

Interweaving in/on the Air: A Scripted Synthesis of Indigenous and Settler Knowledges for Environmental Protection in Resource Development

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Abstract

The ever-rising threat of environmental catastrophe and the continuing displacement, dishonor, and attempted erasure of Indigenous Peoples and their traditional lands are linked by capitalism's externalizing the costs of conquest, whether ecological or human. This work investigates efforts to address these intertwined issues of social, economic, and environmental justice through interweaving Indigenous and settler ways of knowing in resource-development projects in Canada. In seeking to dramatize the need for further informed and engaged public dialogue on how to redress the twin menaces of extractivism and colonization, this arts-based research unfolds as a script for a semi-satirical radio play or podcast. Here, our researcher seeks to explain research findings and advance environmental protection and decolonization on a radio talk show, only to be confronted by a skeptical host and a battery of opinionated guests reflecting real-world challenges to those two emancipatory goals. We close with a brief methodological reflection.

Keywords

environmental protection, resource development, Indigenous relations, colonization, arts-based research

The most banal background MUZAK imaginable starts us off. We hear PACING FOOTSTEPS. Our researcher, GEO, takes a DEEP BREATH and begins.

GEO: I'm in the green room, waiting to be interviewed on live radio. Low stakes, right? I mean, who listens to radio anymore? Especially during the playoffs.

The muzak cuts off.

ANNOUNCER: This just in. Tonight's big game is postponed due to yesterday's flooding. But don't worry! Coming up is our top-rated program, AQUA. And don't fret if you miss it. All of our shows are archived online. Permanently.

The MUZAK restarts in a vaguely mocking tone.

GEO: Maybe it's too soon for this. What if they're not ready? What if *I'm* not ready? Of course, it's my job to be ready. And relevant. And accountable. As for imposter syndrome . . . well, I'm not sure I'm up to imposter standards.

A door CREAKS open, admitting the house WRANGLER.

WRANGLER: What's up, doc? Wait, you are. *(aside)* I love my job. *(full voice)* Thanks for doing this on sub-zero notice.

We hear their receding FOOTSTEPS. A vaguely nautical musical FANFARE rings in the program.

ANNOUNCER: It's time once again for AQUA, where you "Ask Questions, Uncork Answers!"

We hear the in-house Greek chorus, the WHISPERERS, who of course always whisper.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA, where the conversation always flows.

We hear a ROARING WATERFALL.

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ANNOUNCER: But first things first. We would like to respectfully acknowledge that our program rests on the traditional . . . (*pregnant pause*) support of our sponsor, Bubbly Spring, “The Beverage that Gives You Leverage.”

We hear a POP akin to a champagne cork.

Bubbly Spring: bringing you nature’s finest from the renowned water-treatment program in Victoria, BC, Canada.

We hear a TOILET FLUSH.

ANNOUNCER: And now, live from our studios in beautiful downtown Colwood, here’s our host, Myrtle Highland.

MYRTLE: Welcome, everyone. Like our proud sponsor, we understand the value of a good brand in the world’s most exciting place, the marketplace. A global Olympic village, if you will, where some 200 nations compete for a finite supply of trade, tourism, and investment dollars. Although armed conquest worked well enough to determine who’s boss in centuries past, the big lever today is “soft power.”

ANNOUNCER: Soft power? Is that the electricity people’s version of soft water?

MYRTLE: Good one. Soft power is a country’s reputation and influence in the international arena. Would you want to do trade, investment, or tourism with a rogue state? Of course you wouldn’t! Let’s pause for this important word.

SUNNY VOICE: When it comes to global citizenship, it’s a great time to be Canadian. Sure, we got a bad rap from some critics for curbing federal environmental laws, muzzling scientists, and being the first to pull out of the Kyoto Accord. And we’ve had our wrist slapped by human-rights groups for failing to regulate Canadian-owned mining operations in Latin America—operations said to harm local environments and Indigenous populations (Blanchfield, 2017). But it’s a new day. Your federal government is committed to doing the right thing. Canada: cleaning up our act, and proud of it. (*pause*) This message brought to you by the Government of Canada.

MYRTLE: We’re back on AQUA, where the discussions are always fluid.

We hear a RUSHING RIVER CURRENT.

MYRTLE: If Canada is to lead by example in the global marketplace on issues like environmental protection, what can we do? Today’s guest has some ideas on that. He’s a prof of Communication and Culture at Royal Roads University. And he’s looking at integrating

Indigenous knowledge into our decision-making on environmental protection and resource development. Welcome, Geo Takach.

GEO: Ahoy, Myrtle. I also bring greetings from my learned collaborator, Asma-na-hi Antoine, director of Indigenous learning at my school. And also an acknowledgment that this studio rests on the ancestral lands of the Xwsepsum and Lekwungen Peoples.

MYRTLE: In that vein, I see your skin’s as pale as a polar bear’s patoot. What gives *you* the right to discuss Indigenous issues?

GEO: Well, beyond the right to free speech, concern about some pretty profound injustices still going down in Canada . . . eh?

MYRTLE: Aren’t you worried about “cultural appropriation?” Or did the Ivory Tower not get that memo?

GEO: I thought we’re trying to help *write* the memo. (*pause*) You bet we worry. But I’m not here to speak for anyone. Or to preach at your listeners. I’m here to share some research. We can talk about what we might do—or not do—about it.

MYRTLE: So why take on such a political hot potato?

GEO: We need to talk about Indigenous issues as everyone’s issues, as a first step to acting on them. The Truth and Reconciliation Commission of Canada (TRC, 2015) has called our federal government’s treatment of First Peoples cultural genocide.

MYRTLE: Really.

GEO: Really. After the residential schools, ongoing violations of treaties, low living standards, lack of clean water, systemic racism, bogus overruling of Indigenous legal orders, and more, it’s time for a new relationship with Indigenous People. The TRC says that means transforming many areas of our society.

MYRTLE: Are Canadians ready for this?

GEO: Well, a major, national poll showed almost four out of five non-Indigenous Canadians want to learn more about Indigenous culture (Enviroics Institute, 2016). Another poll showed deep divisions on how to reset Canada’s relationship with First Nations, but three out of five are optimistic about its future (Angus Reid Institute, 2018). But all Poles aside—not to mention Afghans, Peruvians, and the rest—

MYRTLE: We do the jokes here, Geo.

GEO: Sorry, Myrtle. (*pause*) It’s high time we were ready. Some 202,000 learners enrolled in an open online course on Indigenous history and contemporary issues in Canada (University of Alberta, 2020).

MYRTLE: So what’s reconciling with Indigenous People got to do with protecting the environment?

GEO: In one word, *everything*. Colonizing Indigenous People is like extracting and selling natural resources. Both enrich industry and the state, but at the expense of local communities (Berkes, 2015)—as well as

sustainability: social, economic, *and* environmental. Canada's record and reputation—that soft power you mentioned—need work on both fronts.

MYRTLE: But isn't Canada the envy of the world?

GEO: We like to think so. But the nations that voted against putting us back on the UN Security Council in 2010 and 2020 might disagree.

MYRTLE: Ouch. So what does your research tell us?

GEO: That Indigenous knowledge offers ways to deepen, balance, and improve Canada's approach to both environmental stewardship and conciliation with Indigenous Peoples at home—and by example, our reputation abroad.

MYRTLE: So what's this really about, then? Justice at home or a stronger voice on the world stage?

GEO: Well, both. But shouldn't we clean up our own house before trying to model good behavior for others?

MYRTLE: Hmm. So are you saying our approach to natural resources is bad?

GEO: Well, I wouldn't use the word "bad" to describe how our resource extraction is playing out—

MYRTLE: I should hope not. It's given Canadians a standard of living that ranks among the highest in the world (U.S. News, 2020).

GEO: But at what cost? If you check with outfits like the International Institute for Sustainable Development (2020), the World Wildlife Fund–Canada (2020) and the Center for Global Development (2020), you might describe our approach as "calamitous," "cataclysmic," or "catastrophic." And those are just the C-words.

MYRTLE: Good one.

GEO: I wasn't kidding.

MYRTLE: Oh, sure you were. Don't tell me you're another one of those extremists who says all development is bad.

GEO: Not all development is bad. But scientists and many others have been warning us for generations that our natural systems are out of balance.

MYRTLE: So what's your solution?

GEO: My research suggests that Indigenous knowledge can help begin to restore that balance. It might also help reverse the horrific treatment of First Peoples in Canada.

MYRTLE: Let's take some calls from our listeners—starting with Kelly from Kamloops. What's on your mind?

(CALLER) KELLY: No offense, but with all the huge problems in the world today—trade agreements, refugees, armed conflicts, terrorism, and whatnot—why single out Indigenous People?

GEO: Well, when the PM spoke at the UN, he did something rare. Instead of the usual bragging about how brilliant his country is, he cited the "humiliation, neglect and abuse" of Indigenous People due to colonization in Canada (Reuters, 2017).

MYRTLE: Ouch.

GEO: And he promised to "correct past injustices and bring about a better quality of life for Indigenous Peoples."

KELLY: He promises heaps of things. Wasn't there a formal apology and a settlement of 1.9 billion dollars by the previous government?

GEO: Sure, for some of the survivors. But it'll take more than that to heal harm done to about 150,000 First Nation, Inuit and Metis children, forced into schools and residencies for 110 years (TRC, 2015).

KELLY: Yikes.

GEO: Beyond the physical and sexual abuse, some 6,000 children are said to have died there. That's a higher death rate than for Canadians serving in World War II! That trauma lives on, in communities, families, and individuals today.

KELLY: Not to take anything away from all that. But Indigenous People aren't the only ones with trauma, you know.

MYRTLE: You're listening to AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA: where the dialogue is always on tap.

We hear a TAP CREAK OPEN and LIQUID GUSH OUT.

MYRTLE: Next up: Pudray from Portage La Prairie.

(CALLER) PUDRAY: So what does "Indigenous knowledge" mean, exactly? There are, like, 634 First-Nations communities in Canada today, with "more than 50 distinct nations and language groups" (Assembly of First Nations, n.d.). Different land bases, different history, different culture. How can you lump them all together?

We hear the filtered DRUMMING of a RINGTONE on Geo's cellphone.

MYRTLE: You didn't get the memo on call-muting?

GEO: Some voices have been muted long enough. (*into phone*) Thanks for calling in, Sam. Even if you are a thinly dramatized composite of my respectful reading of literature from Indigenous scholars and authors, and their allies.

SAM: (*through phone*) No sweat. Pudray is right, there's lots of diversity. But we can find some general commonalities, just like we can for Western, consumer societies (Voyageur et al., 2015). Even Indigenous and settler knowledges have some things in common. They both seek the truth, and they both emerge from their own contexts. But they're also deeply different (Bohensky & Maru, 2011).

GEO: Settlers have tried to understand the world "objectively"—by dividing it, segregating it, and putting it into

institutions and departments. Take universities: fine arts, physical sciences, nursing.

MYRTLE: Communication and culture.

SAM: *(through phone)* Sure. But Indigenous cultures tend to be more holistic. They focus on connections and shared relationships among all things, both living and non-living (Umeeek, 2005).

MYRTLE: Did he say “non-living?”

SAM: *(through phone)* Yup. And knowledge is seen as subjective, not universally applied to everyone. And you weigh the consequences of your actions over a long time. As is said, over seven generations—rather than, say, a four-year election cycle.

MYRTLE: Elections are important, too!

GEO: Especially when voters turn out. Running with that example, in settler society, we learn about elections in different ways.

MYRTLE: Such as?

GEO: We count votes, consider campaigns past and present, comment on them, test theories about the results, and so on. Western knowledge favors “scientific” methods of research.

MYRTLE: Let’s hear from Harley in Hope.

(CALLER) HARLEY: So what the heck’s wrong with science?

GEO: Nada. Bill Nye rocks! But there are other ways to learn, too.

SAM: *(through phone)* Indigenous knowledge can come from four sources in a place over time (Johnson et al., 2016). There’s traditional knowledge, passed along through stories. There’s empirical knowledge, which we get from careful observation and practice. Revealed knowledge comes from visions, rituals, and ceremonies. And contemporary knowledge, we gain through our experience, education, and problem-solving.

HARLEY: Huh. I’m not sure all of that qualifies as “scientific..”

GEO: Well, first off, who gets to define what qualifies as “science?”

MYRTLE: Everyone knows what science is.

GEO: We need to be careful when we use ways of thinking that we know, to judge those that we don’t know as well. There’s an unstated assumption there: Our way is the only route to the truth.

MYRTLE: So how does that play out on environmental issues?

SAM: *(through phone)* Indigenous knowledge is local and tied specifically to the land (Kunkel, 2017). Land isn’t just property; it’s an incredibly rich source for learning.

MYRTLE: Like outdoor ed, you mean.

SAM: *(through phone)* You could call it that. And land, air and water are seen as sources of communal knowledge, not private profit.

HARLEY: So now you’re saying the rest of us are out to rape the Earth?

GEO: Settlers have created a different relationship with the Earth. Western society—which tends to focus more on the individual than the collective—mostly sees people as *separate* from nature (Umeeek, 2005). Whether we romanticize it, conquer it, or consume it.

We hear the REVVING of an engine in the background.

HARLEY: Not me. I’m out enjoying nature right now, on my quad. See ya.

Harley’s phone CLICKS off.

GEO: Thanks, Sam.

SAM: Hey, it’s *your* imagination. But get an Indigenous co-writer next time, okay?

MYRTLE: And now, this.

MELLOW VOICE: Clean water is a fundamental human right. One that we can take for granted in this great country. The Canadian government is working hard to keep our three coastlines clean for all Canadians. That water is not just a resource. It’s our lifeline. One that will last a whole a lot longer than our fragile minority government in Parliament. *(pause)* The Government of Canada: taking the long view—working for you—and, like our precious coastline, hanging on for dear life.

MYRTLE: We’re back on AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA: where we’re *always* ahead of the wave.

We hear a single, pounding ocean WAVE.

MYRTLE: Let’s take another caller. McKenna from Mississauga.

(CALLER) McKENNA: I don’t get it. How does this Indigenous knowledge fit into regular, Canadian ways?

GEO: You crushed it, McKenna. We see Indigenous People and their ways as having to “fit” into systems that *we’ve* built. Systems that have actually tried to destroy them. And given them abnormally high cancer rates, disastrous oil spills, poisoned water—

McKENNA: I’m not talking about destroying anyone.

GEO: Of course not. But look at the language we use.

McKENNA: What now?

GEO: The biggest barrier to combining settler and Indigenous traditions may be to overcome bias—the bias of Western superiority baked into Western thinking. It’s so pervasive, it’s taken for granted (Tuhiwai Smith, 2012). And it actually continues the colonizing that the TRC calls on us to acknowledge, stop, atone for, and cure.

McKENNA: I don't feel biased. I resent what you're implying. Canadians are tolerant and fair. A lot more than people in other places I could name.

MYRTLE: We have Quinn from Québec.

(CALLER) QUINN: Look. I'm sorry for all the awful stuff that's happened under the Indian Act (Canada, Department of Justice, 2020b). And with the environment. But throughout history, there are always some winners and some losers. It's just part of life.

GEO: Right? And that's exactly the ethic that got us into the mess we're in, whether it's colonizing Indigenous People, or the environment. But really, colonialist thinking—that we're better than others and can take what we want from them—has no sound basis in philosophy or morality (Maffie, 2009).

QUINN: (*chuckling*) Dude. We have rules. They're called laws.

GEO: Totally. But people made those laws in Canada. Mostly White people. And people can change them.

QUINN: Reconciliation is a nice idea. But if you're talking about a wholesale overhaul of the whole federation, it's too big, man. Pie in the sky.

GEO: A lot of real progress starts that way. Copernicus' theory that the sun, not the Earth, is the center of the universe. The notion that women should have the vote. The dream that a Canadian team can win the Stanley Cup again someday.

MYRTLE: Seriously?

GEO: Okay, still too soon. Um . . . go, Canucks?

MYRTLE: So remind us, how does this relate to your research on Indigenous knowledge?

GEO: If we want to fix imbalances in power, we start by reframing issues. And that's where words come in. When you introduced me, you mentioned "integrating" settler and Indigenous knowledges. That term comes up a lot in the literature.

MYRTLE: So I'm in good company.

GEO: Certainly. But when it comes to co-managing natural resources and the environment in Canada, typically, efforts at "integrating" have absorbed one knowledge into the other (Bohensky & Maru, 2011). That is, they tried to fit Indigenous knowledge into Western ways of thinking. Or just paid it lip-service. Or used it to greenwash resource-extraction projects with token "consultations.."

MYRTLE: Let's go to Shan from Charlottetown.

(CALLER) SHAN: Look. I've worked all over Canada. And I've seen a lot of public servants, resource companies, etcetera work awfully hard to consult with Aboriginal folks when dealing with their land.

GEO: No doubt. But even well-meant colonialism is still colonialism. And it's probably not doing the environment any favors, either.

SHAN: These are just words. How does calling those efforts "integrating" make them more "colonialism?"

GEO: Words can be a tool for control, and furthering injustice. Like when we distinguish between "Traditional Ecological Knowledge" and "Western science," we may be inferring that traditional knowledge is inferior because it's not a "science" by settler standards.

MYRTLE: We've got to have standards.

GEO: Okay. But even Western scientists and scholars have shown, repeatedly, that they have much to learn from Indigenous knowledges (e.g., Sveiby, 2009). So your choice of words can color your entire approach (Johnson et al., 2016).

SHAN: I still think you're splitting hairs. Okay. If "integrating" has bad karma, what term would you use, wise guy?

GEO: My colleague, Asma-na-hi, speaks to this.

We hear a DOOR OPEN, ASMA-NA-HI's incoming FOOTSTEPS, and a CHAIR pulled across the floor.

MYRTLE: We are joined by Asma-na-hi Antoine, acknowledged earlier as a collaborator on our guest's research.

GEO: So glad you're here. What do you think?

ASMA-NA-HI: You started our conversation with, "How do we try to bridge these two different worldviews together?" And I said, "I'm really not comfortable." As we were working together, I said, "When you take a bridge, you're only joining at the tips of two different worldviews. And that's not what we want to do. What we want to do is actually weave and intertwine."

MYRTLE: Can you give us an example?

ASMA-NA-HI: I use the metaphor of weaving a basket. You're weaving together the knowledge and you're actually forming something, whether it's sweetgrass or whatever you are working with. So I said, "Let's move away from talking about bridging, and let's talk about weaving together two traditional worldviews."

MYRTLE: Weaving.

ASMA-NA-HI: Once you do that, you still have your own traditional lens and your own traditional ways of knowing and being, as well as the other side. But you're able to respect each other in a really meaningful way, and redefine what reconciliation is in that moment.

GEO: With Asma-na-hi's interwoven basket, we learn that we can still see the individual strands. But both kinds can maintain their individuality and integrity—while also blending into a coherent whole that's greater than its parts. They're woven together to create something both functional and beautiful.

ASMA-NA-HI: And in all of that is not going back to using the same colonial tools, as well as avoiding colonization, avoiding assimilation, and, the number-one key, avoiding appropriation of the knowledge. It's not "integrating," and not "bridging." It's "interweaving."

MYRTLE: Let's take a quick break.

ANNOUNCER: You're listening to online radio station AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA, sponsored generously by Bubbly Spring, "The Beverage that Gives You Leverage."

AQUA: where your time is *never* down the drain.

We hear water GURLING down a drain.

MYRTLE: Asma-na-hi had to leave us, to do a welcome and acknowledgment of traditional lands back at her university. (*pause*) For those who just joined us, her colleague, Dr. Geo, is here to talk about integrating Indigenous knowledge with environmental protection.

GEO: That's *interweaving*, Myrtle.

MYRTLE: Right. So we're hearing a lot about words. But how do you actually *do* something as complex as balancing natural-resource development and environmental protection using different worldviews?

GEO: We need a form of inquiry that's more complete, and more holistic. One that embraces values and culture (Houde, 2007). But more than that, weaving together the two approaches in a way that fundamentally reshapes current systems of decision-making.

MYRTLE: How?

GEO: We reassess the colonialist mindset, on the theory that to work best with others, we must first know ourselves. Once we recognize our own views and biases, and accept and respect those of people that may not mirror our own—only then do we move to a shared "third space" of greater cultural self-knowledge (Johnson et al., 2016).

MYRTLE: You university types do love your ideals.

GEO: But ideals can play out in good practices. Maybe your listeners have some examples.

MYRTLE: Okay, boss. Let's go to Brett from Bouctouche.

(CALLER) BRETT: Mi'kmaq people on the East Coast practice "two-eyed" seeing. Identifying with others in various ways, to understand and benefit from both Indigenous and settlers' ways of knowing the world. Seeing it from two different perspectives, at the same time (Bartlett et al., 2012). Recognizing that sharing knowledge goes beyond collecting data that you can see. It involves building relationships, developing processes, and like you said, being careful with language.

GEO: Score! It's key to stop thinking of First Nations, Inuit and Metis people as just another "stakeholder" or "special interest" on the checklist. They are legally and morally entitled to make decisions affecting their traditional lands. That means an essential redistribution of power (von der Porten & de Loë, 2013).

MYRTLE: That sounds like a big deal.

GEO: It's already in Section 35 of the Constitution, affirming "Aboriginal rights" (Canada, Department of Justice, 2020a). And Canada finally ratified the UN Declaration on the Rights of Indigenous Peoples in 2016 (Canada, Indigenous and Northern Affairs, 2020).

MYRTLE: Which does what, actually?

GEO: Which recognizes the right of First Peoples to determine their own affairs. It includes the right to free, prior and informed consent over the development of natural resources on their traditional lands (United Nations, 2008). That's a lot more than the right to be "consulted," Myrtle.

MYRTLE: Let's consult with this.

RUSSIAN VOICE: Kanada is leader, sure. Leader in peace, order, and good government. Is in Constitution. We must stand up for these values. Small, angry minorities and interest groups have no business for demanding special treatment. They cannot upset cart of apples. They must not tell us good hosers what to do. Keep Great White North free! Support political candidates who carry message of freedom and equality to national capital in Toronto. This message paid for by Council of Concerned Citizens. Is genuine Kanadian organization, not foreign agitators in GRU tower in Moskva, yes?

ANNOUNCER: Um, you're listening to online radio station AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA, where great conversations are precipitated.

We hear the PITTER-PATTER of rain on a cold tin roof.

MYRTLE: We have Frankie from Fort Saskatchewan.

(CALLER) FRANKIE: Look. I work in the resource sector, and I see lots of dealings with First Nations on projects on their land. What's the big problem, anyway?

GEO: Good question: what makes for strong and meaningful Indigenous participation? Well, first, working closely with Indigenous People in planning, assessing, and decision-making on, the project.

FRANKIE: We do that.

GEO: Working with your project's leaders and regulators to address, and shape, how Indigenous knowledge is enacted and how environmental impacts are identified—throughout the project (Rathwell et al., 2015; Udofia et al., 2017).

FRANKIE: Yeah?

GEO: Focusing on social networks and relationships, to build mutual trust. That takes time.

FRANKIE: Nice words. But what's this supposed to look like on the ground?

GEO: Community participation. Through things like scenario-planning. Interviewing. Monitoring. Mapping. Holding workshops.

MYRTLE: Sounds “scientific” to me.

GEO: Sharing stories, oral and visual. Considering indicators of the health of Indigenous communities affected by resource development (Donatuto et al., 2016). Indicators like community connections, resource security, cultural use, education, self-determination, and resilience.

FRANKIE: Got a real-life example?

GEO: Maybe some callers can chime in here.

MYRTLE: You want my job? Here’s Nattan from North Vancouver.

(CALLER) NATTAN: Yeah. Okay, so the Fraser Basin Council analyzed watershed governance by Natives and non-Natives in five local regions (Spencer et al., 2016). It found three common factors that led to positive results. Establishing a framework with clear guidelines. Clarifying duties to ensure accountability. And having enough resources to do the work, including personnel skills like leadership, commitment, and respect.

MYRTLE: Robin from Revelstoke.

(CALLER) ROBIN: Another study from BC scoped four groups that do planning, management, or advocacy around watersheds. In two cases—the Columbia Basin Trust, and the Okanagan Basin Water Board (von der Porten & de Loë, 2013)—co-management didn’t turn out well. There were sketchy assumptions about community goals, and lame understandings of Native ways of seeing the world. Reconciliation is a great idea, but it doesn’t always work in practice.

MYRTLE: Avery from Airdrie.

(CALLER) AVERY: No disrespect. But honestly, isn’t a lot of this stuff just a polite way for Native people to get a bigger slice of the pie? Sure, you talk about their respecting the land and whatnot. But when push comes to shove, they need jobs, too. Take the Trans Mountain pipeline. A lot of bands were onside of that. There were tons of consultations (Trans Mountain Corporation, n.d.).

GEO: Okay. On the other hand, for example, members of the Tsleil-Waututh Nation and Squamish Nation—whose traditional lands lie on and near the pipeline terminus at the Port of Burnaby—and Coldwater Indian Band along the interior route tried to fight it in the Supreme Court of Canada (“Supreme Court Dismisses First Nations’ Challenge Against Trans Mountain Pipeline,” 2020). Also strongly opposed are the Union of British Columbia Indian Chiefs (2020) and participants in several big protests (e.g., “‘We’ll Do What We Have to Do’: Trans Mountain Pipeline Opponents to Ramp up Protests,” 2020). So is the International Treaty to Protect the Salish Sea, signed by nine First Nations from the lower mainland, Vancouver Island and Washington State (Tsleil-Waututh Nation Sacred Trust, 2014).

AVERY: Bunch of NIMBYs, if you ask me.

MYRTLE: And now, this.

We hear the music to the national anthem, O CANADA, softly at first but rising in volume during the commercial.

PATERNAL VOICE: Are you fed up with foreign environmentalists meddling in Canadian affairs? Let’s ask this person on the street.

PEDESTRIAN: Hells, yeah.

PATERNAL VOICE: Does it fry your back bacon to see overpaid Hollywood film stars calling Canadian bitumen “the dirtiest oil on the planet?”

PEDESTRIAN: Damn straight.

PATERNAL VOICE: Do you gnash your teeth when BC’s premier tries to stop pipeline expansions that everyone knows are in the national interest?

PEDESTRIAN: Who does he think he is!

O CANADA swells to a patriotic crescendo.

PATERNAL VOICE: It’s time for Canadians to take back their country, and their own resources. Don’t listen to the naysayers. Canada’s oil is good for the economy. That means good jobs, more purchasing power, and better lives for all Canadians. And that’s what the national interest is all about.

O CANADA ends majestically.

This message from the Freedom Institute of Canada. (*hastily*) An independent voice for truly *Canadian* interests based at the University of Calgary.

We hear the receding CLANK of an oil pumpjack.

ANNOUNCER: This is online radio AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA: where something’s always percolating underfoot.

We hear the sound of something BUBBLING.

MYRTLE: We’ve got Geo with us, talking about integrating Indigenous and Western knowledges on environmental issues.

GEO: Interweaving.

MYRTLE: Right. Time for one last caller. Drew from Dryden.¹

(CALLER) DREW: I think melding Native and Western knowledge is terrific. Like the almost 900,000 Native Christians in this great nation who blended their church learning and their own traditions, and just got on with it already.

MYRTLE: Uhh . . .

DREW: No offense, but there's too much fuss being made about all this. Indigenous People and their knowledge don't need special treatment. They have the same Charter of Rights and Freedoms as the rest of us Canadians. Let's cut out the blame, make a cash settlement to cover off any outstanding obligations, get over the guilt, and all move on with growing our economy, and building this great country that we all love!

GEO: So you think Indigenous People get a special deal?

DREW: Frankly, yeah. All those programs and payments funded by our taxes. More than any of the rest of us get!

GEO: How would you feel about 15 billion dollars a year in government support? That's how much the International Institute for Sustainable Development (2020) says Canada gave to fossil fuels from 2017 to 2019.

DREW: They're biased.

GEO: Check their math. And if you count beyond direct support to things like uncollected taxes on "externalized" costs and post-tax subsidies like traffic congestion, air pollution and climate change, then that figure multiplies.

MYRTLE: Let's take a quick—

GEO: And let's not forget 4.5 billion in federal-government funds committed to buy the Trans Mountain pipeline, part of an investment of north of 16 billion dollars (Kapelos & Tasker, 2020).

DREW: Unfair comparison. Oil is in the national interest.

GEO: So are meeting Canada's obligations under laws and treaties on environmental protection and respect for Indigenous People.

MYRTLE: Time for a quick—

GEO: And living up to standards of justice and morality that Canadians probably believe they stand for.

DREW: When oil companies are hurting, so are Canadians. When the price of oil went south, a lot of workers lost their truck, their house, and in some cases, even their family. They deserve our support against forces beyond their control.

GEO: I hear you. Lost opportunities, lost land, broken families. That might also *begin* to describe the Indigenous experience in this country.

DREW: Hey! That's not fair.

GEO: I couldn't agree with you more.

MYRTLE: Break time.

We hear OMINOUS MUSIC.

ANXIOUS VOICE: It's a scary world out there. Angry, despotic leaders. Random acts of violence. Weird weather. No telling what will happen next!

The ominous music segues into PASTORAL MUSIC, accompanied by the sound of WATER FLOWING. Anxious Voice becomes CALM VOICE.

CALM VOICE: It's good to know there are some great things you can count on. Like a nice, refreshing brew. Crack open a can of Tailings Select, the pride of the Canadian West. Brewed naturally from pure, prairie malt barley, hops, and yeast. Enhanced by 100% local adjuncts. Tailings: you'll taste the difference in our water.

The pastoral music segues into the sound of BEER POURING INTO A GLASS.

ANNOUNCER: You're listening to online radio station AQUA.

WHISPERERS: Ask Questions! Uncork Answers!

ANNOUNCER: AQUA: programming that *never* needs diluting.

We hear liquid POURING into a bottle.

MYRTLE: So, Geo, we have about thirty seconds. How would you sum up your research?

GEO: I heard an old story about a *yaya*, a grandmother, and a basket of perfect, shiny apples that had been sprayed with pesticide. But it's not my story to tell.

MYRTLE: (*bewildered*) That's it?

GEO: As Canadians, we have a chance—a historic, transformational chance—for both environmental protection and Indigenous reconciliation, with a new approach to resource-development projects. Let's take it!

MYRTLE: Uh . . . thanks for joining us.

GEO: Thank *you*, Myrtle.

MYRTLE: (*unconvincingly*) Good luck with your work. (*pause*) And now, this final word.

RUGGED VOICE: At Rock-On Resources, our commitment to social responsibility isn't just buzzwords in an annual report. It's how we do business. And nowhere is that more apparent than in our partnerships with Indigenous communities in Canada, and around the world.

We hear a rising, rhythmic DRUMBEAT.

Whether we carefully clear a few trees to lay a pipeline, or safely navigate through some rock to produce shale gas for Canadians' energy security and economic growth, we're all over the Indigenous Relations file—like a Hudson's Bay blanket. When our work takes us into Indigenous territories, we do our homework.

We hear POSSIBLY INDIGENOUS VOICES CHANTING.

We're right there, with respect, meaningful consultations, and well-paying jobs. Rock-On Resources. Putting Canada and its First Nations first. Every time. (*pause*) This ad authorized by the Longhorn group of companies, headquartered in Houston, Texas.

ANNOUNCER: This is online radio AQUA.
 WHISPERERS: Ask Questions! Uncork Answers!
 ANNOUNCER: For goodness' sake-ous, keep your dial tuned to Aqueous!
 MYRTLE: Dear listeners, that wraps it up for today. Join us again next week, when lifestyles maven Lacey Wahobnak presents ten great places to buy that vacation property you've always wanted.

We hear SPLASHING SOUNDS and SQUEALS OF CHILDLIKE JOY.

Brought to you with the participation of your friends at your local office of Avidez Realty. Avidez, a member of the Matón syndicate, based in Barcelona, Spain.
 ANNOUNCER: You've been listening to online radio station AQUA. This station is sponsored generously by Bubbly Spring, "The Beverage that Gives You Leverage."
 AQUA: where we're *always* livestreaming.

*We hear a BABBLING BROOK, which stops on the CLICK of a console switch.
 Then SILENCE for three seconds.
 We hear a HEADSET BEING REMOVED and DROPPED ON A DESK.*

MYRTLE: Apples?

Methodological Reflection

With its emancipatory dream of redressing the menaces of ecological and human colonization, this project calls for gathering, synthesizing, analyzing, and mobilizing my research for dissemination beyond the academy. Thus, I choose arts-based research (ABR), which is rooted in the quest for social justice (Finley, 2005) and can share subjugated perspectives, access multiple meanings and promote dialogue, all while bringing scholarship to wider audiences (Leavy, 2015). ABR engages ". . . the artistic process, the actual making of artistic expressions in all of the different forms of the arts, as a primary way of understanding and examining experience" (McNiff, 2008, p. 29). ABR suits the goals of this project because enduring appeals to science and reason need help to achieve the changes in popular attitudes and public policies required to stop the unsustainable ecological degradation of the Earth (McKibben, 2005). With its goal to engage the wider public on more visceral and impactful levels, ABR can lend itself well to sharing environmental research aimed at remedial action (Takach, 2016). ABR can also be seen as compatible with Indigenous ways of knowing the world and preserving culture, for example, through "research storytelling" (Christensen, 2012). Moreover, the emerging performative genre and area of scholarship known as eco-comedy (e.g., Bodkin, 2014) reinforces the historical role

of the comic corrective in fomenting resistance to wrongdoing (Jenkins, 1994). Accordingly, aspects of the deep physical, emotional and psychological trauma wrought by the colonization of environment (Seymour, 2018; Zekavat, 2019) and Indigenous Peoples (Ludolph, 2017; Taylor, 2006) may be amenable to sharing, addressing, and working to heal through comedy.

Of particular potential utility here is satire, which does not readily admit to a unified definition, but has been suggested to entail an attack on "vice or folly" based on some moral standard or purposes that uses wit, ridicule, exaggeration, and/or fiction to argue that a real-life thing or person is "reprehensible or ridiculous" (Griffin, 1994, p. 1). This gap between the target's perception and the satirist's take on reality seems to be the bedrock of the genre.

The site of this inquiry, Canada, seems particularly ripe for satire because it is fraught with breathtaking dualities. For example, Canada ranks second on an American consortium's list of "best countries" (U.S. News, 2020) and thirteenth on the UN's Human Development Index (United Nations Development Programme, 2020), but remains unable to regain its one-time seat on the UN Security Council (Cecco, 2020; Ibbitson & Slater, 2010). It is known widely for its pristine landscapes and inferentially its environmental stewardship, yet it was the first nation to withdraw from the Kyoto Protocol implementing the UN Framework Convention on Climate Change (Walsh, 2011); is second only to Saudi Arabia in state subsidies to the fossil-fuel industry (International Institute for Sustainable Development, 2020); ranks ninth among nations in total emissions of greenhouse gases and fifth in per-capita emissions (World Population Review, 2021); is faring poorly in protecting biodiversity (World Wildlife Fund-Canada, 2020); and ranks 38th out of 40 nations in the environmental component of an index measuring commitment to international development index for the G20 and 27 other industrialized economies (Center for Global Development, 2020). Canada positions itself as a beacon of multicultural tolerance (Library of Parliament, 2018), while continuing a long-standing regime of cultural genocide against Indigenous Peoples (TRC, 2015), for which the prime minister apologized at the UN (Reuters, 2017). Canada's ecological and human colonization converge, for example, in international complaints against Canadian-owned mining companies for brazenly overrunning sensitive environmental areas and their Indigenous occupants in Latin America (Blanchfield, 2017). Ironically, perhaps, Canada itself is seen as a bastion of satire by dint of its citizens' distanced observation of a certain cultural juggernaut, its southerly neighbor lurking just across the 49th parallel (Fisher & Taub, 2017).

Delving into eco-comedy and deploying devices like satire, exaggeration, and aural double-entendres, this audio script begins the work of dramatizing this research. This aims to make it more accessible to diverse audiences, and to encourage further reflection, discussion and action on

environmental protection and Indigenous conciliation. Still at the draft stage, the script is shared as an exercise in arts-based methodology, rather than as work ready for professional production and broadcast on a radio program or podcast. This draft is marked by two central tensions.

The first tension is between the need to reflect the research and the need to practice proper conventions of dramatic scriptwriting. As a professional screenwriter as well as a university researcher, I find that this draft still leans too heavily toward communicating the research per se. It would likely benefit from weaving in further principles of Indigenous “storywork” such as respect, responsibility, and reciprocity (Archibald, 2008; Archibald et al., 2019), and collaborative, Indigenous methods of inquiry like reframing and envisioning (Kulnieks et al., 2013; Tuhiwai Smith, 2012), all in service of “a reconstructive and locative educational and social justice idea” (Pewewardy, 2019, p. 151). Also, this work could draw more on principles of Western storytelling such as dramatic structure, character, and dialogue, while adding further subversive satire aimed at engendering emancipatory action.

The second tension involves the process of sharing the content of this research as an uninvited settler. As a first-generation offspring of immigrants settling on Turtle Island, I received my share of othering in the trenches of local elementary and middle schools. While I feel that my background provides a sympathetic portal to my research topic, I am wary of furthering the colonizing practices engrained in research models practiced in Western academe. I am concerned about “integrating” more than “interweaving” Indigenous approaches, as noted in the script. I am blessed with the wisdom, generosity, and grace of my collaborator, Asma-na-hi Antoine, who approved of my including her thoughts (taken from our many conversations) in the radio play. The work benefited further from story editing by my colleague, Dwayne Beaver, a university instructor and professional playwright and screenwriter. However, to realize the aims of this kind of research-creation in practice as well as in principle, I believe that its fullest execution requires the participation of an Indigenous co-creator from the point of brainstorming to the final curtain on production, and beyond into the means of dissemination.

When it comes to the devastating twin evils of colonizing the Earth and its Indigenous residents, we have a long row to hoe. This script is just one colonizer’s modest foray into the dirt.

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Note

1. Caller Drew’s remarks are adapted from actual letters posted online by a member of the Senate of Canada, Lynn Beyak, who was removed from the Conservative Senate caucus and censured and temporarily suspended by the Senate itself; the Senate itself removed the offensive letters (“Racist Letters About Indigenous Peoples Removed From Sen. Lynn Beyak’s Website,” 2019). In 2021, the senator announced her early retirement.

References

- Angus Reid Institute. (2018). *Truths of reconciliation: Canadians are deeply divided on how best to address Indigenous issues*. <http://angusreid.org/indigenous-canada>
- Archibald, J. (2008). *Indigenous storywork: Educating the heart, mind, body, and spirit*. University of British Columbia Press.
- Archibald, J., Lee-Morgan, J., & De Santolo, J. (Eds.). (2019). *Indigenous storywork as methodology*. Zed Books.
- Assembly of First Nations. (n.d.). *About AFN*. <https://www.afn.ca/about-afn>
- Bartlett, C., Marshall, M., & Marshal, A. (2012). Two-eyed seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, 2(4), 331–340.
- Berkes, F. (2015). *Coasts for people: Interdisciplinary approaches to coastal and marine resource management*. Routledge.
- Blanchfield, M. (2017, June 8). Canada’s international mining industry may not be living up to human rights commitments, experts say. *The Star [Toronto]*. <https://www.thestar.com/news/canada/2017/06/08/canadas-international-mining-industry-may-not-be-living-up-to-human-rights-commitments-experts-say.html>
- Bodkin, A. (2014). Eco-comedy performance: An alchemy of environmentalism and humour. In R. D. Besel & J. A. Blau (Eds.), *Performance on behalf of the environment* (pp. 51–72). Lexington Books.
- Bohensky, E. L., & Maru, Y. (2011). Indigenous knowledge, science, and resilience: What have we learned from a decade of international literature on “integration?” *Ecology and Society*, 16(4), Article 6.

- Canada, Department of Justice. (2020a). *Constitution Acts, 1867 to 1982*. <http://laws-lois.justice.gc.ca/eng/Const/page-16.html>
- Canada, Department of Justice. (2020b). *R.S.C., 1985, c. I-5 as am*. <https://laws-lois.justice.gc.ca/eng/acts/i-5>
- Canada, Indigenous and Northern Affairs. (2020). *Implementing the United Nations declaration on the rights of Indigenous peoples in Canada*. <https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958>
- Cecco, L. (2020, June 18). Canada's failed UN Security Council bid exposes Trudeau's "dilettante" foreign policy. *The Guardian*. <https://www.theguardian.com/world/2020/jun/18/canada-loses-bid-un-security-council-seat-justin-trudeau>
- Center for Global Development. (2020). *Commitment to development index: Environment*. https://www.cgdev.org/cdi/#raw_environment
- Christensen, J. (2012). Telling stories: Exploring research storytelling as a meaningful approach to knowledge mobilization with Indigenous research collaborators and diverse audiences in community-based participatory research. *The Canadian Geographer/Le Géographe canadien*, 56(2), 231–242.
- Donatuto, J., Campbell, L., & Gregory, R. (2016). Developing responsive indicators of Indigenous community health. *International Journal of Environmental Research and Public Health*, 13(9), 1–16.
- Environics Institute. (2016). *Public opinion about Aboriginal issues in Canada 2016*. <https://www.environicsinstitute.org/projects/project-details/public-opinion-about-aboriginal-issues-in-canada-2016>
- Finley, S. (2005). Arts-based inquiry: Performing revolutionary pedagogy. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 681–694). SAGE.
- Fisher, M., & Taub, A. (2017, June 30). Canada's comedy, the voice of a polite nation, rises in the Trump era. *The New York Times*. <https://www.nytimes.com/2017/06/30/world/canada/canadas-comedy-the-voice-of-a-polite-nation-rises-in-the-trump-era.html>
- Griffin, D. (1994). *Satire: A critical reintroduction*. University Press of Kentucky.
- Houde, N. (2007). The six faces of traditional ecological knowledge: Challenges and opportunities for Canadian co-management arrangements. *Ecology and Society*, 12(2), Article 34.
- Ibbitson, J., & Slater, J. (2010, October 12). Security Council rejection a deep embarrassment for Harper. *The Globe and Mail*. <https://beta.theglobeandmail.com/news/politics/security-council-rejection-a-deep-embarrassment-for-harper/article1370239/?ref=http://www.theglobeandmail.com&>
- International Institute for Sustainable Development. (2020). *Doubling back and doubling down: G20 scorecard on fossil fuel funding*. <https://www.iisd.org/publications/g20-scorecard>
- Jenkins, R. (1994). *Subversive laughter: The liberating power of comedy*. Macmillan.
- Johnson, J. T., Howitt, R., Cajete, G., Berkes, F., Louis, R. P., & Kliskey, A. (2016). Weaving Indigenous and sustainability sciences to diversify our methods. *Sustainability Science*, 11(1), 1–11.
- Kapelos, V., & Tasker, J. P. (2020). *Cost of Trans Mountain expansion soars to \$12.6 billion*. <https://www.cbc.ca/news/politics/vassy-trans-mountain-pipeline-1.5455387>
- Kulnieks, A., Longboat, D. R., & Young, K. (Eds.). (2013). *Contemporary studies in environmental and Indigenous pedagogies: A curricula of stories and place*. Sense Publishers.
- Kunkel, T. (2017). Aboriginal values and resource development in native space: Lessons from British Columbia. *Extractive Industries and Society*, 4(1), 6–14.
- Leavy, P. (2015). *Method meets art: Arts-based research practice* (2nd ed.). Guildford Press.
- Library of Parliament. (2018). *Canadian multiculturalism background paper*. https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/200920E
- Ludolph, R. (2017). Humour, intersubjectivity, and Indigenous female intellectual tradition in Anahareo's Devil in Deerskins. *Canadian Literature*, 233, 109–126.
- Maffie, J. (2009). "In the end, we have the Gatling gun, and they have not": Future prospects of Indigenous knowledges. *Futures*, 41(1), 53–65.
- McKibben, B. (2005, April 22). Imagine that: What the warming world needs now is art, sweet art. *Grist Magazine*. www.grist.org/article/mckibben-imagine
- McNiff, S. (2008). Art-based research. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research* (pp. 29–40). SAGE.
- Pewewardy, C. (2019). Afterward: To be an Indigenous scholar. In S. Windchief & T. San Pedro (Eds.), *Applying Indigenous research methods: Storying with people and communities* (pp. 150–153). Routledge.
- Racist letters about Indigenous Peoples removed from Sen. Lynn Beyak's website. (2019, September 24). *Global News*. <https://globalnews.ca/news/5945827/racist-letters-about-indigenous-peoples-removed-from-sen-lynn-beyaks-website>
- Rathwell, K. J., Armitage, D., & Berkes, F. (2015). Bridging knowledge systems to enhance governance of the environmental commons: A typology of settings. *International Journal of the Commons*, 9(2), 851–880.
- Reuters. (2017, September 22). Trudeau confronts Canada's failure of Indigenous people in U.N. speech. *Reuters*. <https://www.reuters.com/article/us-un-assembly-canada/trudeau-confronts-canadas-failure-of-indigenous-people-in-u-n-speech-idUSKCN1BW2KL>
- Seymour, N. (2018). *Bad environmentalism: Irony and irreverence in the ecological age*. University of Minnesota Press.
- Spencer, M., Overduin, L., Bannister, N., Simms, K., Brandes, R., & Brandes, O. M. (Eds.). (2016, September 30–October 1). *Building capacity for collaboration and watershed governance in British Columbia* [Conference session]. Watersheds 2016, Vancouver, BC, Canada. <https://poliswaterproject.org/files/2016/12/Watershed2016-Proceedings-web.pdf>
- Supreme Court dismisses First Nations' challenge against Trans Mountain pipeline. (2020, July 2). *CBC News*. <https://www.cbc.ca/news/canada/british-columbia/trans-mountain-pipeline-challenge-bc-first-nations-supreme-court-of-canada-1.5634232>
- Sveiby, K.-E. (2009). Aboriginal principles for sustainable development as told in traditional law stories. *Sustainable Development*, 17, 341–356.
- Takach, G. (2016). *Scripting environmental communication: Oil, democracy and the sands of time and space*. Palgrave Macmillan.

- Taylor, D. H. (Ed.). (2006). *Me funny*. Douglas & McIntyre.
- Trans Mountain Corporation. (n.d.). *Indigenous peoples*. <https://www.transmountain.com/indigenous-peoples>
- Truth and Reconciliation Commission of Canada. (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada*. Lorimer & Sons.
- Tsleil-Waututh Nation Sacred Trust. (2014). *Coast Salish Nations sign international treaty to protect the Salish Sea*. <https://tw-sacredtrust.ca/coast-salish-nations-sign-international-treaty-to-protect-the-salish-sea>
- Tuhiwai Smith, L. (2012). *Decolonizing methodologies: Research and Indigenous peoples* (2nd ed.). Zed Books.
- Udofia, A., Noble, B., & Poelzer, G. (2017). Meaningful and efficient? Enduring challenges to Aboriginal participation in environmental assessment. *Environmental Impact Assessment Review*, 65, 164–174.
- Umek. (2005). *Tsawalk: A Nuw-chah-nulth worldview*. University of British Columbia Press.
- Union of British Columbia Indian Chiefs. (2020). *Federal Court of Appeal's ruling on TMX brazenly attacks Indigenous title and rights and threatens climate*. https://www.ubcic.bc.ca/the_federal_court_of_appeal_s_ruling_on_the_tmx_spells_future_catastrophe
- United Nations. (2008). *United Nations declaration on the rights of Indigenous peoples*. http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- United Nations Development Programme. (2020). *Human development report 2020*. <http://report.hdr.undp.org>
- University of Alberta. (2020). *Indigenous Canada*. <https://www.coursera.org/learn/indigenous-canada>
- U.S. News. (2020). *Overall best countries ranking*. <https://www.usnews.com/news/best-countries/overall-rankings>
- von der Porten, S., & de Loë, R. C. (2013). Collaborative approaches to governance for water and Indigenous peoples: A case study from British Columbia, Canada. *Geoforum*, 50, 149–160.
- Voyageur, C. J., Calliou, B., & Brearley, L. (Eds.). (2015). *Restorying Indigenous leadership: Wise practices in community development* (2nd ed.). Banff Centre Press.
- Walsh, B. (2011, December 14). Bienvenue au Canada: Welcome to your friendly neighborhood petro-state. *Time*. <http://science.time.com/2011/12/14/bienvenue-au-canada-welcome-to-your-friendly-neighborhood-petrostate/print>
- 'We'll do what we have to do': Trans Mountain pipeline opponents to ramp up protests. (2020, February 6). *CBC News*. <https://www.cbc.ca/news/canada/british-columbia/bc-trans-mountain-pipeline-opponents-protests-1.5453606>
- World Population Review. (2021). *Carbon footprint by country 2021*. <https://worldpopulationreview.com/country-rankings/carbon-footprint-by-country>
- World Wildlife Fund–Canada. (2020). *Wildlife protection assessment*. <https://wwf.ca/climate/wildlife-protection-assessment/>
- Zekavat, M. (2019). Satire, humor and ecological thought. *Neohelicon*, 46, 369–386.

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