholarship of several Indigenous scholars working at the crossroads of law, governance, literature, philosophy, and pedagogy: Val Napoleon, Dwayne Donald, Rosemarie Kuptana, and Gerald Vizenor deeply inform my philosophical

understandings of the world, as do the elders and interlocutors I worked with in Paulatuuq and the artists, peers, thinkers and friends I am fortunate to know in Edmonton. From Dwayne Donald I have been oriented towards the notion of ethical relationality—an *active* principle that encourages us to tend to not only our relationships to one another, but to our relationships to everything around us through time (Donald 2009). Inuvialuk politician, broadcaster and thinker Rosemarie Kuptana has also deeply shaped my thinking about human-fish relations and decolonization in Canada. Rosemarie taught me about what she calls the Inuit practice of ‘principled pragmatism’ (Kuptana 2014)—which is, at least in my humble understanding, a practice of negotiating across simultaneous sameness and difference in order to contend with the paradoxes and twists and turns of colonialism and the colonial nation-state.

Indigenous legal orders, in the words of Indigenous legal scholar Val Napoleon are: “law that is embedded in social, political, economic, and spiritual institutions” (Napoleon 2007: 2). Napoleon goes on to argue that:

“Law is basically a collaborative process—something that groups of people do together. Law is never static, but rather, lives in each new context. In fact, one of the most important things to understand about any law is how it changes. And it has to change in order to be an effective part of governance—it has to be appropriate to new contexts and circumstances or it simply will not work. It also has to be appropriate to the experiences of the people or it will have no meaning or legitimacy. And most importantly, law is about thinking” (Napoleon 2007: 4).

In this definition, Napoleon describes a quality of law which John Borrows (2014) describes as the ‘dynamic-but-rooted’ nature of Indigenous legal orders. I choose to use this framing of Indigenous legal orders, drawing here on the work of Napoleon and Borrows, because it provides tools with which to examine the robust and day-to-day negotiations and relationships through and across which local realities and experiences are lived and enacted in Paulatuuq and in my home community. These day-to-day negotiations engage human and more-than-human beings in the acts of tending to, enlivening, and mobilizing relationships which support the well-being and self-determination of humans and more-than-humans through time and space. This demonstrates what Vanessa Watts (2013) reminds us of in her work, which is that more-than-human societies are political entities and that through tending to responsibilities to these more-than-human beings. Indigenous legal orders are therefore deeply informed by and shaped through ongoing relationships between humans and more-than-human beings. She notes that (Watts 2013: 23):

“habitats and ecosystems are better understood as societies from an Indigenous point of view; meaning that they have ethical structures, inter-species treaties and agreements, and further their ability to interpret, understand and implement. Non-human beings are active members of society.”

Through the active interpretation and implementation of relationships between humans and more-than-human beings, we are brought into the application of Donald’s ethical relationality (2009, 2010), Rosemarie Kuptana’s (2014) work on ‘principled pragmatism’, and the processes and praxis explored in the Indigenous legal scholarship of Val Napoleon and John Borrows (and many others). These threads of thought, together with the care-full examinations of

relationships between humans and more-than-human beings in Vanessa Watts' work (2013, 2016), give us tools with which to examine how human-animal, human-environmental, human-spiritual relations operate in the active assertion of, tending to, and enactment of Indigenous self-determination in the face of complex colonial processes, experiences and paradigms. With all of this in mind, I now turn to Gerald Vizenor's (2008) work on survivance, which he explains as:

“an active sense of presence over absence, deracination and oblivion; survivance is the continuance of stories, not a mere reaction, however pertinent. Survivance is greater than the right of a survivable name” (p. 1).

Vizenor (2008) explores how survivance is enacted through stories (p. 14). The active practice of survivance is present in the stories that Paulatuq interlocutors shared with me through the course of my work in the community. And the inter-relatedness and inter-dependence of humans and more-than-humans are very clearly enacted through the work that Paulatuqmiut apply in their approaches to tending to the well-being of lands, waters, fish and other more-than-human beings. Vizenor (2008) draws out this relationship between humans, more-than-humans and survivance in the following terms:

“Native stories of survivance are prompted by natural reason, by a consciousness and sense of incontestable presence that arises from experiences in the natural world, by the turn of seasons, by sudden storms, by migration of cranes, by the ventures of tender lady's slippers, by chance of moths overnight, by unruly mosquitoes, and by the favor of spirits in the water, rimy sumac, wild rice, thunder in the ice, bear, beaver and faces in the stone.

Survivance, however, is not a mere romance of nature, not the overnight pleasures or pristine simulations, or the obscure notions of transcendence and signatures of nature in museums. Survivance is character by natural reason, not monotheistic creation stories and dominance of nature” (p. 1).

The ways that humans are decentered in understandings of how to live with care in Paulatuq are instructive for enacting robust survivance. Furthermore, during my time working Paulatuq, these complex relationships were expressed in terms of responsibilities and fish pluralities, which are shared and re-examined through dynamic stories. A crucial moment for me in understanding implicit human responsibilities to fish and fish pluralities was one day at lunch in 2012, when Millie and I were eating in her kitchen. We were eating a lake trout that she had cooked, while her grandkids finished up their lunch, and she held up a fish bone and said “did you know that Inuvialuit have a story for every bone in the fish?” She gently explained that these stories are not ones for me to learn, but this moment deeply shifted my understanding of fish as more-than-food. Fish carry stories in their bones and her sharing of this reality, this truth, nudged me to think about the ways that fish in my own home territory carry stories within their bones as well. Not the same stories—not by any means. I do not seek here to appropriate Inuvialuit praxis, but rather to reflect on the ways that fish exist simultaneously as many different things and beings and agents in Métis legal orders as well.

So, as I have indicated, human-fish relations are a micro-site across which Inuvialuit assert and negotiate a complex and paradoxical ‘sameness and difference’ in attending to and

contending with the imposition of State and Church and Commercial understandings of how to conceive of, move through and relate to the lands, waters and atmospheres, human and more-than-human inhabitants and presences in the region. This negotiation of fish pluralities, and human-fish relations as micro-sites of resistance and refraction of colonial imperatives continues today. In other words, fish are an integral part of Indigenous legal orders, and we can and should think through our responsibilities to one another by also considering the duties and obligations we have to fish.

When I discuss refraction and dispersion—these are metaphors I borrow from physics—I use these terms to illustrate how Indigenous peoples can (and do) use Indigenous legal orders, and relationships to more-than-human beings, to bend and diffuse the State’s European-derived laws. When forced to negotiate across both ‘sameness and difference’ as a matter of survivance, fishy refraction is a tool through which to assert Indigenous legal-governance traditions while contending with the unavoidable realities of State imaginaries about how humans should relate to the world around them. I see Donald’s work on his principle of ethical relationality, which he draws from his work within Cree and Blackfoot territories (Donald 2010), Kuptana’s ‘principled pragmatism,’ and Vizenor’s survivance as intimately bound expressions of a deeply rooted and visceral commitment to *live well and with care* across time and space in territories heavily, brutally impacted by colonial violence. Refraction, with its roots in the Kuptana’s principled pragmatism I mention above, is a concept that can be used alongside commonly used concepts in contemporary decolonial thinking in Canada. I think here of the principles of resurgence (Alfred and Corntassel 2005); resentments (Coulthard 2011; Coulthard 2014); reconciliation (Snuneymuxw First Nation 2013); refusal (Simpson 2014; Simpson 2016b); renewal (Little Bear 2016), and resilience (Berkes 1999; Berkes and Jolly 2001), which are all currently employed by different scholars to describe different aspects of Indigenous-State and Indigenous environmental relationships in Canada.

I also look to my own recent explanation of fish refraction and dispersion from an interview with my colleague Caroline Picard (2016), which I offered in response to her question about how I came to apply this idea of refraction to my work on human-fish relations in North/Western Canada:

“Well, I realized that the visual in my mind as I was talking to Inuvialuit interlocutors in my research in Paulatuq, in the Northwest Territories, was one of Indigenous legal orders, kinship, and relationships to space and time literally bending and diffusing [sic – I mean dispersing] the colonial efforts of the State, the church, and corporate/capitalist institutions. Through this bending and diffusion, Indigenous peoples assert local knowledge, local praxis, in creative ways to maintain local self-determination in the face of often very violent colonial incursions into local life (see, for example, the legacy of the Indian Residential School system in northern Canada). But I also see it as something related to fish, too. The way fish see us, up here in our “air world,” is refracted by the water. And the way we see fish is also refracted by the water—things are not always what they seem. We have to adapt our actions to the water interface in order to actually catch a fish—to actually physically interact with a fish.

So, refraction as a physical imperative creates conditions that are complex and require care and skill to navigate the boundaries between interfaces and I see this as an apt metaphor to also query and understand the complex and dynamic interface between Indigenous legal orders and the State. For me, refraction is an active process—conscious,

creative labor is required to shift, distort the efforts of the State to subsume, control, erase Indigenous laws and stories. I see refraction and diffusion as pretty badass processes. And, diffusion [sic – I mean dispersion], well it's that process we get when a prism scatters a ray of white light and reveals all the constituent wavelengths. In Canada, we've been sold a story about the country as a particular "good"—but when these stories of Canada as a human rights champion are refracted and diffused through Indigenous legal orders (and through the stories and histories of diverse marginalized communities in the country), you get the full spectrum of our history. You hear more than just the white-washed history of this place. So. That's why I have been using these metaphors of refraction and diffusion [sic] in my work. And I am continuing to flesh them out as I write more work!"

Fish refraction, and the concomitant action of dispersion, are active processes; they are labour intensive; they are creative; they distort colonial framings; and they engage more-than-human relations in the re-imagining and refusal (Simpson 2016b) of colonial orders. Like any good doctoral student, I thought I was quite clever for coming up with the metaphors of refraction and dispersion to explain the creative ways that humans and fish alike work to bend and shift colonial attempts to control human-animal relations and water in Canada, but a colleague recently directed me to other scholarship which applies refraction in other contexts. For example, anthropologist Karyn Strassler employs the notion of refraction in her work examining representations of life in Indonesia through photography. She applies refraction (2010) as a mediation and transformation through which "everyday encounters with photographs entangle widely shared visions with affectively charged personal narratives and memories" (p. 2). She draws this notion from the literary work of Bakhtin (Strassler 2010, p. 23). Métis scholar Dr. Chris Andersen (2014) employs the notion of refraction in his own work on Métis peoplehood and politics on the Plains:

"Understanding courts as a powerful actor in the broader field of juridical power – itself within a broader field of colonial power – thus requires that we accord the courts with a function that is indirectly generative as opposed to directly constitutive. It also requires that we seek to account for how the courts' internal dynamics (hierarchies, forms of prestige, and so on) impose a particular form of reasoning on their struggles; in this case, Aboriginality as a form of "difference" comes to be refracted through Canada's common-law emphasis on precedent". (p. ixvii)

These forms of refraction are a helpful starting point for examining the roles of fish as political agents in the transformation of relationships here in devastated waterscapes in Canada. I am interested here, however, in a fleshier kind of refraction, one that can help us reclaim legal orders from the oppressive refractory power. I draw on Vanessa Watts' (2013) brilliant ruminations on soil-as-flesh and reassertions of relationships between humans and more-than-humans which are informed by Anishinaabek and Haudenosaunee metaphysics and philosophy. I use her work to help me imagine a kind of refraction which engages our dynamic relations to more-than-human beings and more-than-human worlds, a refraction in which we acknowledge that fish do a significant amount of labour in co-constituting our reciprocal responsibilities to one another. I am interested in refraction beyond technological process and seek here to demonstrate refraction's metaphysical expressions through fish and water as modes of refusing colonial logics (Simpson 2007, 2014, 2016b). I am also interested in a kind of refraction which takes seriously Leroy Little Bear's (2016)

point that we must ask fish, who have survived so many shifts and transformations of worlds over millions of years, what their philosophies and theories are. The refraction of colonialism through fish and water is thus a collaborative process, one in which humans are indebted to the labour and imagination of fish. Further, I am interested in an insistent, relational, fleshy, and active kind of refraction which supports Vizenor's phenomenon of survivance.

My understandings of fish refraction, and Indigenous legal orders, are deeply shaped by my time working with Andy Thrasher and Millie Thrasher throughout 2012, and as such my expressions of it are intimately bound to the time and places we visited throughout their territory. I seek here in this piece to expand my application of the idea of fish refraction towards human-fish and other human-environmental relations in my home community of amiskwaciwâskahikan in Treaty 6 territory in Alberta, Canada. So, though I discuss the physical imperatives of refraction between the air-water interface in Paulatuq as one manifestation of refraction above, there are other valences or pluralities of refraction through Indigenous human-fish relations in Canada can be examined. Specifically, I am interested in how refraction, as expressed through human-fish relations in Paulatuq, can be instructive in examining and guiding human-fish relations in the face of wide-scale fish destruction in my home province of Alberta. What do manifestations and application of refraction of colonial orders through human-fish relations in the clear, cool waters of Paulatuq have to teach those working to build and tend to caring and ongoing *and robust* legal-ethical relationships to fish in a province so deeply marred by multiple and multi-scalar life-disrupting resource, settlement and agricultural projects?

As I keep returning to the fragments of fish memories and fish stories from my travels on the land with Andy and Millie throughout the spring, summer and fall of 2012, I unravel other facets of the theory and philosophy that Andy and Millie mobilize in their life-long engagements with fish, water, land, law and stories in their home territory. Each article I write is truly only a partial approximation of the richness of what Andy and Millie offer to the world through their work and tending to fish and fish stories. However, through each re-telling and re-visiting of both the fish stories that Andy and Millie shared, and the stories they offered me the opportunity to experience through my time on the land with them, I come closer to understanding how to engage the messiness and complexity of the fish crisis in my own home territory of amiskwaciwâskahikan. With this partiality, and with this conscious repetition of fish stories in mind, let me turn now to explaining the Alberta fish crisis and the urgent need for a fish-centric intervention in Alberta socio-political imaginaries.

A comeback and a devastation

It is difficult to enact the fleshy, visceral prairie Métis legal traditions that bind us to fish if the fish no longer exist. On July 20, 2016 200,000 litres of crude oil were spilled into the kisiskâciwani-sipiy (North Saskatchewan River) roughly 30 kilometres east of Lloydminster, in Alberta, Canada (CBC 2016). This oil, mixed with a thinning chemical (CBC 2016), traveled along the river. Husky Oil placed a boom in the river to attempt to stop the plume, but the spill breached the containment infrastructure and by July 24, the cities of North Battleford and Prince Albert had to shut off their water intake from the river (Global News 2016; The Canadian Press 2016). As I write this piece in late August, 2016, the James Smith Cree Nation continues to monitor contamination in river water (CBC 2016b). Alvin Moostoos (CBC 2016b), of the James Smith Cree Nation, explains the impact of the oil spill on humans, water and fish:

““This river has taken a beating," said Alvin Moostoos. "We can't let oil spills interfere with what we have here. The river has brought life to the community. We fish out of it. Spend time with family. It's worth protecting.””

Moostoos goes on to illustrate the wide-reaching impacts of the spill on local life:

““There is oil on the banks. Dead fish. Dead crayfish. Moose cross the river here. Is it going to be safe to eat the meat after they've been drinking from the water?" said Moostoos. "Let's get down the facts and clean up the river.””

This devastation came shortly after fisheries biologists were celebrating a small victory in tending to fish relations in the North Saskatchewan. Just a month before the July 20 oil spill, on June 24, 2016, fish biologist Owen Watkins was interviewed on CBC Radio Edmonton's morning show (CBC 2016c). Watkins described the resurgence of sturgeon in the North Saskatchewan river, specifically in the Edmonton area, sharing a story of one sturgeon he has tagged who routinely travels from west of Edmonton to the Saskatchewan border (some 250 kilometres). In a recent article, I explore the importance of kisiskâiwani-sipiy fish relations, and Métis-fish relations in the Lake Winnipeg watershed more broadly, in shaping Métis governance and legal orders today (Todd 2016c). In this current article, I want to take the gesture of the kisiskâiwani-sipiy namew (North Saskatchewan sturgeon) moving back and forth between Edmonton and the Saskatchewan border, indeed very close to the site of the Husky oil spill, as a starting point for a different rumination. This rumination is one on human responsibilities to fish and water in the places I live and come from, and it draws from my research in the Inuvialuit hamlet of Paulatuuq, Northwest Territories, Canada and my upbringing as a Métis woman in Treaty Six territory in central Alberta.

The triumph I felt after listening to Watkins describe sturgeon making a 'comeback' was pierced with rage and grief after photos of the oil spill began circulating amongst my friends and peers on Twitter and Facebook. Images of dead herons and dead amisk (beavers) articulated the harsh, unforgiving realities and fragilities of rivers and waterways in oil-soaked prairie Canada. Fish might make 'comebacks', but they will always be subject to the underlying human violence of capital, resource extraction and colonialism which shape Canada's relationship to people, time and place (Coulthard 2014). These violations are deep transgressions of Indigenous legal orders and legal traditions that centre human responsibilities to more-than-human beings (Borrows 2010, Napoleon 2007). By extension, humans who have borne fish stories since Time Immemorial, whose survivance is bound up with the ability of fish to thrive in clear and healthy waters, are also deeply impacted by the devastation of fish worlds and waterscapes. As Erica Violet Lee (2016) stated after the Husky oil spill:

“Indigenous folks in affected communities are the ones cleaning up this toxic mess and told to be thankful for the job "opportunity." This is a crime against the lands and waters, our people, and all the medicines and creatures that rely on the kisiskâiwani-sipiy river system to live (that includes you). Protect namew. Protect amisk. Protect our medicines. Protect nipiy.”

In light of these violations of fish, water, and other watery beings in my home province and in Treaty Six Territory, the fish refraction that Andy and Millie teach through their engagements with fish and Inuvialuit legal orders in Paulatuuq become so much harder to fathom, physically at least, when we stare out at Alberta prairie rivers coated with foaming and opaque oil (Lee 2016), or which roil with the thick pea soup of near-constant blue-green algae outbreaks (Alberta Health Services 2016; Todd 2015). I wonder about how we can refract worlds and colonial logics through our fish-water relations when the water itself is rendered opaque, poisoned, and viscous as it carries the ‘modernist mess’ (Fortun 2014) resource extractive colonial economies and imaginaries (p. 312). Additionally, how can we imagine fish refraction in those waters that appear clear, but carry with them invisible forms of contamination, both physical and metaphorical? In the waters that are clear but are in fact dead zones to fish and other vertebrates and invertebrates? How do we re-engage reciprocal responsibilities to spaces and beings that have been deeply harmed by colonial capitalist ‘messes’ (Fortun 2014)? Reclaiming refraction as a tool of asserting Indigenous legal orders, through fishy refraction, requires nuanced and care-full attention to the myriad ways relationships are formed and re-formed in the process of engaging across ‘sameness’ and ‘difference’, and in engaging across the complexities of the air-water interface at a lake’s surface in the context of colonial capitalist environmental destruction.

So, I turn my attention here to what it means to examine the role of fish pluralities in Treaty Six Territory, along the North Saskatchewan River. I seek here to tend to my responsibilities to fish pluralities in Treaty Six Territory, in amiskwaciwâskahikan by tending to what interlocutors taught me about their own human-fish relations in Paulatuuq. I explicitly apply the principles that interlocutors like Andy Thrasher, Millie Thrasher, Annie Illasiak, Edward Ruben and Mabel Ruben taught me about *their* fish lives, and how fish played and play a role in the application of Indigenous legal orders and the conscious and strategic *refraction* of colonial imaginaries in Paulatuuq. Drawing on the fleshy experiences of people and fish, together, in amiskwaciwâskahikan, I will explore the potential and possibilities opened up to us if we re-imagine (or re-orient our imaginations towards) Edmonton and Alberta (and other parts of Canada) as fish-places, bound up with legal-ethical responsibilities to and with fish, and train our eyes and our minds to thinking of what it means to live up to and embody our legal-ethical duties and obligations to the fish we share waterways with.

Fish in amiskwaciwâskahikan

In the historical sense, amiskwaciwâskahikan is abundant. This is one of the reasons, though not the only one, I am sure, that people have been coming to the places where Edmonton now stands, since time immemorial. Or to get all empirical about it, for at least 8,000 to 10,000 years (Spirit of Monto undated). Edmonton is a territory which has been inhabited and tended to by Cree, Blackfoot, Nakoda, Saulteaux, Dene and Métis peoples, and it has been and continues to be a rich and dynamic place. Dwayne Donald (2004) has done such a beautiful job articulating the role of the Fort in building up and shaping the imaginaries that animate Edmonton today in his work—advancing philosophies that are grounded, deeply, in the earth and loamy soil and trees and wild-roses and saskatoons of that place. So, I want to contribute to this dialogue by taking our eyes along the shores of the North Saskatchewan, away from the hustle and bustle of the roads and streets and bike trails and historical parks, to the water. Most Edmontonians would be hard-pressed to tell you which fish they share time and space with. Fish are inscrutable in their

watery worlds, and since we do not have an active commercial fishery of any large scale along the North Saskatchewan sipy in Edmonton, the contemporary role of fish in shaping human-environmental experiences in a city like Edmonton can be easily overlooked. Many cities, Edmonton and Toronto included, have entombed former waterways where fish ran freely with concrete and silt and overfill and other technologies and infrastructures that have vastly changed the city-water interface over time (City of Toronto 2012: 3). So, we have to dig a little. We have train our eyes and ears and mind and body to fish-worlds that we stand alongside and even on top of.

As a small child, my initial introduction to fish-worlds came through my parent's tutelage at Baptiste lake, a small kettle lake two hours north of Edmonton and 20 minutes outside of the town of Athabasca, deep in the boreal forest. It is here that I learned to fish and to watch the fish dart about in the shallows along the sandy beach. Here is where I watched curiously and intently as our neighbours cast off from their docks. And here is where I caught my first fish. Fish stories are more than fanciful ways to spend time (though this is one of their virtues). They also bind us to the waters and lands we move through and inhabit—bringing our lives into direct relationship to fish as political actors, more-than-human beings, and kin whom we owe reciprocal responsibilities. While fish-pasts informed stories and legal-governance orientations in the province, fish-presents and fish-futures are uncertain in Alberta. We have watched waterways deteriorate alarmingly in the last few decades (Kelly et al. 2010). Recent reports indicate a widespread fish crisis in Alberta (Fitch 2015). What does this mean for fish in amiskwaciwâskahikan?

While working in Paulatuuq, the late elder Annie Illasiak repeated to me many times throughout the eight months that I worked there in 2012 that “you never go hungry in the land if you have fish.” Fish, as pluralities, ground stories meaning, legal-governance principles *and* act as food and physical sustenance. Without fish, we are left physically and *philosophically* hungry (Todd 2016). And this teaching is important to hold in mind as we examine the devastation of fish populations and fish habitats across Alberta. In October 2015, Lorne Fitch, a Professional Biologist in Alberta, produced a report entitled ‘Two Fish, One Fish, No Fish: Alberta’s Fish Crisis’. In it, he mulls over the destruction of fish populations throughout the province. He composes a short poem, which ruminates on the ways that sickness, population decline and habitat destruction impact fish in Alberta (Fitch 2015: 14):

Two fish, one fish, dead fish, no fish,
 No grayling or goldeye, something's
 amiss.
 This one has a tumor and a rotten fin,
 There's no home for that one to live in,
 Say, what a lot of fish there used to be,
 Where are the fish for my kid and me?

Today, we are a crisis point. However, fish played an integral role in the settler-colonial expansion into Alberta. Fitch points out that at Lac La Biche (northeast of Edmonton), where the HBC built a post and pursued an extensive large-scale fishery between 1798-1878: “The finny wealth of lake whitefish that encouraged settlement has been reduced to a fraction of historic levels” (Fitch 2015: 14). In an earlier report, released last summer, Fitch also raised the alarm

about streams in Southern Alberta, where he argues that sedimentation from industry is threatening cutthroat and bull trout spawning (Calgary Herald 2015). Fitch (2015: 17) points out:

Farmers, miners, off highway vehicle users, roughnecks, homeowners, politicians and a cast of thousands have devastated Alberta's fish populations without ever catching let alone frying a single fish. Instead, large numbers of fish, populations of fish, and watersheds of fish were killed through habitat alterations, loss of critical habitats, water withdrawals, and pollution. Alberta's fish have died by a thousand cuts, not a thousand hooks.

Fish supported settler colonial expansion, and settler colonial expansion seeks to eliminate the conditions that support fish life and fish worlds. In Alberta, as in Paulatuuq, the presence of fish both paradoxically *supported* settler-colonial expansion into diverse territories throughout the variegated expressions of colonialism in territories across the continent, while at the same time human-fish relations acted as a site through which Indigenous peoples asserted (and assert!) their legal orders. However, today, Alberta's once abundant and healthy fish and waterways are in rapid decline (Fitch 2015; Kelly et al. 2010). So, what are the state-governance responses to these egregious violations of human responsibilities to fish? Fitch points out in a newspaper interview in the *Calgary Herald* (2015) last summer that the response from settler colonial government bodies has been abysmal:

Alberta's previous Tory government completed a land-use plan for the entire South Saskatchewan River watershed, which includes the Oldman [River]. Fitch said it barely mentions fish, contains no specific recommendations for their protection and defers most important decisions to local management bodies.

While the previous Alberta government deferred action on fish devastation in Alberta, scientists indicate that we may be experiencing the 'Sixth Great Mass Extinction Crisis', through which up to three-quarters of species on earth may be extinct within the next few hundred years (Barnosky et al. 2011; Regnier et al. 2015). While we may experience the loss of fish in Alberta as a *local* loss, it is arguably linked to broader catastrophic losses across geographies, territories, moments. As Alberta faces this 'death by a thousand cuts' (Fitch 2015:17) of its once life- and world-sustaining fisheries, we need to turn to a different ethical-moral-governance paradigm that centres fish not as specimens or 'collateral' to massive environmental degradation, but instead as more-than-human beings whom we share territory and owe responsibilities (Fitch 2015). Fish have borne witness to—and resisted—the incredible upheavals of Indigenous livelihoods, laws, language and lands over the course of the last few centuries. We need the principles of reciprocity, care, tenderness and trust that are centred in the 'dynamic-but-rooted' (Borrows 2014) Indigenous legal orders in places like amiskwaciwâskahikan. We need to consider that a land without fish is one that will not only leave us physically bereft, but also intellectually and spiritually bereft as well (Todd 2016). We need to consider how our responsibilities to fish are integral to the act of survivance.

We can learn from the hard work that Paulatuuqmiut have done to protect the well-being of fish and humans alike in their community in the face of intense colonial and environmental pressures. Negotiating strategically and pragmatically across their own Inuvialuit legal orders and the co-management regimes introduced with the 1984 Inuvialuit Final Agreement,

Paulatuuqmiut refracted state-colonial attempts to continue a state-sanctioned commercial fishery which had been established under the guise of an economic development project in the 1960s—using Indigenous legal orders to bend and disperse colonial attempts to assert State notions of how to relate ethically and morally to fish. Creatively negotiating across ‘sameness and difference’, Paulatuuq people raised their concerns about the impact the fishery had on the local char stock in the nearly twenty years it operated (1968-1986) (Ayles et al. 2007; Community of Paulatuk 2008).

While the scale of the fisheries conflict and decline is very different between Paulatuuq and amiskwaciwâskahikan/Alberta, I do think that there are many things people in Alberta can learn from how Paulatuuqmiut moved to protect fish in their territory. Disrupting or refracting state understandings of human duties to fish, and asserting reciprocal and caring principles instead, are necessary tools through which to contend with the massive, catastrophic fish losses we are facing in Alberta. We need to start somewhere and turning our attention to treating fish as kin and more-than-human persons, we have reciprocal duties to is a necessary step in re-orienting our relationships to land, waters, space, stories and time in light of the ongoing colonial imperatives that shape Canadian cities like Edmonton.

There is hope for fishy refraction and engaging human-fish relations at the air-water interface across the country and beyond. As Fox et al. (2017) demonstrate in their work in Aotearoa, Canada, and the USA, Indigenous communities are striving to restore and repair relationships to waterways damaged by colonial incursions, pollution, and capitalist interventions. Elizabeth Hoover (2017) details the legal-ethical, political, health, socio-cultural, and ecological work of community members in the Mohawk community of Akewsasne to assert relations to lands and waters impacted by industrial contamination and colonial violation in their territory.

Heiltsuk First Nation successfully fought to suspend the roe herring commercial fishery in their waters in 2018 (Heiltsuk First Nation 2018), and numerous communities are fighting to protect salmon in the Pacific Northwest (see: Norgaard et al. 2016; Norgaard et al. 2018). In fact, the province of British Columbia is implementing an advisory council for wild salmon protection (CBC 2018). Underpinning these efforts are deep reciprocal responsibilities to fish through ongoing Indigenous legal orders and legal traditions across myriad territories.

Despite ongoing environmental crises, Indigenous peoples are performing ever-growing advocacy and academic work to restore human-fish-water relations across North America. For these reasons, I want to return to the notion of refraction at the air-water interface. I also want to return to Leroy Little Bear’s suggestion, quoted in the epigraph to this article, that we tend to the things that fish think through, and are informed by, their many eons of existence in this place. I have been thinking a lot lately about what it means to inhabit space and time with care and tenderness. What it means to tend to and mobilise communities of care, to embody ethics of care, reciprocity and kindness in our work. While fish and governance may seem disparate to Euro-Western actors, they are inherently connected. Paulatuuqmiut, in shutting down a commercial fishery on the Hornaday River, which the community depends on for arctic char, demonstrate the ways that human-fish relations are integral to refusing and refracting state imaginaries and colonial legal-governance paradigms. And Paulatuuq’s approach to protecting arctic char reminds us that the way that we move through this time, through these places that we inhabit, are forever and always shaped by the more-than-human. These are instructive lessons for people in my home territory, where we are reeling from massive fish habitat destruction and large-scale fish decline. It is time for us to pause and ask the fish what they think. We have much to learn to

direct us towards reciprocal, caring and meaningful relationships to fish and water. The refraction of fishy relations throughout territories across Canada can teach us to train our actions and thoughts towards worlds that have sustained fish through eons of existence. They can teach us to sustain these worlds, here, in lasting and tender ways. And oh, what worlds I hope we leave for the next generation of curious and ferocious grandchildren as we re-imagine our very existence and our very place, here. Now.

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