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SOME KEYWORDS TOWARD DECOLONIAL METHODS: STUDYING SETTLER COLONIAL HISTORIES AND ENVIRONMENTAL VIOLENCE FROM TKARONTO

MICHELLE MURPHY

ABSTRACT

This article provides keywords and reflections for decolonial methods, drawing on insights from the Indigenous-led Land and the Refinery project, which concerns the history of Canada's Chemical Valley. This project is crucially organized as Indigenous people co-researching the Imperial Oil Refinery, not as academics studying Aamjiwnaang, and asks how Indigenous and decolonial methods might reorient the use of archives toward other futures. Together, the keywords begin to outline a particular place-based theory of change within decolonial historical practice.

Keywords: decolonial methods, history of science, Indigenous science and technology studies, environmental violence, Chemical Valley

This article offers some keywords and reflections for embracing decolonial historical practices from and about a particular place, *Nayaano-nibiimaang Gichigamiin,* or the North American Great Lakes region, which is Anishinaabe and Haudenosaunee land. The keywords offered here follow and learn from scholarship in Indigenous studies and local protocols.[1] Moreover, they arise from a commitment to a specific place-based research project conducted in Tkaronto/Toronto that examines the relationships between pollution, science, and colonialism in Sarnia, Ontario's Chemical Valley, which is on the territory of the Aamjiwnaang First Nation. The reflections here derive from the day-to-day workings of the Indigenous-led Environmental Data Justice Lab, which is composed of academics and community members for whom historical practice is just one important constituent element. The lab includes Anishinaabe, Métis, as well as diasporic scholars of color from Somalia and Malaysia, all of whom

1. For example, Mishuana Goeman, *Mark My Words: Native Women Mapping Our Nations* (Minneapolis: University of Minnesota Press, 2013); Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London: Zed Books, 2012); Nick Estes, *Our History Is the Future: Standing Rock versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (London: Verso, 2019); Susan M. Hill, *The Clay We Are Made Of: Haudenosaunee Land Tenure on the Grand River* (Winnipeg: University of Manitoba Press, 2017); Aileen Moreton-Robinson, *The White Possessive: Property, Power, and Indigenous Sovereignty* (Minneapolis: University of Minnesota Press, 2015).

bring their own traditions of anti-colonialism. Although some project members are undertaking this work on their home territories, other members (like myself, a Métis from Winnipeg) are from elsewhere.

Sitting on the St. Clair River that runs between Lake Huron and Lake Erie, Chemical Valley processes some forty percent of Canada's petrochemicals.[2] The refineries there exemplify the poor regulation of environmental pollution in Canada: a single Canadian refinery produces up to fifty times more pollution than comparable facilities in the United States.[3] Moreover, Chemical Valley, which is not a valley at all but an industrial corridor along the Canadian side of the river, is a site of over one hundred and fifty years of concentrated colonial violence. It occupies the traditional Anishinaabe land of the Three Fires Confederacy and more specifically surrounds and disrupts the land and life of the Aamjiwnaang First Nation. Our work on The Land and the Refinery project is a collaborative research endeavor that focuses on the history of Chemical Valley and one of the world's oldest refineries, the Imperial Oil Refinery, which was first founded in 1871 and is majority-owned by Exxon Mobile, one of the planet's biggest oil companies. This Imperial Oil facility is, in turn, the downstream progeny of the first commercial oil field, which was begun in the 1850s, as well as the upstream kick-starter of a North American twentieth-century fossil fuel infrastructure connected to the automobile industry and Fordist racial capitalism, as exemplified in Detroit. Between Lake Huron and Lake Erie, along the river's waters, lies a crucial hub in the history of petrocapitalism.

We understand our general research project—with historical practices underpinning it—as primarily a relationship with Aamjiwnaang community members and land defense rather than oriented toward academic ends. The purpose of the work is to contribute to a future of less colonial violence in the form of environmental harm. That is, its purpose is to participate in undoing colonial violence and activating Indigenous worldings. We co-develop our work with community members through community review meetings and relationships. We have created events, a website, and a mobile phone app as well as the usual written forms of historical scholarship. We define our project as Indigenous people co-researching the Imperial Oil Refinery (and not as academics studying Aamjiwnaang) and ask how Indigenous and decolonial methods might reorient the study of chemical violence, the interpretation of environmental data and science, and the use of archives toward other futures.[4]

In asking what a decolonial approach to past and present petrochemical violence might be, we are working against at least two habits of environmental

2. EcoJustice, *Exposing Canada's Chemical Valley: An Investigation of Cumulative Air Pollution Emission in the Sarnia, Ontario Area*, 2007, https://www.ecojustice.ca/wp-content/uploads/2015/09/2007-Exposing-Canadas-Chemial-Valley.pdf.

3. EcoJustice, *Inadequate Pollution Control in Canadian Refineries: Media Backgrounder*, 2018, https://www.ecojustice.ca/wp-content/uploads/2018/05/2018-04-30-benchmarking-backgrounder-FINAL-1.pdf.

4. Indigenous science and technology studies (STS) is exemplified by the work of Kim TallBear, Marissa Duarte, Kyle Powys Whyte, and the new generation of scholars such as Max Liboiron, Desi Rodriguez Longbear, Krisha Hernandez, and Jessica Kolopenuk.

justice research.[5] The first is the tactic of representing environmental violence through injuries to bodies and lands. This research tactic is often turned to because most data and scientific research on industrial violence is produced by companies and the state and is thus profoundly complicit in colonial practices that obscure environmental violence. Therefore, it makes sense that historians have often sought to confront this legacy of violence with the evidence of suffering. The second habit involves working with the materials, and hence the concepts, produced by industry and the state. The petrochemical industry depends on its structure of waste-making—that is, its ability to pollute freely—and creates understandings of chemicals as separate from their violence. The corporate entitlement to pollute, in turn, rests on a settler-colonial claim to the legal fiction of *terra nullius*—the land is empty and thus can be taken or anything can be done to it—as well as structures of white supremacy, in which Indigenous, Black, and people of color are exposed to violence for the sake of upholding whiteness.[6] Part of our work, therefore, is shifting the very terms and concepts that we might use to describe histories (and continuing practices) of environmental violence. In this way, our research project asks, what can be done with and against settler-colonial science and concepts of industrial chemicals to hold them responsible for their violence? How can research refuse settler colonialism in both the nation-state and the corporation? How can decolonial approaches and Indigenous knowledges offer different, more responsible conceptualizations of our histories? Or put in its most broad way, what kinds of keywords might we need if the concepts that the university provides are built by the very same violent structures we are seeking to undo?

KEYWORDS FOR LESSONS LEARNED

What follows are reflections on decolonial methods that come from the place of our research organized around keywords. The question of what is a decolonial method, of course, has many answers, as there is no single universal decolonial method. What is offered below is far from a recipe for decolonizing history but instead a set of practices that are struggling with being both within and against colonialism—they are a bundle of refusals, affirmations, activations, and gestures that seek to work toward a decolonial horizon.[7] Together, the keywords begin to outline a particular place-based theory of change within decolonial historical practice. The keywords below seek to trace an explicitly decolonial (and not just anti-colonial) orientation, one that wants to participate in undoing colonialism (rather than just describing or critiquing colonialism), activating Indigenous

5. On epistemic habits for studying chemical violence, see Michelle Murphy, "Alterlife and Decolonial Chemical Relations," *Cultural Anthropology* 32, no. 4 (2017), 494-503; Max Liboiron, Manuel Tironi, and Nerea Calvillo, "Toxic Politics: Acting in a Permanently Polluted World," *Social Studies of Science* 48, no. 3 (2018), 331-349.

6. Moreton-Robinson, *The White Possessive*; Traci Brynne Voyles, *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2015); J. Kēhaulani Kauanui and Patrick Wolfe, "Settler Colonialism Then and Now: A Conversation Between," *Politica & Società* 2 (May–August 2012), 235-258.

7. On decolonial gesturing, see Karyn Recollet, "Gesturing Indigenous Futurities through the Remix," *Dance Research Journal* 48, no. 1 (2016), 91-105.

worldings (rather than describing Indigenous people), and building less violent futures both at the large scale of structures and at the intimate level of our ethical relationships with one another (as knowledge-holders and researchers) and with the land (as beings who live with more-than-human obligations).

Land

In North America, decolonial approaches to settler colonialism are necessarily about Land and Indigenous sovereignty. Eve Tuck and K. Wayne Yang's now-classic article, "Decolonization is not a Metaphor," makes this point well.[8] In seeking to undo settler colonialism and support Indigenous sovereignty and Land, such research is specific to place—its earths, airs, waters, nonhuman relations, and ongoing Indigenous presence. And at the same time, a decolonial approach asks us to attend to the coordinated structural violence of the nation-state, capitalism, and white supremacy. Decolonial history in Canada and the United States is generally antagonistic to the nation-state as the bearer of settler colonialism, and in this way it might be distinct from other decolonial lineages that sought to establish independent nation-state sovereignty against colonial occupation. Being responsible to Land is to reject a sense of land as resource, property, or territory and to work in obligation to capital-L "Land," understood in all its relations, including its specificity of place and kinship.[9] Thus, in this understanding of a decolonial approach on the terrain of settler colonialism, historical research practices strive to enact obligations to Land and be responsible to the Indigenous sovereignties of that Land while at the same time undoing the structures of colonialism.

Justice

We often think of the research we are doing in our lab as a kind of environmental data justice, work that is also a form of Land protection. Our research shows how data about pollution is largely the result of state and corporate infrastructures that are purposefully created to produce unknowing, uncertainty, erasure, and doubt. This creation of unknowing is central to the settler-colonial project, beginning with Indigenous elimination, the premise of *terra nullius* (so-called empty land), and many other epistemic erasures. Manu Vimalassery, Juliana Hu Pegues, and Alyosha Goldstein call this a "colonial unknowing."[10] Readers might note a resonance with forms of corporate epistemic doubt-making, from Exxon Mobile's work to undermine climate change science to Imperial Oil refineries' limited and proprietary pollution monitoring.[11] The decolonial sense of justice that we invoke, importantly, is not one that appeals to the nation-state. Tuck and Yang are once again helpful here in their critical work querying the concept of

8. Eve Tuck and K. Wayne Yang, "Decolonization is Not a Metaphor," *Decolonization* 1, no. 1 (2012), 1-40.

9. Deborah McGregor, "Honouring All Relations: An Anishnaabe Perspective on Environmental Justice," in *Speaking for Ourselves: Environmental Justice in Canada*, ed. Julian Agyeman, Peter Cole, Randolph Haluza-DeLay, and Pat O'Riley (Vancouver: University of British Columbia Press, 2009), 27-41.

10. Manu Vimalassery, Juliana Hu Pegues, and Alyosha Goldstein, "Introduction: On Colonial Unknowing," *Theory & Event* 19, no. 4 (2016), 1-12.

11. Geoffrey Supran and Naomi Oreskes, "Assessing ExxonMobil's Climate Change Communications (1977–2014)," *Environmental Research Letters* 12, no. 8 (2017).

justice in social justice work, and particularly in pointing out an implied shoring-up of the nation-state as the arbiter of justice that can accompany the term.[12] A vision of decolonial justice enacted through historical practice from here, in contrast, recognizes rich worlds of Indigenous governance as well as Black, queer, and other projects of ethical relationality that seek to affirm non-state versions of calling into responsibility. Thus, our sense of chemical violence involves this sense of decolonial justice, which shapes our histories, in which the settler state is purposefully designed not to stop pollution. Indigenous jurisdiction and other modes of collective life are where justice is imagined and made.

Decolonialities

Although decolonial approaches to historical and other research in Toronto begin by being responsible to the specificities of place and Land here, we also recognize the multiplicity of colonialisms meeting here and connected elsewhere. Starting with the three subject figures that underpin North American settler colonialism—the settler, the Indigenous, and the slave—decolonial approaches are also necessarily and simultaneously involved in struggling against anti-Blackness and the long wake of slavery.[13] Moreover, Toronto is a meeting place of many different communities shaped by a multitude of dispossessions. As there is no single decolonial approach among them, there is also an abundance of decolonial traditions and itineraries that can learn from one another, even as they may not be commensurate with one another. Living in Toronto, an important site in the Black Caribbean diaspora, our understandings of decolonial histories have been shaped by radical Black traditions in addition to Indigenous decolonial work (particularly Métis, Anishinaabe, Haudenosaunee, and Cree traditions). The work of Frantz Fanon has been particularly crucial for thinking about decolonial histories.[14] Historians such as Sebastián Gil Riaño and Gabriela Soto Laveaga explicitly wrestle with the tensions between decolonial national politics and Indigenous decolonial commitments in sites such as Paraguay and Mexico. Another inspiring example is Manu Karuka's recent work on the history of the North American transcontinental railway as a meeting point between Indigenous and Chinese diasporic politics in a settler-colonial world.[15]

Worlds

In recognizing the multiplicity of often incommensurate decolonial traditions, our historical and other research is confronted by the many worlds in which we exist. It is not only that beings can have multiple ontologies (as science and

12. Eve Tuck and K. Wayne Yang, "What Justice Wants," *Critical Ethnic Studies* 2, no. 2 (2016), 1.

13. Tiffany Lethabo King, *The Black Shoals: Offshore Formations of Black and Native Studies* (Durham: Duke University Press, 2019).

14. Frantz Fanon, *Black Skin, White Masks*, transl. Charles Lam Markmann (New York: Grove Press, 1967).

15. Sebastián Gil-Riaño, "Decolonial Lessons from Aché Children" (lecture, Postcolonial Tensions: Sciences, Histories, Indigenous Knowledges Workshop, Harvard University, Cambridge, MA, April 12–13, 2019); Gabriela Soto Laveaga, "Largo Dislocare: Connecting Microhistories to Remap and Recenter Histories of Science," *History and Technology* 34, no. 1 (2018), 21-30; and Manu Karuka, *Empire's Tracks: Indigenous Nations, Chinese Workers, and the Transcontinental Railroad* (Oakland: University of California Press, 2019).

technology studies teaches us).[16] In recognizing the multiplicity of decolonial projects, we also recognize the multiplicity of worlds. By listening to Zapatista and Latin American decolonial understandings of the pluriverse, a decolonial approach can acknowledge the multiplicity of worlds that are threatened by, but also persist against, the colonial logic of a single universal world that science so often presumes. Here, Marisol de la Cadena's work on the world of many worlds is particularly helpful.[17] Understanding that there are many worlds, moreover, disrupts claims of a universal timeline that conventional historians may be inclined toward by training.

Emphasizing the specificity of place, and at the same time seeking to dismantle the colonial science hubris of a single universal world, does not involve a move to relativism. Worlds are materially connected even as they do matter differently. Worlds can be in antagonism even as they make and break one another within profoundly uneven conditions. There is so much to learn across decolonial practices from different worlds. A decolonial approach is not merely descriptive or representational of multiple worlds. It is materially and conceptually engaged in dismantling colonialism and cultivating something else—and thus it has uneasy responsibilities in worlds.

Incommensurabilities

Conducted in academic spaces, decolonial research has to reckon with and not smooth over the incommensurabilities in its project and reject moves to innocence. History as a narrative discipline, as any historian knows, promulgates a smooth and logical narrative in order to make the evidence make sense. Decolonial practices have to be responsible to the incompleteness of our gestures in the long horizon of undoing colonialism and the necessity of working in profound contradictions. Efforts toward decolonial histories are thus profoundly humbling.

Refusal

One important method for doing decolonial history is to begin with refusing a colonial form.[18] Stopping, dismantling, and refusing can be done without knowing exactly what comes next. The call to "suspend damage," as articulated by Unangaŝ scholar Eve Tuck, offers one vision for this method, in which deficit-based research is refused and then reformed around the desire for animating an alternative world

16. John Law, "What's Wrong with a One-World World?" *Distinktion: Journal of Social Theory* 16, no. 1 (2015), 126-139; Anne Marie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham: Duke University Press, 2002).

17. *A World of Many Worlds*, ed. Marisol de la Cadena and Mario Blaser (Durham: Duke University Press, 2018); Marisol de la Cadena, "Uncommoning Nature," *E-Flux Supercommunity*, August 22, 2015, http://supercommunity.e-flux.com/texts/uncommoning-nature/. See also *The World Multiple: The Quotidian Politics of Knowing and Generating Entangled Worlds*, ed. Keiichi Omura, Grant Jun Otsuki, Shiho Satsuka, and Atsuro Morita (London: Routledge, 2018).

18. Audra Simpson, "On Ethnographic Refusal: Indigeneity, 'Voice' and Colonial Citizenship," *Junctures* 9 (December 2007), 67-80; Eve Tuck and K. Wayne Yang, "R-Words: Refusing Research," in *Humanizing Research: Decolonizing Qualitative Inquiry with Youth and Communities*, ed. Django Paris and Maisha T. Winn (Los Angeles: Sage, 2013), 223-248; Ruha Benjamin, "Informed Refusal: Toward a Justice-Based Bioethics," *Science, Technology, & Human Values* 41, no. 6 (2016), 967-990.

that is more livable.[19] Importantly, we seek to make less violent relations, and hence our historical work is committed to an Indigenous feminist vision of harm reduction.

Already Here

Decolonial alternatives are already here. Indigenous, Black, queer, and other structurally disposed communities already know well other ways of living, thinking, and being in kinship despite hostile conditions; they know well how to get by without the help of, and within the violence of, capitalism or white supremacy. Decolonial futures can be found in the past. Bringing "invention into existence," as Fanon describes, is not about replicating the myth of autonomous invention that colonial science offers.[20] Invention is only possible because of the long and persistent past of already-here other worlds.

Theories of Change

An important debate for considering what constitute decolonial methods is whether decolonial futures can be reached only through wholesale systemic change. In this view, the scale of the decolonial must be the overthrow of all. Another view suggests that decolonial futures and projects can operate at other scales. Decolonial potentials can be made in the scope of small, desire-based work in community. Stefano Harney and Fred Moten, for example, describe the undercommons that exists within and against the university.[21] In this sense, decolonial historical practices are already here, are still here, and have already been here. Our lab's sense of the decolonial tends more toward this second sense of generating potentials in the intimate scale of our work. Tuck describes this as a desire-based "theory of change" that does not defer but starts with the now of each other.[22] Decolonial possibilities can be humble and need not be spectacular.

Violence

Heeding the call to suspend damage-based research does not mean that historical and other research should not attend to violence. It is our anti-colonial responsibility as beneficiaries of colonial institutions to analyze and attend to the violence of infrastructures and conditions. This includes attending to how violence is habitually erased in academic epistemologies. The methodological challenge is deciding how to put the burden of representating violence on the perpetrating structures and not the land and lives that are most affected by that violence. The methodological challenge is to conduct research that is not extractive and that does not create research careers out of others' suffering. This is not a call to discourage people from describing and sharing their own experiences, as this would be entirely an overstep, and it is not for historians to say how people should represent themselves. Rather, heeding the call to suspend damage-based research is a request to historians to make themselves responsible for the violent structures that

19. Eve Tuck, "Suspending Damage: A Letter to Communities," *Harvard Educational Review* 79, no. 3 (2009), 409-428.

20. Fanon, *Black Skin, White Masks*.

21. Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning & Black Study* (Brooklyn: Autonomedia, 2013).

22. Tuck, "Suspending Damage," 409.

they are entangled in even as they struggle against them; it is a request to work as anti-colonial co-theorizers rather than simply as explicators.

Relationality

The decolonial approach employed at our lab emphasizes ethical relationality. History and science studies tend to describe relations as primarily abstract forms of connection at either ontological or epistemological registers. As Métis scholar Zoe Todd underlines—and Anishinaabe, Métis, and other Indigenous teachings emphasize—relations are not abstract but derive from specific Indigenous and non-Indigenous worlds with obligations and kinship.[23] What might a decolonial history of science look like if it began with activating the value of reciprocal relationality (a core Métis and Anishinabeg value) in its own practices? Whom would it be for? To whom is the research responsible?

With and Against Technoscience

The decolonial approach of our lab derives from urban Indigeneity not only in the context of highly disrupted Lands and lives but also in the context of asserting the fullness of Indigenous modernity. Our work is with computers, data, spreadsheets, apps, and digital visualizations. It happens inside and outside of universities. Here we look to the work of Kim TallBear, Marisa Duarte, Maggie Walter and Chris Andersen, Elizabeth LaPensée, and Jason Lewis to understand that technoscience and its histories can be Indigenous and decolonial. Our work is with and against technoscience, and thus it is in explicit acknowledgement of working within unresolved antagonisms, and even impossibilities.

Time

A decolonial approach to a history of settler colonialism requires critically addressing disciplinary conventions of time. The past is not over. The "yet to come" are already here in the Land. Here, we are thinking with the artwork of Métis scholar Dylan Miner, who is collaborating on our project. He is working with the Anishinaabe concept of *anikoobijiganag*, which conveys a sense of relations simultaneously stretching both to the past, with ancestors, and the future, to those yet to come. We also learn from the work of Potawatomi philosopher Kyle Powys Whyte, who emphasizes that the temporalities of Anthropocene and climate change research, which places broken-worlds on the horizon of the future, is a form of colonial time and that, instead, our historical practice is in the aftermath of massive Land violence.[24]

Study

A decolonial approach to historical research demands that we remake the genealogies that are understood to compose the usual historical protocols. This point is obvious, I know, but I think it is worth saying again and again. The doing of

23. Zoe Todd, "Fish, Kin and Hope: Tending to Water Violations in *Amiskwaciwâskahikan* and Treaty Six Territory," *Afterall: A Journal of Art, Context and Enquiry* 43 (Spring/Summer 2017), 102-107.

24. Kyle Powys Whyte, "Is it Colonial Deja Vu? Indigenous Peoples and Climate Injustice," in *Humanities for the Environment: Integrating Knowledge, Forging New Constellations of Practice*, ed. Joni Adamson and Michael Davis (London: Earthscan, 2017), 88-104.

history would involve respecting, acknowledging, and generating a multitude of sometimes incommensurate genealogies not only to remake the discipline epistemically but also to shift who is part of it and where it happens.

For all our hopes, the Environmental Data Justice Lab is a small group of people, often huddled together around our laptops and brewing seemingly endless cups of coffee together. Or we are driving the three-hour stretch to the Aamjiwnaang, working to keep showing up with community. In contrast, the companies that stand in Chemical Valley are some of the most powerful multinationals in the world. Step by hard-won step, we try to laden the refinery with responsibility for its violence—historical and continuing—and point to the decolonial horizon of justice. We know there will be a time in the future when the refinery, Chemical Valley, and even the whole concatenated infrastructure of fossil fuel extraction will no longer be standing. But for now, we are meeting the Land and ourselves where we already are, and this is part of our theory of change.[25] As one of the paintings by Oneida artist Monique Aura inspires us to keep remembering, "The Land Behind this Fence is Still Sacred." Even if our mobile app crashes and the book never gets finished, we are still activating something vital in the ways we are coming together, in showing up, in the circle of the lab, in our ethical relations. We are attempting to generate collaboratively another ethics of historical inquiry. This here and now is just as important to our practice as the long arcs of time to which we are directed. In other words, undoing colonialism and activating something happens in the relations and values with one another that create and maintain a decolonial otherwise. How we are together in this place is the starting point. It is more important than what we write.

University of Toronto

25. Karyn Recollet and Erin Marie Konsmo, "Afterword: Meeting the Land(s) Where They Are At: A Conversation between Erin Marie Konsmo (Métis) and Karyn Recollet (Urban Cree)," in *Indigenous and Decolonizing Studies in Education: Mapping the Long View*, ed. Linda Tuhiwai Smith, Eve Tuck, and K. Wayne Yang (New York: Routledge, 2019), 238-251.