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"My Body is a Spaceship": Technoscience and Experiments Otherwise in Adam Dickinson's *Anatomic*

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ABSTRACT

What does an understanding of the self as constantly rearticulated mean for ecopoetry and the lyric "I"? And how might an emphasis on a multiscalar semiotics, where different forms of writing are understood to carry the capacity to literally reorganize material life, reframe the possibilities for writing under the contested sign of the Anthropocene, in the midst of the Earth's sixth extinction event, the accelerating acidification of the planet's oceans, and the largescale climatic reorganizations wrought by climate change? This article reads the idiosyncratic mode of production and the poems of Adam Dickinson's Anatomic alongside recent scholarship in ecopoetics, environmental humanities, and science and technology studies to advance a particular and specific (that is, non-generic) understanding of Dickinson's experimental poetics. From its beginnings in the desire to catalogue and identify the presence of a dizzying array of bacteria, chemicals, metals, and other substances in the body, Anatomic narrates the movement from a misguided and despairing purity politics to a transformative conception of the individual body and consciousness as shot through with relations at multiple, unfathomable scales. Intervening in the discourses, techniques, and worldview of what Max Liboiron (Métis) has termed "dominant science" (20), Dickinson's text elaborates an experimental practice that invites us to rethink our modes and forms of relating to one another and the morethan-human entanglements that sustain, feed off, or simply co-exist with us.

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Keywords

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1. Introduction

The introductory prose poem of Adam Dickinson's *Anatomic* (2018) announces the collection's overt concern with the proliferation of toxins and toxicants that continually wash over the contemporary, western subject:

The keys touch me as I type.... My neighbour's attempt to control dandelion leads to misspellings in my adrenal gland.... My fat collects signatures from one of the most profitable companies in the world.... Petrochemicals brand hormonal messages that course through endocrine pathways and drive my metabolism. I wear multinational companies in my flesh. But I also wear symbiotic and parasitic relationships with countless nonhumans who insist for their own reasons on making me human. I want to know the stories of these chemicals, metals, and organisms that compose me. I am an event, a site within which the industrial powers and evolutionary pressures of my time come to write. I am a spectacular and horrifying crowd. How can I read me? How can I write me? (9)

Dickinson's first sentence resituates an object or instrument of writing-the keyboard-as an actor in a mutually constitutive performance. The "I" here remains legible, but the sentence's grammar relocates it into a subordinate clause, predicated on the "touch[ing]" occasioned by the subject, the "keys." Images related to writing and textuality recur throughout this passage in various forms, offering a bridge between the uneasy recognition of toxic accumulation ("misspellings in my adrenal gland," "My fat collects signatures," "Petrochemicals brand hormonal messages") and the problem of representation that has emerged as a central preoccupation for theorists of the Anthropocene in the humanities.¹ Dickinson foregrounds the notion that the self is constantly overwritten or "compose[d]" by a range of environmental, chemical, and biological beings or markers. Indeed, this poem seems open to the possibility that this constant reshaping of the self characterizes what it means to be "human" in

^{1.} By the "problem of representation" I mean the many variations on the argument that the Anthropocene "overturns our representations of the world" (Bonneuil and Fressoz 45), or that "the climate crisis is also a crisis of culture, and thus of the imagination" (Ghosh 9). Similarly, from a public humanities perspective, Imre Szeman contends that "how to effectively communicate about global warming... is a challenge less of available data than of rhetoric and representation" (3).

the contemporary moment. The stew of chemicals, endocrine disruptors, and those "symbiotic and parasitic relationships," Dickinson suggests, are what "mak[e] me human." As the poem announces in its concluding sentence, "What is inscribed in me is in you, too" (10).

Dickinson's first poem, and Anatomic broadly speaking, also addresses that anxiety of representation, both at the scale of the individual subject and, I will argue, in relation to larger, self-reflexive guestions about the problematics of writing in the Anthropocene. These concerns are visible in those questions that close the extended excerpt above: "How can I read me? How can I write me?" To scale these questions beyond the individual to the level of poetic form, we might ask, with Dickinson: What does an understanding of the self as constantly rearticulated mean for ecopoetry and the lyric "I"? And how might this emphasis on a multiscalar semiotics, where different forms of writing are understood to carry the capacity to literally reorganize material life, reframe the possibilities for writing under the contested sign of the Anthropocene, in the midst of the Earth's sixth extinction event, the accelerating acidification of the planet's oceans, and the largescale reorganizations wrought by climate change? In what follows, I read the idiosyncratic mode of production and the poems of Anatomic alongside recent scholarship in ecopoetics, environmental humanities, and science and technology studies to advance a particular and specific (that is, non-generic) understanding of Dickinson's experimental poetics. From its beginnings in the desire to catalogue and identify the presence of a dizzying array of bacteria, chemicals, metals, and other substances in the body, Anatomic narrates the movement from a misguided and despairing purity politics to a transformative conception of the individual body and consciousness as shot through with relations at multiple, unfathomable scales. Intervening in the discourses, techniques, and worldview of what Max Liboiron (Métis) has termed "dominant science" (20), Dickinson's text elaborates an experimental practice that invites us to rethink our modes and forms of relating to one another and the morethan-human entanglements that sustain, feed off, or simply co-exist with us.

2. Ecopoetics and/as Experiment

To better begin to unpack Dickinson's interventions, I want to first situate his poetry in the context of recent trends and criticism in the field of ecopoetics proper. As the extended excerpt above no doubt demonstrates, *Anatomic* traffics in what Lynn Keller identifies as a poetics of the "self-conscious Anthropocene." Keller coins the term in her study of ecopoetics in North America in the 21st century. The self-conscious Anthropocene names, for Keller, the resonance of the Anthropocene concept in the cultural sphere. In other words, regardless

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of the debates in Earth system sciences about the Anthropocene's start date or in environmental humanities about alternative names and narrations of this newly recognized geological epoch, the term and its implications—that human activity has and continues to irreversibly alter the planet with massive consequences for life as we have known it—has become a powerful cultural touchstone.² This is to approach the Anthropocene, as Keller notes, "as a cultural reality more than a scientific one" (2). More than just a claim about the relevance of the Anthropocene's conceptual apparatus for contemporary cultural work across forms, modes, and media, Keller's self-conscious Anthropocene also does the work of periodizing ecopoetics. This shift in the cultural imaginary is intimately tied to Paul Crutzen and Eugene Stoermer's introduction of the term "Anthropocene" in 2000; the insinuation, for Keller, is that there have been palpable changes in ecopoetics or environmental poetry since the turn of the 21st century.

On a similar timeline, Margaret Ronda has recently identified a "literary mode of ecopoetics" that "emerges in North American poetry in the early 2000s" (Remainders 117, 113). Reading post-1945 environmental poetry in the United States, Ronda historicizes this branch of environmental poetry, suggesting its development and shaping against the backdrop of the Kyoto Protocol (1997), Bush's withdrawal from Kyoto (2001), Hurricane Katrina (2005), the BP Spill (2010), and, in her analysis, a general malaise with green consumerism as the dominant mode of environmental consciousness at the turn of the 21st century. In terms that resonate with Keller's notion of the recognition of the Anthropocene's effects becoming commonplace or widespread in non-scientific communities or parlance, Ronda argues that the ecopoetics she traces "thus appeared in a moment where planetary crisis had become the new normal and where no countering force for change, whether governmental or communal, seemed in sight" (117). I want to momentarily bracket Ronda's gesture to the absence of a "communal" "force for change" as one pressure among many from which a new mode of ecopoetics arises in the 21st century. Dickinson's Anatomic is attentive to the ways that the contemporary petroculture literally organizes life, at the level of the hormone as mentioned above, but also in

^{2.} Keller's focus is contemporary culture, with experimental ecopoetics occupying a very narrow and specialist area of that terrain. We might compare Keller's claim, about the relevance of the Anthropocene concept for humanists and various artmaking communities, with Lesley Sklair's findings in the Anthropocene Media Project (AMP) after studying how media reports on the Anthropocene or presents narratives pertaining to an Anthropocenean present and future: "it is likely that most people have either never heard of [the Anthropocene] or, if they have, they have no clear idea about it" (3).

terms of the possibilities for the social.³ But rather than closing in on itself in despair or concern, either at embodied toxic accumulation or the worlds and livelihoods we have lost, I want to read *Anatomic* generatively, that is, as advancing a vision of a "world of abundance" (Papadopoulos 7) and cracking open a foreclosed and colonial future to the otherwise.

Keller's and Ronda's parallel narratives of ecopoetics in the 21st century are invaluable as a starting point for thinking about how contemporary environmental poetry enters into dialogue with historically situated political and theoretical concepts and discourses. At the same time, it is worth distilling further the particular, Canadian context of Dickinson's contemporary ecopoetics. As Catriona Sandilands notes in a recent introduction to a journal cluster on environmental literatures and politics in Canada, there is "a geographical, historical, colonial, economic, political, and literary specificity" to Canadian environmental writing and ecocriticism, and "environmental literatures and politics take particular, interrelated shapes here" (284). In the Canadian context, settler colonialism is not an optional framework for environmental literary scholarship, or, I would argue, for contemporary ecopoetics. Indeed, in Canada in the 21st century, the acceleration of extractivist projects and associated infrastructure development has been met with concerted social organization and Indigenous-led protests that have forced the field of Canadian poetry, specifically, to confront its relation to environmental politics. Sandilands notes the \$5.6M lawsuit that Kinder Morgan, the Texas-based oil company then operating the Trans Mountain Pipeline in Burnaby B.C., served in 2014 to Stephen Collis for his participation in pipeline protests; during the trial, Collis's poetic blog posts were read by the prosecuting council as evidence of his criminality (283). In the late summer and fall of 2019, both the Canadian poet, scholar, and activist Rita Wong and Tawahum Bige-a Łutselk'e Dene, Plains Cree, Two-Spirit and Nonbinary poet-were arrested and subsequently jailed for conducting ceremony and defending Burnaby Mountain, on unceded Coast Salish territory, from the same Trans Mountain pipeline expansion. More than twenty years out from the coinage of the Anthropocene, perhaps the ground has shifted to the point that we can identify a renewed mode of politicized ecopoetics commensurate to the shift in environmentalism from Ronda's green consumerist malaise to a more urgent, anti-extractivist, and often Indigenous-led environmental politics.

^{3.} My use of the term "petroculture" in this essay takes a cue from Ross Barrett and Daniel Worden, who present oil "as the central concern of a vast network or 'assemblage' of interlinked technological, commercial, financial, and political initiatives" (xxiv). Petroculture, in this context, names the dominant, fossil-fueled energy system and its attendant social, political, and infrastructural formations.

Dickinson's Anatomic addresses itself to the "geographical, historical, colonial, economic, political, and literary" contexts that shape the confluence of "environmental literatures and politics" in Canada through, I argue, a critical and self-reflexive engagement with "experiment." "Experiment," for my purposes here, straddles the lexicons or vocabularies of dominant science and contemporary ecopoetics, and might offer a way to conceive of the work of the literary in the Anthropocene. We might also route the "experiment" back through a shared node in both Keller's and Ronda's constellation of 21st century ecopoetics, that is, the journal ecopoetics, first published in 2001 by Jonathan Skinner out of SUNY Buffalo. In the "Editor's Statement" in that inaugural issue, Skinner makes an argument for an "investigative poetics" for environmental poetry that grows out of an avant-garde genealogy, thereby bringing experimental poetics into a political engagement with climate while also opening a literary space for a new kind of poetic articulation of environmental consciousness (7). As Ronda puts it, investigative ecopoetics was "characterize[d] as an extension of avant-garde poetry with sustained attention to environmental concerns" (118). Keller notes that the project of *ecopoetics* cut in two directions: from Skinner's perspective, on the one hand, environmentally minded poetry had remained latched to a reductive understanding of nature poetry, limiting itself to outdated ideas of the coherent and separate human subject coming into consciousness of the environment or place through which they move; on the other hand, "experimental" or "avant-garde" poetry had failed to conceptually, theoretically, or critically engage questions of climate and environmental degradation. An "investigative poetics" in ecopoetry, in other words, intervened in both of these literary and formal lacunae.

There is a line to be drawn between the "investigative poetics" that Skinner identifies as characteristic of his mode of contemporary ecopoetry and the literal "experiments" or the mode of production of Dickinson's Anatomic. Dickinson performed extensive biomonitoring and microbiome testing on himself, measuring the presence of chemicals and microbes in his blood, urine, and feces in order to determine the extent to which the individual body is inundated with the byproducts of contemporary petroculture. He catalogues in gruesome detail the physical and mental effects of this kind of self-extraction: drawing 76 vials of blood in one sitting ("My veins were a mess.... By the end of it, I was drawing from both arms and yanking on the tourniquet with my teeth" [16]); complications from colonoscopies (68); intensified anxiety from the litany of chemicals he finds present within himself (27). He uses the discoveries from these experiments as occasions for poetry, writing "chemical and microbial poems" that use the "organisms discovered during" the tests, as well as their measured presence in his bodily fluids, as epigraphs (149). For example, the poem "Lipids," which I will read in more detail shortly, has as an

epigraph for its first section "Polychlorinated Biphenyls, # 105 (plasma): 1.88 ng/g lipid" (32).⁴

An understanding of the origins of the collection's subject matter, as well as its harrowing method of textual production, allows us to qualify the text's status as "experimental" poetry. This is what I meant above in suggesting that *Anatomic* advances a non-generic experimental poetics. *Experimental*, as it is often deployed in poetry and poetics criticism, functions as a multivalent marker that nonetheless remains difficult to pin down: it gestures to forms and modes associated with or understood as avant-garde, including agrammatical modernist techniques that rely on fragmentation, paratactical construction, and interruption, or a mixing of linguistic, textual, and/or affective registers, styles, and discourses; it also sometimes suggests, to varying degrees of intensity, a politics, that is, a commitment to composing a more equitable and just world. Indeed, the relationship between art and politics is a key part of Gregory Betts's argument in his recent study of avant-garde poetry and artmaking communities in Vancouver in the second half of the 20th century, and a key sticking point in differentiating avant-gardism and experimentation, writ large:

the avant-garde is always, by name and definition, the productive, liberatory dynamic at work in literature. Revolutionary work presumes the possibility of a better or ideal social contract, but that begins by re-imagining interpersonal relations and daily life. If the radical affect disappears, so does the avant-garde. (*Finding* 45)

At the same time as I am wary of conflating the aims, politics, and expressions of experimental and avant-garde writing,⁵ I want to suggest there are elements

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^{4.} Dickinson's hyper-specificity in naming the trace presences he finds in his various samples inaugurates an interesting tension in the context of the collection's gestures to contamination as a universalizing experience, such as the statement, quoted above, "What is inscribed in me is in you, too." I am inclined to read these epigraphs in the context of Jean-Thomas Tremblay's notion of an "ecology of the particular," a "methodological principle" that tracks the uneven distribution of harms at the hands of "toxification and environmental calamities" that might otherwise be understood to "homogenize, and as such departicularize, experience" (20).

^{5.} As this article deploys *avant-garde* in relation to Dickinson's work, it feels relevant to flag the intensified debate of the past decade about the uneven distribution in the frequency with which the moniker attaches to white, cis, and male writers and artists. This is Cathy Park Hong's argument in "Delusions of Whiteness in the Avant-Garde," which names avant-garde poetry "a racist tradition" and condemns the process by which experimental, innovative, or radical BIPOC artists and writers have been canonized "under

of avant-gardism that prove useful to understanding what I am calling Dickinson's *experimental* ecopoetics.

In an earlier monograph, some of which lays the foundation for the examination of Vancouver's postwar avant-gardes, Betts develops his theory of the avant-garde by emphasizing its attachment to the "revolutionary" impulse to create "an art that participates in or serves the liberation of culture and ideology" (Avant-Garde 17). Indeed, this becomes the defining separation between experimental and avant-garde: "avant-gardism, unlike other forms of experimental or innovative art, intertwines aesthetic novelty with sociopolitical revolution" (18). While Dickinson's poetics refuse a traditional, grandiose avantgarde militancy, focused as they are inwardly on the cellular and microscopic, I want to tentatively suggest there is nonetheless an element of what Betts might describe as a "new world consciousness" that emerges in the text's radical reconceptualization of the embodied self (Finding 45). To reroute this discussion back to the experiments of Anatomic, there is also an echo between the avantgarde's fraught relationship to "progress" (Betts, Avant-Garde 17; Tremblay and Strombeck 3) and Dickinson's interventions into laboratory spaces and discourses. Put differently, the poetics of Dickinson's Anatomic, I want to suggest, qualify experimental through a critical emphasis on the "experiment" and the ways this term circulates across registers from the literary to the technoscientific. Anatomic is not only experimental ecopoetry in the sense that it appears out of, and engages with, a lineage of avant-garde, politically engaged environmental literature; it is experimental in that it models a particular ontology for the Anthropocene, one that emerges from a critical and anticolonial reconsideration of the affordances, possibilities, and incommensurabilities of a range of technoscientific practices.

3. "Lipids," Endocrine Disruptors, Infrastructure

To get a better sense of how Dickinson develops this *experimental* mode across *Anatomic*, I want to turn to the aforementioned sequence of poems, "Lipids" (32-41), with a particular focus on the section that references Aamjiwnaang First Nation (39). "Lipids" is introduced by a standalone prose piece, which

the banner of ethnic studies" and "rarely regarded as core figures in experimental poetry." In their overview of crisis in/and the contemporary avant-garde, Jean-Thomas Tremblay and Andrew Strombeck show that "too often, *avant-garde* has served as shorthand for a certain dogma around experimental work–a dogma that, at its worst, disguises whiteness as post-identity" (1).

reiterates the introductory poem's concerns with cellular semiotics, while also making clear the collection's self-conscious engagement with the Anthropocene concept: "I have found one of the most widely distributed environmental contaminants on the planet in my body: polychlorinated biphenyls, PCBs.... PCBs constitute a form of writing in the Anthropocene" (31). These PCBs, as Dickinson's poem notes, are part of the class of endocrine disrupting chemicals, or EDCs, and function "as subtle revisions to the hormonal cascades that precipitate bodily morphologies" (31). Liboiron offers a "simplistic, biologically reductive" description of EDCs that is nonetheless useful for understanding the operations of these toxicants, particularly for a poetry scholar (94). Unlike toxins, which are nonindustrial in origin and which "work like [a] bull-ina-china-shop... wrecking things and spilling cell soup," EDCs "work as part of the system, disrupting it while allowing it to continue" (95).6 This is not to place toxicants and toxins on a continuum of bad to worse. EDCs, as Liboiron points out, are implicated in a range of harms, "resulting in things like recurrent miscarriages, early-onset puberty, early-onset menopause, obesity, diabetes, and neurological disorders" (95). Crucially for our purposes, and as Dickinson's engagement with Canada's Chemical Valley suggests, EDCs "are also parts of structures of violence" (Liboiron 95).

The sixth section of "Lipids" is a short prose piece that makes legible the scale-shifting required to navigate between specific, sited harms and structural violence. The poem reads in full:

In Aamjiwnaang First Nation, only a third of all babies are boys. The hockey team is disbanded. Girls' softball was added. Refineries rim the community with pipes. Cholera, smallpox, the British, and the French split piles of young Anishinabek men. In unceded lipidscapes, offspring now flare with feedback. Injuries take their course like conclusions draw baths. Boilerplates rust in jurisdictional prudence. On the back of the old ten-dollar bill, the picture of smokestacks and holding tanks could only have been taken by standing on the reserve. I called to ask. (39)

The naming of Aamjiwnaang here in the first line of the poem is a startling moment that jolts the reader into a specific relation. It should be noted that

^{6.} In flagging the difference between toxins and toxicants from the outset of this article, I follow Liboiron's convincing argument throughout *Pollution is Colonialism* that distinguishing between these terms is not simply "fussy science-nerd semantics," but that toxins and toxicants "operate at different scales, engender different relationships, have different modes of both harm and violence, and thus have different politics" (94). Cf. also Liboiron 87 n28.

Dickinson announces the collection's interest in the confluence of environmental, toxic accumulation and settler colonialism from the opening section of "Hormone," the long poem that runs in divided sections throughout the text. There, the speaker ruminates on the "buffalo meat / that built railroads / and fuelled wagon trains" and, in an echo of the Aamjiwnaang poem above, asserts that "Every nation / sits atop / a *pile* / and waits" (13, emphasis added). At the same time, however, this section of "Lipids" marks something of a departure for the collection so far in that it names specific harms and also self-reflexively implicates the settler poet–and settler readers, myself included–in the ongoing structures that perpetuate those harms.⁷

Before attending more closely to "Lipids," I want to offer some necessary context on Aamiiwnaang and the relationships between settler colonialism and pollution. Dickinson himself points to Sarah Marie Wiebe's scholarship on Aamjiwnaang for further context on this poem (146). Wiebe fuses policy analysis, an environmental justice framework, and ethnographic fieldwork to trace the ongoing impacts for residents of Aamjiwnaang, which sits in what has become known as Canada's Chemical Valley in Sarnia, Ontario. As Wiebe describes it, "Chemical Valley is a heavy industrial zone, located in southwestern Ontario and responsible for approximately 40 percent of Canada's chemical manufacturing" (11). In terms that resonate with my initial gloss of Dickinson's poem as implicating the settler self and readership in the harms perpetuated in Aamjiwnaang, Wiebe documents the ways that "contemporary manifestations of colonial biopower in Canada, from universal state policies to intimate sites and lived experiences, are distributed through policies across scales from the Canadian Constitution to the individual citizen" (17). Her overarching argument is to reimagine the way the settler nation does policy in relation to environmental reproductive justice, that is, to infuse "an old colonial system of land relations where the land is a Resource" (Liboiron 39) with a sincere engagement with the epistemologies and lifeways of the Indigenous peoples who live with and on the land itself. Wiebe's suggestion that "Injury and wounding in Chemical Valley" become "incidental features of Canadian politics" (17) is articulated in the "smokestacks" that Dickinson describes "on the back of the old ten-dollar bill";

^{7.} Dickinson self-identifies as a settler in the text. A later poem, "The People of Grassy Don't Have a Mercury Problem, They Have a Drinking Problem" (65), is occasioned by the discovery of mercury in his blood. As Dickinson tells it in the "Notes" at the collection's conclusion, this discovery "made me think about my connection... as a privileged settler in southern Ontario" to the ongoing effects of mercury poisoning in the Wabig-oon-English River system and the prejudices of "the largely white community of Kenora toward the Indigenous residents of nearby Grassy Narrows" (147).

the "piles of young Anishinabek men" and the broader community of Aamjiwnaang are both imagined as resource, and their exposure to the castoff of petrochemical industry circulates as literal currency in the settler-colonial nation (see fig. 1).⁸



Fig. 1. An engraving of the Polymer Corporation plant in Sarnia, Ontario, which draws from the photographs of George Hunter. Sourced from The Bank of Canada Museum Blog.

Liboiron traces the historical emergence of "permission-to-pollute" (39) systems that rely on the "threshold theory of pollution" (40) to advance a central claim that remains implicit in Dickinson's engagement with Aamjiwnaang. They argue forcefully that

pollution is not a manifestation or side effect of colonialism but is rather an enactment of ongoing colonial relations to Land. That is, pollution is best understood as the violence of colonial land relations rather than environmental damage, which is a symptom of violence. (6-7)

Following Liboiron's narration, contemporary policy relating to pollution dates to the 1936 publication of the "Streeter-Phelps equation," that is, the "scientific and mathematical model" developed by Earle B. Phelps and H.W. Streeter that

^{8.} Wiebe, like Dickinson, notes the usage of one of Sarnia's petrochemical plants on the old ten-dollar bill (23). In a blog post for The Bank of Canada Museum with section headings like "Where there's smoke, there's progress," Graham Iddon outlines how foregrounding industrial infrastructure on currency was a deliberate choice, meant to emphasize "Canadian achievement."

showed the "conditions and rates under which water... could purify itself of organic pollutants" (3-4). Streeter and Phelps's highly specific study (they developed their equation by studying a particular stretch of the Ohio River) was soon applied universally. The portability of the Streeter-Phelps equation, that is, its universal application, is problematic because it *over*writes, or ignores, the differences between particular locations, including myriad other environmental factors that affect a body of water's assimilative capacity; the Streeter-Phelps equation also *re*writes Land and all its specificities—its "histories, spirits, events, kinships, accountabilities" (43)—as primarily, and essentially, a resource for settler use.⁹ Put differently, in quantifying the limits of pollution, Streeter and Phelps provide dominant science with a new vocabulary for the enclosure of everything as a sink for pollution, in the process facilitating the transformation of all Land into Resource.

This is the colonial backdrop for the slow violence of Chemical Valley,¹⁰ against which Dickinson's prose poem engages the lives and livelihoods of Aamjiwnaang's residents and registers individual harms at the endocrine scale. The poem opens by addressing the community's declining rate of male births; in the "Notes" at the collection's close, Dickinson makes clear that "While PCBs have been implicated in altered offspring sex ratios... the matter is complex and as yet unsettled" and "[m]any other factors and chemicals may be involved" (145-146). If the text refuses to ascribe an etiological origin for "offspring sex ratios," the descriptions of the community's material reorganization that follows suggests causality: "The hockey team is disbanded. Girls' softball was added" (39). These matter-of-fact and notably passive sentences (who, or what "disband[s]" or "add[s]" is unclear) naturalize the impacts felt by Aamjiwnaang's residents, not only at the scale of individual harm, but in the very shape of the community that remains. The passive voice recalls Wiebe's notion of "wounding" as "incidental"; this is just the way it is. Here, petrocultural infrastructures-the "pipes" and "refineries" that "rim the community"-alter the very

^{9.} Jason W. Moore explores a similar dynamic in the context of greenhouse gases, showing how capitalism "enclose[s] the atmosphere as a gigantic dumping ground" (37). At the same time as they caution us not to conflate the two, Liboiron notes that "capitalism and colonialism make such friendly bedfellows in part because of... analogous relational logics" (64 n89).

^{10.} Rob Nixon's landmark concept of "slow violence," that is, "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all" remains a powerful framework for thinking about environmental racism (2). Cf. also the "small breakage" of Elizabeth Povinelli's quasi-event (134) and Thomas D. Beamish's "crescive troubles" (4).

possibilities for sociality, for modes of community or being together. Recognizing how Aamjiwnaang's residents bear an inordinate amount of environmental risk in their proximity to Canada's densest concentration of petrochemical processing and chemical manufacturing, Dickinson's poem alerts us also to the ways that these infrastructures parcel out the possibilities for participation in a common or shared sphere of relations.

Dickinson's "Lipids" supplements an attention to environmental racism with a broader invitation to reflect on the ways our everyday lives are materially structured-from plastics in our home to the leisure activities available to us-by petrodependence. In this way, the poem also returns us to a question posed by Wiebe in her examination of the confluence of environmental, political, and jurisdictional actors in Aamjiwnaang: "What does policy feel like?" (41). Wiebe's question reminds us to attend to the structural violence within which individual harm is implicated, but it also opens onto another, related question: what could policy feel like otherwise? Indeed, the otherwise emerges as a useful schematic or organizing principle for a range of scholars working in the field of petrocultures and imagining the possibility of just energy transition. Often, this work involves cracking open calcified, naturalized logics and expectations. As Stephanie LeMenager suggests, "petroleum infrastructure has become embodied memory and habitus for modern humans, insofar as everyday events such as driving or feeling the summer heat of asphalt on the soles of one's feet are incorporating practices" (104). In a later poem in Anatomic that thinks with another EDC, phthalates, Dickinson similarly identifies the relationship between pleasure and petroculture: "The characteristic and desirable 'new car smell' is composed in part of phthalates off-gassing from plastic finishes" (76). LeMenager and Dickinson both flag the ways our shared experiences, desires, and pleasures are simultaneously delimited, and actively reproduced, by our dependence on fossil fuels.

Responding to this recognition that petroleum, in its varied forms and applications, shapes not only our desires and pleasures but their very horizon of possibility, recent critical work in the environmental humanities has attempted to advance a theory of alternative pleasures. For LeMenager, the response to the "incorporating practices" and embodied memories of petrodependence is "decoupling human corporeal memory from the infrastructures that have sustained it" (104). Indeed, in her estimation, this becomes "the primary challenge for ecological narrative in the service of human species survival beyond the twenty-first century" (104). In a similar vein, Cara New Daggett urges environmentalists to "counter[] the pleasures of the post-Fordist, consumerist life of high energy consumption with an alternative political vision of pleasure" (190); Stacy Alaimo enumerates a range of community actions, from bee-keeping to seed bombing, offering them as "environmental pleasures" that operate

"through abundant practices of sensuality and playful experimentation" (28). Alaimo's intervention here is striking for its return to this language of experiment that I have wanted to attach, with specific qualifications and connotations, to Dickinson's poetics. As we move further through *Anatomic*, then, we arrive at a clearer sense of Dickinson's poetic project as an attempt to experiment with alternative, literary modes of pleasure that might operate as otherwise infrastructures for sustaining particular kinds of communal relations within the midst of petroculture.

4. Purity Politics, Cosmonauts, Ontology

If Anatomic gestures to these broader environmental and literary concerns, I would argue that, by "Lipids," Dickinson hasn't guite developed a vocabulary for how best to articulate this political project. Indeed, the Aamjiwnaang poem offers the startling phrase "unceded lipidscapes," an image that suggests the individual body is colonized by unwanted or "wayward particles" (Liboiron 19). This metaphor circulates throughout the early sections of Anatomic, in particular the "Specimen" prose narratives that relate, in a kind of flat, autobiographical voice, the strange and disorienting processes that Dickinson underwent in order to perform the necessary tests for the project. In a section that describes keeping a food diary because of an upcoming stool sample, for example, Dickinson struggles with a commonsensical anxiety: "If I ate less, I would limit the PCBs, pesticides, and metals that could get in, right? This idea consumed me" (27). Later, "When the results started to arrive," he navigates newfound fears relating to the recognition of his always already compromised body: "When I came across a chemical that measured among the top percentiles, I panicked" (30). There is, perhaps, an ironic or self-reflexive way to understand the "unceded lipidscapes" that surface in Aamjiwnaang; rather than reading this phrase as doubling down on a misguided desire for bodily autonomy, EDCs give the lie to our uncritical assumption of a "sovereign" body. Put differently, they provide a transit from purity politics to a transformative understanding of selfhood in the Anthropocene.

Given the presence of this recurring anxiety relating to contamination across the first third of *Anatomic*, it feels important that "Lipids" is immediately followed by a section of "*Specimen*" (42) that shifts the affective register–fear, concern–that had hitherto characterized Dickinson's descriptions of the processes and protocols for gathering test material and data. Suddenly, the "sovereign" body is reconceptualized as a vehicle for a host of nonhuman beings:

My gut is a tropical forest of microbes. Their cells, which cover my entire body, are at least as numerous as my own. These microbiota live on and within me as

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a giant nonhuman organ, controlling the expression of genes and the imagined sense of self.... It is unclear, in fact, whether the immune system controls the microbes or the microbes control the immune system. My body is a spaceship designed to optimize the proliferation and growth of its microbial cosmonauts. These organisms enact a form of biochemical writing through their integral involvement in the metabolic processes that fuel my life. (42)

This section of "Specimen" formalizes the body made strange by playing with scale and metaphor. The "tropical forest" of "my gut" is contained by the "space-ship" of "my body." More than incidental bedfellows, the microbiota function as a "nonhuman organ," literally organizing and reorganizing gene expression and "the imagined sense of self," and possibly exerting a form of control over the immune system. Undoing the logic of the coherent and autonomous subject that becomes contaminated or polluted by other presences, actors, or microbes, these microbiota are already here with each of us. Indeed, we might be "designed" for their reproduction; they are "integral" and "fuel my life."

In my reading of Anatomic, this section of "Specimen" not only marks a key shift in the text's affective preoccupations but also flags a critical engagement with speculative literary metaphors. This pairing-the speculative mode alongside the exploration of a range of environmental affects beyond the elegiac-offers a productive lens for thinking more carefully about Dickinson's experimental poetics. This section of "Specimen" foregrounds a particular mode of relationality; the human carries microbiota, who are invested in a kind of stewardship of the "metabolic processes" of their human host. The body as a "spaceship" holding within itself "microbial cosmonauts" is a playful self-representation that, as noted above, emerges out of an attempt to make sense of the poet/speaker's newly estranged corporality. But the long quotation above might also be understood to demonstrate a range of traditionally "experimental" or avant-garde techniques, which Ronda has recently argued are deserving of intensified engagement in the context of "speculative poetics." Ronda suggests that, although "speculative work tends to be approached as a predominantly narrative modality," the poetic, "with its capacities for paratactic leap and temporal play, its nonlinear logics and modes of expansion and condensation" emerges "as a particularly exciting site for creative speculation" ("The Social"). The scalar distortions of "Specimen"its shuttling across scales from microbiota, to the human, to the intergalactic or cosmic-performs the "modes of expansion and condensation" suggested by Ronda. More than simply naming, or pointing to, the coexistence of scales, Dickinson's poem distributes agency across every level. Indeed, it is possible to read this section of the text, with its intimations of the possibility that "microbes control the immune system," as offering a model for the creation of livable worlds via a kind of agency from below.

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To put it clearly, my initial hesitation at the phrase "unceded lipidscapes" in Dickinson's Aamjiwnaang poem relates to the appropriation and deployment of the scale of structural, colonial violence to describe personal, bodily harm or injury, including the insinuation that settler bodies experience "colonization" by EDCs. As Liboiron puts it in their critique of "purity activism," this is a "scalar mismatch" (101). More interesting to me is the experimentation, in "Specimen," with what we might frame as an anticolonial understanding of the self as embedded and shot through with relations and entanglements at multiple scales, impossible to fathom or document. Liboiron identifies the most common manifestations of purity activism as tactics of "avoidance, consumer choice, and technological fixes" that, much like the universal application of the Streeter-Phelps equation noted above, functionally "secure land as standing reserves for plastics" in that they fail to make meaningful interventions at the scale that matters, that is, production (101-102). This is to shift focus away from purity politics and/or activism that responds to the fear of personal contamination and towards a model of relationality that questions dominant assumptions, in technoscience and politics, about continued access to Land as resource, as well as how we understand the relationships between the self and the so-called environment.

Before closing on a deeper consideration of the affective experimentation of *Anatomic*, I want to offer one final theoretical interlocutor for the speculative work that, in my reading, characterizes Dickinson's experimental poetics. Dimitris Papadopoulos theorizes "experimental practices" as a wide-ranging assemblage of tactics undertaken by "more-than-social movements" that bring about the material transformation of everyday existence. Like Alaimo, quoted above, he enumerates the ways "grassroots ecological activism" has "craft[ed] a multiplicity of alternative forms of life" from "urban gardening" to the "disruption of agribusiness" (21). To return to the possibilities of the speculative in poetry, Papadopoulos introduces the concept of "terraformation from below" (29) as a counter to some of the modes or discussions of terraforming that circulate in contemporary Anthropocene criticism, namely, that humans have irrevocably transformed the Earth (bad terraforming) *but also* that technoscience solutions are the path out of the climate crisis (good terraforming). In other words, "the destruction of Earth" and "the promise of redemption" are contained within a "single matrix" (28).¹¹

^{11.} Papadopoulos's framing of terraforming as, at once, the source of our contemporary climate crisis and the path to salvation, echoes Allan Stoekl's critique of sustainability discourses which transform "the quantified, mechanized destruction of Earth" into the "quantified, mechanized preservation of Earth" (133). Any attempt to recuperate, or take seriously, terraformation as a liberatory, de-, or anticolonial practice must also reckon with the argument of Heather Davis and Zoe Todd (Métis) in their landmark es-

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Terraformation from below, on the other hand, would be about "rescaling the geographies of technoscience in ways that matter" (22), or about inhabiting the very logics, techniques, and strategies of technoscience otherwise. In opposition to those "managerial ontologies" that enclose the future for colonial use (Liboiron 65), Papadopoulos offers us a vocabulary for understanding Dickinson's experimental poetics as an ontological practice oriented towards the articulation of anticolonial relations in the Anthropocenean contemporary.¹²

5. Conclusion: Humour, Instrumentality, Urine

In closing, I want to briefly turn to the image-poem sequence "Metabolic Poetics" that concludes Dickinson's *Anatomic* to extend what I have located as the text's experimental practice alongside a consideration of environmental affects. "Metabolic Poetics" represents the collection's clearest instance of an *experimental* poetics in a pair of related ways: first, in the generic sense, the image-poems that make up this section are the most explicitly non-traditional in the text, reframing "found" technoscientific imagery as poetry and drawing on visual and constraint-based poetic traditions;¹³ and second, these poems take experiment and experimentation literally, for example inviting bacteria to perform erasure poetry in a controlled, laboratory setting (see fig. 2). In this instance, Dickinson prints a catalogue of "Other words for money" (141) on a small, rectangular sheet of paper, swabs literal currency, and then cultures the bacteria from the swabs in petri dishes so that the growths write over the catalogue. The metaphor of a cellular semiotics—from the "misspellings in my adrenal gland" of the introductory poem to the "biochemical writing" of the gut

say "Decolonizing the Anthropocene" that "processes of terraforming... define[] the Anthropocene" and "settler colonialism–which in the Americas simultaneously employed the twinned processes of dispossession and chattel slavery–was always about changing the land, transforming the earth itself, including the creatures, the plants, the soil composition and the atmosphere" (770).

^{12.} My use of "ontology" here follows Papadopoulos, who uses the term in a "concrete and ordinary way" to refer to "the habitat and space of existence of various animal species, groups of humans and things that provide specific conditions of how its materiality can be changed" (162). Ontology here is not defined by "what it is, but how it can and cannot change" (162).

^{13.} Another important context for Dickinson's playful and non-generic "experimental" poetics is his continued engagement with pataphysics, the "science of imaginary solutions" developed by French writer Alfred Jarry (68). Keller reads Dickinson's *The Polymers* (2013) alongside pataphysics. Cf. also Dickinson, "Pataphysics" and Dickinson, "Poetics."

microbiota—is made literal in this lab experiment, as the catalogue is returned to the poet/reader "edited and revised" (141). Throughout this sequence, Dickinson's fraught engagement with the laboratory, including questions of access, comes to the fore. As he notes in that early "*Specimen*" section that narrates the complications from his blood draw, "The university eventually found out what we had done. New policies were put in place" (16). "Metabolic Poetics" exists in strange relation to those laboratory spaces and techniques that enable its production, embodying a kind of fringe or provisional practice that might point to broader cultural and institutional reorientations of the relationship between modes of cultural and knowledge production.

In terms that resonate with Dickinson's interventions or disruptions of the laboratory, Darren Wershler, Lori Emerson, and Jussi Parikka have recently traced the ascendance of the "lab" as a hybrid, interdisciplinary, and institutional figure for the production of various forms of knowledge. Examining the consequences of what kinds of spaces gain access to the designation "lab," they think through "the lab" as "a way of understanding recurring forms of power and experimentality" (7). In other words, as assemblages of technical apparatuses and cultural or scientific discourses and imaginaries, labs emerge from, and risk participating in or even reproducing, the structures of power and violence that perpetuate harms in the contemporary moment.¹⁴ But the lab also holds within it the potential of an otherwise. Drawing from Wershler, Emerson, and Parikka's discussion of the relationship between experiment and failure, we can arrive at an understanding of Dickinson's minoritarian forms of aesthetic-scientific experimentation, in their iterative, contentious, and slantwise deployment of lab spaces, as "point[ing] to the possibility of moving beyond narrow functional uses, or the limits of what is currently believed to be possible" (230). In "Metabolic Poetics," Dickinson takes up the tactics of Papadopoulos's "experimental practice," very literally deploying the tools and techniques of technoscientific practices that identify and regulate "wayward molecules" in order to create poetry. The results, I argue, might orient us towards a necessary shift for thinking about the possibilities for environmental affects and poetics.

^{14.} Wershler, Emerson, and Parikka point to the lab that Liboiron runs, the Civic Laboratory for Environmental Action Research (CLEAR), as an example of "a lab that pursues institutional change in and around labs on nearly every level" (241). Describing the operations of CLEAR, Liboiron emphasizes that science labs have an obligation to consider questions of colonial knowledge production. They emphasize that, while the lab and its members "are dedicated to doing science differently by foregrounding *anti*colonial land relations... CLEAR is not unique: land relations always already play a central role in all sciences, anticolonial and otherwise" (6).



Fig. 2. Bacteria perform an erasure poem from the image-poem sequence "Metabolic Poetics."

The gambit of my reading of "Metabolic Poetics" is simply that this section of *Anatomic* is *funny*. The humour of these image-poems lies, in part, in precisely the use of lab instruments and technoscientific material and data otherwise, in the service of poetry. In this playfulness, I argue, "Metabolic Poetics" addresses itself to a twofold despair or nihilism that rears its head in multiple, related and unrelated, ways in both environmental and poetic discourses. Throughout this essay I have gestured to "despair" or the "despairing" quality of purity politics as an affective description of the fears and anxieties related to coming into knowledge of a world awash in plastics, EDCs, and other harmful substances.¹⁵ This is a commonsensical, because inherited, position that elegizes so-called nature as something that has been lost or irrevocably transformed.

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^{15.} In the late stages of writing this essay I read, for the first time, one of the blurbs on *Anatomic*'s book jacket, from Juliana Spahr: "a book of meaningful despair."

But as the microbial cosmonauts teach us, there is a shift to be made from this backwards-gazing elegiac mode to a different understanding of how to build relations from below, living with and alongside compromised bodies. In a similar vein, Ursula Heise argues forcefully for the need to articulate a "more affirmative vision of our biological future" by "mov[ing] beyond mourning, melancholia, and nostalgia" (13). Throughout her recent study on the cultural imaginaries of extinction, Heise draws on this language of "story templates" to find alternatives for representing the scale and impact of the ongoing sixth extinction event, offering a critical view of the shortcomings of elegy, specifically its "proxy logics" and tendency to fall into the uncritical reproduction of a declensionist narrative. Indeed, she turns to the language of "experiment" precisely in a chapter that explores "humour" as an environmental mode; instead of imagining "a well-functioning natural realm disrupted by the advent of modern society," a non-elegiac or non-tragic story template might allow us to read "nature and culture as parallel and intersecting histories of experiments that continually succeed or fail" (53).

The second kind of despair is about literature or poetry itself. When I first presented a version of this paper at a conference, one of questions was about Dickinson's privilege, as a tenured professor, running expensive tests on himself and only gesturing to the material realities of exposure in places like Aamjiwnaang. I hope that the preceding essay has more fully addressed questions of privilege as well as the place and protocol of settler engagement with colonial structures and Indigenous epistemologies and communities. But I have returned to this critique in my own thinking about Dickinson, and experimental ecopoetics more broadly, not to belittle or scold it, but because I think it captures something of an anxiety about the role of both the literary, as an activist mode of cultural production, and literary scholarship. This is a critique levied by a kind of pure environmentalism that, in Nicole Seymour's trenchant analysis, remains concerned primarily with instrumentality. As Seymour argues in her critical study of "bad" environmental affects, "ecocritics have also tended to take an instrumentalist approach to environmental art," evaluating "cultural texts on their capacity to inculcate 'proper' environmentalist feelings-often, reverence, love, and wonder-educate the public, incite quantifiable environmental activism, or even solve environmental problems" (26). In other words, the question for these "good" environmentalists and ecocritics might be: how does running elaborate laboratory tests and making poetry out of the results benefit the broader environmental movement, or move us towards a more equitable, just, and ecological way of living together?

Even if the answer here is "maybe it doesn't," following Seymour, this refusal to traffic in "good" or "mainstream environmental art, activism, and discourse" should not automatically consign *Anatomic* as less worthy of serious

consideration as an ecological text (15). Put differently, if ecocritics organize our critical approach to texts as always a process of searching out or identifying "what kinds of stories and genres might be more successful at generating... concern than others" (Heise 13) we have begun from a position that limits the possibilities of what environmental literature can do, what kinds of affects or responses environmental literatures can play with, and the very forms and shapes they can take. Dickinson's poetry, I argue, might be helpful for bridging those two despairing modes, the environmental and literary or poetic, described above. Seymour's attempt to decouple the dominant critical rubric of instrumentality from environmental literary scholarship recalls Daggett's arguments for "an alternative political vision of pleasure" (190). To bring these two scholars and projects together, perhaps one tactic for ecocritics and ecopoets that might address a political, and politicized, articulation of pleasurable experiences, is to experiment with affects and story templates beyond the tragic and elegiac. In other words, perhaps one way to build alternative social and cultural infrastructures that sustain life, joy, and good relation, would be to think, with Seymour, about environmental literatures in their capacity as playful, irreverent, perverse, ironic, absurd, and/or frivolous.

To briefly model one such experiment, in closing, I want to look at one more image-poem from "Metabolic Poetics" (see fig. 3). A fractal, crystalline shape extends from the top left corner of the image; the colours are primarily mucky brown with golden highlights. The gloss attached to the image announces a grand and transformative potential for the literary or poetic: "Can writing function as a productive hormone disruptor within larger cultural narrative sequences?" (136). The image-poem, it might be argued, appropriates the individual harms and structural violence of endocrine disrupting chemicals and deploys them to intervene in dominant cultural scripts, effecting a kind of detournement, in an avant-garde lineage, of cellular semiotics. The sentence calls back to the arguments, from LeMenager and others, of fashioning an infrastructural otherwise through the proliferation of alternative social and cultural imaginaries. And then the next sentence reads "This is my urine" (136). Each of those "bad" affects-playfulness, irreverence, perversity, irony, absurdity, frivolity-circulates in the shift from the first sentence to the second. Notably, in my reading, the humour in this image-poem does not undermine the claim for the possibilities of writing in the Anthropocene suggested by the first; rather, new avenues are opened up for environmental literary work through the pleasure of humour. This image-poem of urine, its attendant gloss, and Dickinson's Anatomic broadly speaking, allow us multiple affective experiences and critical concepts for moving together in petroculture, and for orienting ourselves towards new and productive modes of intimacy, beyond "good" or instrumental environmentalism, and between and among "the crowds in common that we are" (143).

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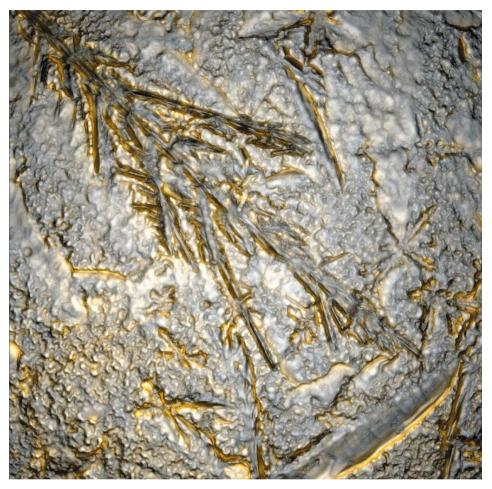


Fig. 3. Dickinson's urine from the image-poem sequence "Metabolic Poetics."

Works Cited

Alaimo, Stacy. Exposed: Environmental Politics and Pleasures in Posthuman Times. U of Minnesota P, 2016.

Barrett, Ross, and Daniel Worden. "Introduction." *Oil Culture*, edited by Ross Barrett and Daniel Worden, U of Minnesota P, 2014, pp. xvii-xxxiii.

Beamish, Thomas D. Silent Spill: The Organization of an Industrial Crisis. MIT P, 2002.

Betts, Gregory. Avant-Garde Canadian Literature: The Early Manifestations. U of Toronto P, 2013.

Ediciones Universidad de Salamanca / CC BY-NC-SA

-. Finding Nothing: The VanGardes, 1959-1975. U of Toronto P, 2021.

- Bonneuil, Christophe, and Jean-Baptiste Fressoz. *The Shock of the Anthropocene: The Earth, History, and Us.* Translated by David Fernbach, Verso, 2016.
- Crutzen, Paul J., and Eugene F. Stoermer. "The 'Anthropocene." International Geosphere-Biosphere Programme Global Change Newsletter, vol. 41, May 2000, pp. 17-18.
- Daggett, Cara New. The Birth of Energy: Fossil Fuels, Thermodynamics, and the Politics of Work. Duke UP, 2019.
- Davis, Heather, and Zoe Todd. "On the Importance of a Date, or Decolonizing the Anthropocene." *Acme: An International Journal for Critical Geographies* vol. 16, no. 4, 2017, pp. 761-780.
- Dickinson, Adam. Anatomic. Coach House Books, 2018.
- -. "Pataphysics and Postmodern Ecocriticism: A Prospectus." *The Oxford Handbook of Ecocriticism*, edited by Greg Garrard, Oxford UP, 2014, pp. 132-53.
- -. "Poetics of the Semiosphere: Pataphysics, Biosemiotics, and Imaginary Solutions for Water." Greening the Maple: Canadian Ecocriticism in Context, edited by Nicholas Bradley and Ella Soper, U of Calgary P, 2013, pp. 439-473.
- -. The Polymers. House of Anansi P, 2013.
- Ghosh, Amitav. The Great Derangement: Climate Change and the Unthinkable. U of Chicago P, 2017.
- Heise, Ursula. Imagining Extinction: The Cultural Meanings of Endangered Species. U of Chicago P, 2016.
- Hong, Cathy Park. "Delusions of Whiteness in the Avant-Garde." Lana Turner, vol. 7, 2014, https://arcade.stanford.edu/content/delusions-whiteness-avant-garde. Accessed 14 Dec. 2022.
- Iddon, Graham. "The Last Smokestack." *Bank of Canada Museum*, 23 Mar. 2021, https:// www.bankofcanadamuseum.ca/2021/03/the-last-smokestack/. Accessed 5 Aug. 2022.
- Keller, Lynn. Recomposing Ecopoetics: North American Poetry of the Self-Conscious Anthropocene. U of Virginia P, 2017.
- LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century*. Oxford UP, 2014.
- Liboiron, Max. Pollution is Colonialism. Duke UP, 2021.
- Moore, Jason W. Capitalism in the Web of Life: Ecology and the Accumulation of Capital. Verso, 2015.
- Nixon, Rob. Slow Violence and the Envronmentalism of the Poor. Harvard UP, 2011.
- Papadopoulos, Dimitris. Experimental Practice: Technoscience, Alterontologies, and More-Than-Social Movements. Duke UP, 2018.
- Povinelli, Elizabeth A. Economies of Abandonment: Social Belonging and Endurance in Late Liberalism. Duke UP, 2011.
- Ronda, Margaret. Remainders: American Poetry at Nature's End. Stanford UP, 2018.
- -. "The Social Forms of Speculative Poetics." *Post45*, 26 Apr. 2019, https://post45. org/2019/04/the-social-forms-of-speculative-poetics/. Accessed 5 Aug. 2022.
- Sandilands, Catriona. "Introduction: Environmental Literatures and Politics in Canada." ISLE: Interdisciplinary Studies in Literature and Environment, vol. 25, no. 2, 2018, pp. 280-291.

Ediciones Universidad de Salamanca / CC BY-NC-SA

Seymour, Nicole. Bad Environmentalism: Irony and Irreverence in the Ecological Age. U of Minnesota P, 2018.

Skinner, Jonathan. "Editor's Statement." ecopoetics, vol. 1, 2001, pp. 5-8.

- Sklair, Leslie. "Editor's Introduction." *The Anthropocene in Global Media: Neutralizing the Risk*, edited by Leslie Sklair, Routledge, 2021, pp. 3-21.
- Stoekl, Allan. Bataille's Peak: Energy, Religion, and Postsustainability. U of Minnesota P, 2007.
- Szeman, Imre. On Petrocultures: Globalization, Culture, and Energy. West Virginia UP, 2019.

Tremblay, Jean-Thomas. Breathing Aesthetics. Duke UP, 2022.

Tremblay, Jean-Thomas, and Andrew Strombeck. "Introduction: Avant-Gardes in Crisis." *Avant-Gardes in Crisis: Art and Politics in the Long 1970s*, edited by Jean-Thomas Tremblay and Andrew Strombeck, State U of New York P, 2021, pp. 1-20.

Wershler, Darren, Lori Emerson, and Jussi Parikka. *The Lab Book: Situated Practices in Media Studies*. U of Minnesota P, 2021.

Wiebe, Sarah Marie. Everyday Exposure: Indigenous Mobilization and Environmental Justice in Canada's Chemical Valley. UBC P, 2016.