Studies in Canadian Literature
Études en littérature canadienne

Speculative Health Futures: Contemporary Canadian Health Policies and the Planetary Health Commons in Larissa Lai's The Tiger Flu

Heike Härting

Volume 48, Number 1, 2023

Special Issue: The Ruptured Commons

URI: https://id.erudit.org/iderudit/1111913ar
DOI: https://doi.org/10.7202/1111913ar

See table of contents

Publisher(s)

University of New Brunswick, Dept. of English

ISSN

0380-6995 (print)
1718-7850 (digital)

Explore this journal

Cite this article

Härting, H. (2023). Speculative Health Futures: Contemporary Canadian Health Policies and the Planetary Health Commons in Larissa Lai's The Tiger Flu. *Studies in Canadian Literature / Études en littérature canadienne*, *48*(1), 109–130. https://doi.org/10.7202/1111913ar

Speculative Health Futures: Contemporary Canadian Health Policies and the Planetary Health Commons in Larissa Lai's *The Tiger Flu*

Heike Härting

> The old world, which once looked stable, even immutable, is collapsing. . . . Whether the systems that emerge from this rupture are better or worse than the current dispensation depends on our ability to tell a new story.
> — George Monbiot (12)

> O slow fish show me the way
> O green weed grow me the way
> . . .
> If one can choose it
> it is wrong
> Sing me the way
> O song
> — Ursula K. Le Guin (loc. 3306)

Notwithstanding its apocalyptic undertones, British writer and environmental activist George Monbiot's observation of a collapsing world draws attention to the narrative stakes involved in how, to what end, and by and for whom planetary futures are imagined and storied. A closer reading might even suggest that the "old world," the planet itself, has always been intrinsically volatile, subject to seismic ruptures and volcanic eruptions. Yet dominant models of Cartesian science and global modernity continue to champion concepts of gradual planetary evolution and human exceptionalism, thus willing the planet to be insentient, an "immutable" resource subservient to human needs. In Larissa Lai's novel *The Tiger Flu* (2018), ruptures "rumble" in unpredictable ways and mock anthropocentric fantasies of gradual development. The de-extinction of the Caspian tiger, a human trigger of the eponymous flu, marks such a rupture in the novel's narra-

tive ecology. Like the "fearsome purring" of "massive tigers," it "makes the rumble of the past resonate deeply, below the level of audible sound" (210), deep within the "earth['s] . . . darkest core" (275). Subject to narrative, as Monbiot aptly states, ruptures interrupt linear and teleological genealogies and ontologies, thus opening up multiple futures and possible pasts. Although narrative ruptures are neither entirely predictable nor fully under authorial control, they entail political and aesthetic interventions that destabilize, to paraphrase Edward Said, normative systems and attitudes of power and reference. The outcomes of such ruptures affect numerous scales of transformation and largely depend on *how* a rupture is narrated. In *The Tiger Flu*, Lai takes a speculative approach that ruptures received orders of time, space, and health and offers non-Cartesian trajectories toward imaging alternative planetary health futures.

Set in the near future amid the planet's anthropogenic devastations and the lethal tiger flu, the novel tells the story of Kora Ko, a fifteen-year-old Salty girl, whose family is dying of the flu and, unknown to her, partly responsible for it, and Kirilow Groundsel, a member of the Grist sisters, a community of parthenogenic and mutating female clones (20). The survival of the community depends on a "doubler" capable of giving birth to multiple Grist "puppies" (18) and a starfish able to regrow her organs to sustain the community's life. When Peristrophe, the last starfish and Kirilow's love, tragically dies, Kirilow must find a new starfish to ensure her community's survival. Surprisingly, Kora, sent to the Cordova Dancing School for Girls, a secret community of Gristies and hated human "Salties" (48), is a starfish but reluctant to join Kirilow. Eventually, they must collaborate to fight Isabelle Chow's HöST Light Industries. Chow has developed the LïFT, a technology that aspires to "cure the mind of the body" (173) and upload human minds to the main framework Eng in outer space but that requires Grist sisters as test objects. Destroying Chow and the New Origins Archive, a science lab and DNA data and memory bank that cooperate with Chow, Kora and Kirilow narrowly escape death and build a new, utopian Grist village.

As a speculative narrative, *The Tiger Flu* does not anticipate definite state-governed health models, nor does it fit the generic constraints of a pandemic "outbreak narrative" (Priscilla Wald). Rather, it facilitates an inquiry into the underlying logic and rhetoric of dominant health policies. For Health Canada, these policies are enshrined in the Canadian Institutes of Health Research (CIHR)'s *Framework for Action on Global*

Health Research, 2021-2026 and *Strategic Plan 2021-2031: The Best Health for All Powered by Outstanding Research*. In this essay, I will argue, first, that *The Tiger Flu* ruptures these policies' investment in global health models and their hegemonic concepts of equity, sustainability, and evidence-based science. Second, I will propose that Lai's novel provides reparative and insurgent perspectives of different health futures that recast the current "planetary entanglement" of biogenetics, digital and AI technologies, extractive predatory capitalism, and "soft-power warfare" (Mbembe, *Necropolitics* loc. 2013). Rather than indulging in what Achille Mbembe dismisses as "baroque and dystopian" fables of the present (*Necropolitics* loc. 4846), Lai offers a speculative narrative concept of the planetary health commons.

A preliminary conception of global and planetary health must address some ways in which to distinguish the global from the planetary. The global, as Dipesh Chakrabarty argues, is "humanocentric" (18) and driven by the various racialized, colonial, and neoliberal histories and practices of extractive and predatory capitalism. The planetary refers to overlapping epistemologies and ontologies of the more-than-human, the human, and the non-human and to the planet's "habitability" (83). In this vein, dominant global health is a derivative of colonial and international health. It shifts "public health," as Vincanne Adams argues, toward "a new kind of 'science' in the form of pharmaceutical research, clinical drug testing, and laboratory concerns." This shift is enshrined in global and national health practices and policies that understand "science as separable from health" (46). In *The Tiger Flu*, the Grist sisters profoundly oppose such a separation. Governing concepts of planetary health, such as those promoted by The Rockefeller Foundation-*Lancet* Commission report on planetary health in 2015, acknowledge the relationality of human and non-human health. Yet they also claim the right to shape planetary health futures by way of technofixes, control over reproduction, and sustainable growth models, all aspects present in extant global health models. This version of planetary health resonates with Isabelle Chow's anthropocentric, philantro- and techno-capitalist vision of the future, a vision profoundly troubled and transformed by Kora and Kirilow's intersecting narratives.

Throughout, my reading tries to follow *The Tiger Flu*'s lead and track the processual, open, complicit, and contradictory character of thinking through the conditions and limitations of imagining the planetary

health commons. Divided into four parts, this essay first examines some narrative stakes through which the novel sketches a speculative and more-than-human planetary commons. The second and third parts read key terms of the CIHR's health policies against *The Tiger Flu*'s narrativization of the same terms to destabilize the CIHR's normative global and national future health imaginary. The final section discusses the novel's "Starfish Orchard" (328) as an embodiment of the planetary health commons and a result of the multi-faceted collaborative labour of "collateral insurgencies," a term that I adapt from Wai Chee Dimock's notion of "collateral resilience" (12) and Lai's concept of "emergent insurgencies" ("Insurgent Utopias" 98).

The Tiger Flu: Narrative Stakes of the Planetary Health Commons

One of *The Tiger Flu*'s central stakes, as recent critical assessments of the novel demonstrate, is its sharp intervention in an increasingly dominant anthropogenic imaginary. For instance, Mónica Calvo Pascual observes that the novel rejects "transhuman philosophy" and instead shares N. Katherine Hayles's and Rosi Braidotti's embodied "posthumanist tenets" (109). Katharina Donn equally draws from theories of "human embodiment" (7) but focuses on Donna Haraway's and Stacey Alaimo's theories to underscore *The Tiger Flu*'s "'lively relationalities of becoming'" (Alaimo in Donn 14). Peyton Campbell's and Marina Klimenko's fine essays on Lai's novel guard against a universalizing use of relationality. Instead, they read the novel in terms of a queer "utopian insurgency" (Campbell 131) that imagines non-coercive and "communal" future methods of "care based on connections with more-than-human beings and shared histories" (Klimenko 163). My reading of *The Tiger Flu* builds upon their arguments but shifts the focus toward planetary health and takes up Lai's notion of speculative fiction as a performative genre that entails an "insurgency in thought." It combines "idealistic thought, critical thought, and narrative experiment" (Lai, "Insurgent Utopias" 97) in ways that, in my view, deeply trouble dominant planetary health models and their claims to particular health futures.

In her essay "Insurgent Utopias: How to Recognize the Knock at the Door," Lai insists that speculative fiction generates "emergent insurgencies" (98). They work toward reparative futures, invoking, in Eve Kosofsky Sedgwick's terms, "terrible surprises" and "good ones," hope in the midst of loss, and painful "possibilities" that the past "could have

happened differently" (146). In this way reparative and critical, Lai's speculative practice explores "how we envision collective social and planetary co-existence" and "respond to the uneven histories of exploitation, colonialism and imperialism that have brought us to the present moment" ("Insurgent Utopias" 98). *The Tiger Flu*'s multi-temporal setting in "Cascadian . . . Time After Oil" (11) and the Chinese and Gregorian calendars foregrounds that planetary imaginaries emerge through competing and simultaneous temporalities. These temporalities unfold through the novel's structural logic of "nodes" or knots, the descriptive subheadings of each chapter (e.g., "Node: Summer Begins. Day: 15." [12]), that signal multiple embodied narrative, climatic, and temporal confluences and connections rather than separations. Indeed, the novel's triple temporalities "slip-knot," to use Ian Baucom's term (65), multiple histories of oppression, extraction, freedom, and geological time, and as such they contest the singular epochal temporality of the Anthropocene (see also Yussof). At the same time, the different calendars question how one measures the future and future health. In their critique of the Rockefeller-*Lancet* report, Abou Farman and Richard Rottenburg note that its technoscientific and progress-oriented measures of planetary health futures directly "relate to measures of resource depletion" (1) and block alternative narratives of planetary health. Contrarily, the novel's narrative of layered temporalities and multifarious pandemic eruptions employs "different methods . . . at different scales of time and space" so that "different [health] realities eventuate" (Farman and Rottenburg 3).

Following four pandemic waves of the tiger flu and various anthropogenic transformations of the planet's gravitational pull and biosphere, the Earth in *The Tiger Flu* is in a state of planetary "dysbiosis" (Hinchliffe et al. e232). In other words, the planet, as James Lovelock already knew in 1991 when he declared the planet a patient, suffers from a structural imbalance of its bacterial, viral, and fungal composition (i.e., its life-generating forces), creating new ecologies of disease. Fascist corporate clone and pharma industries have replaced the nation-state and privatized medicine, science, and knowledge, now stored on two increasingly dysfunctional mainframe satellites, Chang and Eng, launched by Chow's HöST Light Industries.[1] HöST and its rival, the Pacific Pearl Parkade headed by Marcus Traskin, steadily increase tiger flu transmissions and the production of N-lite, a hallucinatory and preparatory drug for the LïFT, to create market demand for their digital health platform. In part

a result of the collateral damages and negative feedback loops of factory farming practices, and in part a result of extractive capitalism and biocapitalism, the tiger flu virus accidentally emerged through the de-extinction of the Caspian tiger,[2] whose bones are commercially extracted to produce tiger wine. Its consumption and the deliberate spreading of the virus structure the "terrain" of "infectability" (Hinchliffe et al. e232) in that the flu targets primarily men but also affects the immuno-compromised. The tiger flu certainly projects how the current mass extinction might unwittingly offer new targets of biogenetic venture capitalism, which combines conservation genetics and biogenetics with a neocolonial ideology of scientific discovery not of the unknown but of the known.

As a parable of Lai's concept of speculative fiction, the tiger flu indicates various ruptures: a narrative rupture of violent human ontogenealogies, enshrined in her reference to Blake's poem "The Tyger"; a rupture of planetary self-regulatory systems; and a rupture of normative reproductive and social relationships.[3] However, a bioengineered *novum* and marker of nodal histories, the tiger flu virus transcends its origins and harbours utopian and dystopian possibilities. Not unlike the Grist sisters, it is subject to mutation, autopoiesis, and symbiosis and thus reflects the planet's volatile life forces, which, as Peristrophe's death reveals, might signal what Dimock calls "immunity breakdown as experimental paths to the future" (104).

Organized like a DNA double helix, Kirilow's and Kora's alternating first- and third-person narratives are cautiously connected, spinning into and out of each other. They address questions of unstable solidarities, differences, and the messy terrains of identity politics and communal reinvention. Initially, however, Kirilow's sense of rage and grief is a result of her community's reliance on communal sacrifice and the scarcity of genetic resources, namely of doublers and starfishes. This makes the Grist community a regulatory commons. As such, Patrick Bresnihan explains, it uses an "institutional approach to managing 'common-pool resources'" (93). It is premised on collective rules and norms to avoid the destruction of common resources (e.g., Grist sister organs), maintains "some form of [indirect] property," and presupposes the "liberal identification of rational, economic subjects exploiting limited stocks of bio-physical resources" (Bresnihan 93). The trajectory of the novel, as the next sections argue, moves away from this notion of commons and embraces an aesthetic and creative practice of "commoning" that entails the difficult

and uncertain labour of "relation-*making*" (Lai, "Insurgent Utopias" 104; emphasis added).

The Grist sisters' use of songs, dances, prayers, and poems encompasses practices of commoning, namely collective learning and communicating.[4] When Kirilow chants her song of the "kiss cut," she prays to

> *Our Mother of dirt*
> *Our mother of songs and sighing*
> . . .
> *We remember mushrooms holding the globe*
> *in their mycorrhizal net*
> . . .
> *We remember . . .*
> *The shifting and wobbling of the intentional earth* (*Tiger Flu* 20-21)

Her chant is an oral and visceral rendering of more-than-human and non-heteronormative reproductive relationships, anchored in a matrilineal and Earth-based commons that Donna Haraway calls "compostist communities" (147). To Haraway, these communities are guided by the wisdom of the "tentacular ones" (31), of living and abstract "string figures" that contain "science fiction, speculative feminism, science fantasy, speculative fabulation, science fact" (10). Kirilow's song, then, disrupts patriarchal linguistic structures and embraces a practice of commoning that "muddle[s]" (Haraway 31) received epistemologies and yearnings for communal purity. In this way, neither the planet nor the commons, as Jennifer Gabrys argues, presents stable and self-evident "analytical categor[ies]" or "settled figure[s] of consensus" (4) but comprises intertwined "collective composition[s] . . . in the making" (3).

The Tiger Flu's aesthetics and politics of commoning, then, challenge the "fascist drives" (Connolly, *Climate Machines* iii) hidden in the phantasmagoria of computational reason and patriarchal anthropogenic regimes of predatory capitalism. These drives are often sugar-coated in an unqualified neoliberal rhetoric of sustainability, equity, and resilience that marks contemporary policies of planetary and national health. The novel's narrative interventions into governing discourses of planetary and global health involve identifying, rupturing, and rescripting their dominant terminologies and future health imaginaries. Turning to the CIHR reports, I will argue that the conceptual and ethical ambiguities of equity and sustainability that plague the broken commons of the original Grist

community also determine the central values that constitute the reports' vision of future global health.

Equity/Sustainability — Sufficiency/Habitability

In October 2020, Canada failed to support the globally demanded waiver on "patents, copyrights, industrial designs, and clinical data," regularly enforced by the World Trade Organization, "for the duration of the [COVID-19] pandemic" (Canadian Centre for Policy Alternatives), and thereby stalled the process of global health equity. Privileging property rights over health as a common good, this scandalous failure was in stark contrast to the CIHR's core values of health equity, sustainability, and research excellence set out in their plan and framework. In both reports, these terms remain poorly defined and embedded in national and global narratives of future health. As relatively vague political and ethical projects, health equity and sustainability are nevertheless contentious terms easily co-opted for conservative agendas.

One of *The Tiger Flu*'s most sinister evocations of the abuse of health equity is related to the tiger men, a few hundred infected men, including Kora's brother, who live socially isolated under Traskin's rule in his Pacific Pearl Parkade. Chow's former collaborator and now competitor, Traskin plans to annex the LïFT and has transformed himself into the "largest" living "public mainframe in Saltwater Flats" (209), literally embodying Big Tech power. When I say sinister, I mean that the vague definition of in/equity promoted by the World Health Organization, and adapted by the CIHR, is easily appropriated by corporate interests similar to those of Traskin. Following the CIHR, health equity refers to the "absence of avoidable, unfair, or remediable differences among groups of people, however these groups are defined" (*Strategic Plan* 11).[5] Other than equality, equity consists of a moral imperative to achieve social justice. Yet it leaves unanswered exactly what *unavoidable* differences are, especially given that dominant explanatory narratives of accidental birth are not value free and falsely suggest that one is born into a historical vacuum. Surely, health equity promotes equitable access to health resources and equity between historically marginalized social groups and individuals through the implementation of public health policies. However, the latter are often preoccupied with data-driven equity and tend to treat groups as monolithic rather than internally differentiated formations, an aspect that Lai's portrait of the Grist community challenges. In contrast to the

CIHR's global health policies, *The Tiger Flu* addresses the underlying causes and narratives of inequity through "the communities from which they emerge" (Lai, "Insurgent Utopias" 100).

In *The Tiger Flu*, in the story of the tiger men, equity is distorted into a narrative of totalitarian sameness to defend extractive capitalism and white, male, heteronormative power. Marginalized for "a hundred years" (207), the tiger men are united by lost privileges, lesions, "streaming long white hair" (203), and the "tendril scales" (i.e., brain-implanted microchips) that float around their heads like halos. At a LïFT party, all of them congregate around their "lord" Traskin, who, wearing a biosustainable "algae-cellulose shirt" and covered in scales (208), sits on a stage in a new-age Buddha pose with flowing white hair, emitting an aura of philanthropical benevolence. Struck with "collective wonder" (209), the men revel in their N-lite intoxicated visions of their immortality and the virtual resuscitation of the good old times: they will be "strong the way [they] were before. There [will be] cars like in the old days. And steak and beer, and . . . hot chiquititas" (126). The tiger men's longing for a return of their lost power, a fascist desire at heart, is part of their denial that the tiger flu is what William Connolly calls a "planetary amplifier" (*Climate Machines* 7), set in motion by extractive capitalism, superseded by "the planetary climate machine" (9), and reinforced by the political failures to unlearn privileges and replot core capitalist values such as the protection of private property, profit making through self-interest, and unhampered economic prosperity.

The tiger men's response to the "fascist temptations" (Connolly, *Climate Machines* 2) that arise in the wake of these political failures is the apotheosis of computational reason (e.g., the scales) and technofixes (e.g., the LïFT). In fact, Kora's brother and the tiger men now collectively run the "Jemini" clone factory (Lai, *Tiger Flu* 215) that bioengineered the Grist sisters to produce new "test subjects" for Traskin and to "control the wine factories" (229). To Kora's shock, the factory has always been owned by her family, which makes Kora vulnerable to her brother's betrayal and a historical agent in the exploitation of the Grist sisters. Indeed, responsible for the mass production of female clones and tiger wine, Kora's family is both complicit in the tiger flu's pandemic of social, economic, and ecological inequity and its victim. As a result, family relations are fractured and suffer from horizontal violence, suggesting that equity, in contrast to the CIHR's definition, must account for the

historical, heterogeneous, and uneven composition of communities and their embeddedness in structures of both equity and inequity. The divisive structure of the Cordova Dancing School for Girls illustrates this point clearly, whereas Traskin and the tiger men demonstrate how the call for equity can obscure the causes of inequity and give rise to fascist forms of corporate rule.

A vehicle of the CIHR's normative global and national imaginary of future health, the *Strategic Plan* "envisions a future where Canadian researchers are global leaders in the development of ground-breaking discoveries," where Canadian health research will be "internationally recognized as inclusive, collaborative, transparent, culturally safe, and focused on real world impact," and where "Indigenous communities will lead health research that focuses on resilience, wellness, and Indigenous ways of Knowing." To this end, the CIHR will drive "progress on global health research," advance "equity, diversity, and inclusion among researchers" and "the self-determination of First Nations, Inuit, and Métis Peoples in health research," and integrate "research evidence . . . seamlessly with Canadian health policy and practice" (4). Yet both CIHR reports unabashedly speak *for* diverse communities while failing to address how a changing, "rumbling" planet (Lai, *Tiger Flu* 316) becomes embedded differently in different places and bodies, creating uneven health susceptibilities.

In effect, both reports are notable for what they do not say, for their failure to establish the central role of the CIHR's health research in "green" capitalist growth models, pharmaceutical politics and Big Tech, patents and property rights protection, and biogenetic reproductive politics. Indeed, though the CIHR's president, Michael J. Strong, celebrates the "tremendous insights [gained] into the fundamental causes of disease" at a hitherto unimagined pace, he bemoans that "the burden of disease and health inequities continue to drive unsustainable health care costs" and, to be remedied, require a "vision for health research that transcends generations" (*Strategic Plan* 7). Strong's economistic rhetoric implies that health inequities, rather than their underlying causes and histories, are to be blamed for high health-care costs, suggesting that the CIHR's value of health equity is governed not by ethical considerations but by economic expedience. His bold claim to Canada's health-care future conveniently overlooks that achieving scientific gains causes "damages in other fields" and is based on "technoscientific methodologies that

restrict what counts as evidence to those things that can be identified . . . through experiments, measurements, or calculations" (Farman and Rottenburg 3). Thus, the methods and technologies that measure medical progress are the same as those that cause planetary destruction and, paradoxically, are championed as its remedy. It is precisely this counterfactual blindness of normative health policies that Lai's speculative narrative ruptures. Chow's and Traskin's development of the LïFT, a digital phantasmagoria that the Grist sisters call the "death machine" (Lai, *Tiger Flu* 173), constitutes a sharp critique of how biogenetic-techno-scientism and metrics have redefined health as designable, platform-driven, and disembodied. The outcomes of such practices are not fully controllable and might pan out in unexpected ways, as evident in the genesis of the Grist sisters. Although bioengineered and sold as slaves to "HöST scale and microchip factories" (21), they learned to self-reproduce, biohack, mutate, and, finally, revolt against HöST. This necessary rupture in the relations of production enabled them to form biogenetic undercommons[6] not unlike the historical Caribbean maroon communities of rebellious and escaped slaves.

The *Strategic Plan*'s politically opportunistic rhetoric on the capitalistic front naturally elides the effects of oppression on marginalized communities while ironically mentioning them. On the one hand, using the rhetoric of "recognition" and "co-existence," the plan emphasizes Indigenous "resilience" rather than resurgence and has little to say about how "Indigenous Ways of Knowing" (16) work toward decolonial and pluriversal research agendas. Indeed, the term "decoloniality" is entirely absent from both reports, implying a lack of political support for Indigenous demands for health equity rights that cannot be separated from Indigenous land rights.[7] On the other hand, the *Strategic Plan* does not define what constitutes evidence in the context of accelerated clinical trials for new drug patents and the development of me-too drugs, namely drugs with little therapeutic but enormous commercial value (Lexchin 14). Indeed, there is little clarity about the CIHR's criteria of research excellence beyond biomedical paradigms or the values and politics that guide their advisory role to Health Canada on the evaluation of evidence and regulation of drug patents and intellectual property rights.

The CIHR's *Framework* is premised on Canada's leading role in the development of "the *United Nations Research Roadmap for the COVID-19 Recovery*," its "support of the UN's SDGs [sustainable development goals]

and a more equitable, resilient and sustainable future" (33). It strives to build "IMPACT . . . ALIGNMENT, and . . . CAPACITY in global health" (16) by embracing a "Global Health 3.0 approach to improve health for the least well-off everywhere" (29) and supporting "gender-transformative approaches" (22). Like the *Strategic Plan*, the *Framework* displays a dazzling rhetoric of sustainability, inclusivity, equity, and diversity at the expense of both "cultural humility" — that is, a "self-reflection to understand personal and systemic" and institutionally and colonially "conditioned biases" (First Nations Health Authority 11) — and a rigorous analysis of the systematic (re)production of unequal economic and political relationships of power. Although "Global Health 3.0" seeks to distance itself from its predecessors of tropical colonial medicine and international health, it continues to privilege research over health and defines health as "an outcome of globally shared risks and responsibilities" (*Framework* 6). This approach represents health within a neoliberal security framework in which risks are presented as universally shared. It represses the radical discrepancies of planetary risk vulnerabilities and distributions. In contrast, the novel's speculative narrative about the first Grist community's unsustainable resource management reveals that risk vulnerabilities are politically generated and uneven.

As mentioned earlier, in *The Tiger Flu*, the Grist village's survival depends on the sustainable use of Peristrophe's organs. Although Kirilow is expected to submit to the strict rules of her community, she refuses to give Peristrophe's heart to the older doubler Radix Bupleuri, whom Kirilow thinks greedy and whose "job" it "should be . . . to sacrifice for [the community]" (14). Yet Radix considers her life more valuable and insists that Peristrophe's sacrifice is the "duty and nature of a starfish" (14). Interestingly, Radix invokes nature in a context in which it is better understood as a complex synthesis of *natureculturetechnologies*.[8] By declaring Peristrophe's particular ability a natural difference (rather than mutation), Radix voices the World Health Organization's untenable idea that "inequalities produced by nature are not inequities" (Amri et al. 8), so Peristrophe has no claim to equitable treatment. Radix's position turns out to be governed by self-interest and reveals that the community's rules of sustainability are not universal or geared to the collective habitability of the planet. Instead, they reflect Radix's sense of growth through organ accumulation as a calculated risk that eventually leads to the community's destruction. For, as Radix insists on "over-harvest[ing]" (32) Peristrophe's

organs, she leaves Peristrophe's body immunocompromised, susceptible to the tiger flu, and the Grist community vulnerable to Chow's military attack, which results in the abduction of most village members.

The story of the first Grist village makes visible that sustainability is a normative episteme built upon Malthusian notions of scarcity and overpopulation, institutional resource management (rather than stewardship), and economic growth models governed by progress and development politics.[9] In this sense, sustainability guides the principles of socio-economic commons based on a "common property regime" (Bresnihan 93), the very system that leads to the failure of the first Grist village. What is needed, as the novel suggests throughout, is an epistemic rupture, or what Gayatri Spivak calls "epistemic daring," a bold epistemological move that allows for contradictions and chance to unfold and thinking of the commons historically and politically as "not-quite-not-yet imagined" (Spivak 140), not just as a place but also as a shared practice of commoning. As I have tried to suggest in this section, imagining the planetary health commons involves restructuring property rights and rethinking equity in terms of "relation-making" (Lai, "Insurgent Utopias" 104). It compels economic models of degrowth and planetary habitability and translates sustainability thinking into concepts of sufficiency, well-being, and regenerative wealth.

The Speculative Knowledge Commons

The speculative knowledge commons imagines the commons through marginalized forms of knowing and sensing the planet. In Lai's novel, it designates not immaterial but embodied forms of knowing and opposes the privatization of knowledge and evidence-based medicine. The latter is instrumental in the CIHR's advancement of "research excellence" (*Strategic Plan* 12) and, as Mbembe remarks, "treat[s] *life itself as a computable object*" ("Thoughts"). Kora's microchip "scales," her digital wearables, are loaded with "flat information" (Lai, *Tiger Flu* 209) and reference the novel's multi-faceted use of fish metaphors and its concern with the metric scalability of evidence. They exemplify an unspoken consensus among pharma industries, the medical sciences, and policy makers[10] that only quantifiable, seemingly evidence-based forms of knowledge are able to generate scientific truths rather than truth effects. A significant epistemological shift occurs early in *The Tiger Flu* when Kora's mother kills the goat Delphine, Kora's animal companion, to

alleviate perpetual food insecurity. The slaughter of Delphine alienates Kora from her family, and though she refuses to eat the goat stew hunger finally forces her to give in. Yet her body, "know[ing] something" that the "mind can't refuse" (70), keeps vomiting up the food. A "selfish" act (39), the killing of Delphine foreshadows the cannibalism generated by Chow's LïFT experiment. Reminiscent of colonialism's civilizing mission to uplift the colonized morally, the experiment slaughters the Grist sisters literally by elevating them to the mainframe and, in the process, turns them into fish to be consumed. More than a satire of Christian saviourism or an illustration of Agambenian bare life, Delphine's death demonstrates the ethical absurdity of disguising vertical and horizontal violence — enacted alike on human and non-human life — as acts of self-preservation or communal sacrifice.

Given the etymology of the name Delphine, the goat's death refers to the destruction of alternative, oracular forms of knowledge. The latter do not deal in prophecies but are speculative ruminations compelled, as Isabelle Stengers argues, by "the intrusion of Gaia" (140), original female goddess of the Earth and oracle of Delphi's ancient shrine. Gaia's intrusion is the name for the multiple planetary and social ruptures narrated in the novel but for which today's research institutions are "badly equipped" (Stengers 140) to formulate the questions imposed by this intrusion. The future, Stengers argues, cannot signify "the advance of knowledge" (110) or "growth and competition" (138) but designates "radical uncertainty" (110), which requires speculative, "messy" (120), and embodied forms of "thinking together" (123). As an embodied knowledge practice, oracular knowledge is speculative, requiring interpretation, and traditionally obtained in a trance state. Unsurprisingly, then, Delphine intrudes (Lai, *Tiger Flu* 272) into Kora's dreams and leads Kora to the "Dark Baths," a preparatory interface for the LïFT that puts her into a state of "wisdom [with] no words" (279). Although this state of cybertrance threatens her life, it also gifts her fragments of the past and the future, of her collective and individual memories, sufferings, and culpabilities (275), all of which will be collectively storied and later transmitted to the new Grist village. These oracular or speculative knowledge practices interrupt Chow's incessant hunger for research advancements, her claims to truth telling despite her unethical clinical methods, and her quest for greater calculability and "verisimilitude" (174) to optimize the LïFT. Ironically, her

quest is a narrative one that cannot but undermine her longing for digital purity and verisimilitude.

The Grist community lives by way of "the loving transplant, the sexy suture" (20). Repetitions, alliterations, paradoxes, chants, and prayers comprise the "evidence" of Grist knowledge/wisdom and their aesthetic practice of commoning. Lai calls Grist knowledge "tiger symmetries" ("Tiger"). Neither Derrida's pharmakon nor quite like the "fearful symmetry" of Blake's "tyger" and lamb, Lai's discrepant symmetries reference a different kind of "fearsome purring" (210). They gesture toward the unleashing of an unpredictable virus and the tiger's tragic return as the uncanny other, both living and extinct, in whose wake the planet reconstitutes itself. Although the phrase is symbolically rich, even exuberant, I understand it as a reference to the volatility of self-organizing and amplifying planetary force fields (Connolly, *Facing* 3-4) and to the planet's own uncanny "alterity" (Spivak, "Imperative" 338). Moreover, the phrase "fearsome purring" embodies the Grist sisters' language of poetic paradox, a mnemonic and pedagogical device of commoning and knowledge transfer yet opaque and to some extent untranslatable. Lai's symmetries, however, are multi-directional and multi-species compositions. As such, they are in conversation with Ursula K. Le Guin's poem "Tao Song," quoted as my second epigraph, which takes the "slow fish" and the unruly "weed" as wise subjects and instructors that help the speaker to search for the "way."[11] Similarly, when Kirilow searches for the Salty who invaded her community, she acknowledges the material agency of her surroundings: "[T]he slope wants me to run" (Lai, *Tiger Flu* 37). As Le Guin suggests, and as the "fearsome purring" implies, finding the way depends not on one's choice or control but on chance and new visceral practices of inhabiting and sensing the planet.

A revelatory moment of the transformative force of chance in *The Tiger Flu* occurs unexpectedly when Kirilow sees her beloved Peristrophe, her mother double Glorybind Groundsel, and the hated Salty, the carrier of the lethal Tiger Flu and hitherto unrecognized starfish, dance together to the tunes of a "time-before machine" (70), a "CD player" (71). Although Kirilow vilifies the "dirty Salty's forest-of-the-night magic" (70) in the same way that Chow criminalizes Kirilow's practical medical knowledge, Kirilow's body begins to dance of its own accord until it is in an ecstatic, trance-like state that Kirilow "never knew" (71). Now volatile, like the planet itself, her body explodes the legacies of Cartesian dualism

and misogynist scientific reductionism that transformed the body into a quantifiable container, an object of abjection and regulation historically readied for the LïFT. Paradoxically, Kirilow finds herself in harmony with the ones whom she loves and hates as her body, attuned to its aural and tactile senses, appears to know more than her mind can grasp (71).[12] She "dances the dance of nuclear fission, of oil . . . the tiger flu . . . Ebola . . . AIDS . . . the Black Plague . . . cloning, mutation. All the long path of chance and science, money and murder that Old Glorybind taught me was my messy legacy" (71). Like Haraway's "world of the Camilles" (137), another "utopian enclave" (Lai, "Insurgent Utopias" 104), Kirilow's world is suddenly saturated with "eruptions of healing energy," driven by the "love of earth" and "by rage at the rate and scope of extinctions, . . . genocides," and diseases (Haraway 137). Thus, knowledge is returned to the wisdom of the body and becomes a deliberately messy healing practice of sensing in common without an anticipated telos. Bringing together aural and tactile forms of knowing and remembering, including the unknown, this knowledge practice allows for contradictions to coexist, decentres the human, and draws from the wisdom of intuition and the unexpected.

Lai's Planetary Health Commons

As a caveat, the planetary health commons cannot promise a reversal of anthropogenic transformations, nor should it be mistaken for a single space of harmonious relationality. Rather, Lai's generative critical and literary work offers speculative knowledge forms that recognize that the amplifying effects of the Anthropocene, though triggered by humans, exceed human control. Thus, "human action," Lai states, is "not causal, but rather embedded in larger self-amplifying systems" ("Insurgent Utopias" 105). It is within this constraint that the planetary health commons should be imagined as a non-coercive, Earth-bound practice of commoning directed toward the continuation of all life and engaged in retuning the senses and building relations. In the novel, the planetary health commons emerges through a series of collateral insurgencies. Following Lai's idea of "emergent insurgencies" ("Insurgent Utopias" 98), I see collateral insurgencies as an incidental eruption caused by the feedback loop of a planetary amplifier or an unexpected event that does not lead to destruction or nihilism — though it can — but triggers the overhaul of given economic, political, epistemological, and health coordinates. Lai advises that this reparative process requires paying atten-

tion to the "'knock at the door,'" which she describes as "a moment of contingent arrival . . . that crystallizes hope for an instant, or offers a sign of wonder," yet is equally open to "co-optation" and "destruction" ("Insurgent Utopias" 94). It is Kora who, drugged by the Cordova girls and trapped in the New Origins Archive, is attentive to a "knock at the door [that] keeps coming" (Lai, *Tiger Flu* 271). It erupts in her mind, alerting her to the "scream of her long history" (275) and representing an "insurgency in thought" (Lai, "Insurgent Utopias" 97). However, in her hallucinatory state, her regrown, mutated right hand seems to be the "only part of her that is real" (Lai, *Tiger Flu* 275). This recognition in mutation relates Kora to the Grist sisters, opposes Chow's median of verisimilitude, and keeps her doubting the veracity of her own illusory desires (e.g., her mother and Delphine). Meanwhile, Kirilow is held prisoner in the New Origins Archive and realizes that the Cordova girls have allied themselves with Chow, who wants to destroy Chang, the old mainframe, and subdue Kirilow by forcefully implanting a scale in her head. Unintended by Chow, the scale instantly moves through Kirilow's "fistula," a cranial hole that all Grist sisters have, including the Sonias of Lai's novel *Salt Fish Girl*, and "burrows . . . deep" into her "brain," making her uncanny to herself, as her "mind grows suddenly sharp yet strangely not [her] own" (312).

Both Kirilow's newly acquired scales and Kora's regrown hand turn out to be "gifts that . . . appear unbidden through the combined action of disparate forces" (Lai, "Insurgent Utopias" 95) and whose transformative effects exceed the intentions of the gift givers. Indeed, the fistula, as Lai says elsewhere, is a multi-temporal and alternative sensory organ for "hearing and smelling sounds and odours from another world," perhaps "a remnant of a prehistoric past, of a time when humans were more closely related to fish" ("Sixth Sensory" 199). Thus, when the Cordova girls Myra and Tania strategically ally themselves with Isabella and launch the von Braun bomb (Lai, *Tiger Flu* 316) to bring down Chang and the New Origins Archive, Kora becomes the collateral damage, subsequently forcing the treacherous Myra, Bombyx (Radix's groom), and Kirilow to pool their forces. To save Kora, they put her into the LïFT, which transforms her into a "giant fish" with "a pink right fin" (322), the trace of her former being. Kirilow then uses the scale in her fistula and a second one that Myra jams into her head to learn how to fly a batterkite, a living bioengineered spaceship, to take Kora to the new Grist village, where

she and Bombyx will "work for many years" to upload her consciousness to the batterkite and help its "tentacles" slowly to sprout roots and branches that would "seed the entire Starfish Orchard" (328). Bombyx's and Kirilow's "slow sciences" (Stengers 106) work beyond any calculus. Instead, they rely on the symbiotic agency of "com-post" and the "tentacular ones" (Haraway 11, 71) while ethically adapting Chow's technologies. They must make use, as Dimock suggests, of the "cascading side effects" of potentially catastrophic events to build "a reparative network bearing the imprint of many" (12). Thus, by recentring the more-than-human body as a subject, they help Kora to grow into a starfish tree and enable the village to replace sustainability and sacrifice with plenitude, habitability, and multi-species pedagogies of collective well-being. It is in this sense that the Starfish Orchard embodies the vision of a future planetary health commons.

Over 150 years later, the Kora tree produces plentiful fruits, the organs that regenerate the Grist village without communal sacrifice. Not unlike the Earth's purring and rumbling, Kora "vibrates language" (Lai, *Tiger Flu* 327), drawing attention to the materiality of sound and listening, as she wordlessly communicates the stories of the Grist sisters — their collective pains, losses, and insurgencies — to the new generation of Gristies. Vibration is evocative of planetary and tactile movement, of a holistic form of healing and sensing.[13] Understood as noise, Cree and Dene scholar Jarrett Martineau argues, vibration entails a "disruptive tactic of generative resistance that hacks the phonic materiality" of given colonial and global capitalist signal chains (274) and modes of sensing. Most of all, Kora's language is untranslatable, a multi-species composition. It is thus not far-fetched to consider her transformation as an outcome of her collective collateral insurgency and an embodiment of the planetary. The Grist community's reproduction no longer depends on coercive forms of sustainability and indirect property claims to the organs of a singular community member. In Spivak's terms of the planetary, we might say that the Kora tree, as both a giver and an educator, teaches "collective responsibility as right" while her vibrations gesture toward "an experience of the impossible" that place her, as well as the planet itself, "in the species of alterity" ("Imperative" 341).

Yet in Lai's "insurgent utopia," the planetary vibrates its own oracular and speculative wisdom through dramatically altered *natureculture-technologies*. The planetary health commons, then, accounts for collat-

eral insurgencies and makes room for multiple "utopian enclave[s]," all "products of interlocking systems of hope and violence" (Lai, "Insurgent Utopias" 111), human and non-human, to co-evolve. Although they cannot be spoken for, these enclaves offer moments of "relation-making" through the "labor of thought, attention, and imagination" (102). *The Tiger Flu*'s narrative of future health imaginaries does not follow but disrupts the scientistic logic of hegemonic global and planetary health models proposed, for instance, by the CIHR. In fact, the planetary health commons, as I have argued in this essay, is a speculative and reparative project that participates in multiple temporalities, fosters multi-species health futures, depends on collateral insurgencies, is epistemologically audacious, and insists on the wisdom of the body. Lai's literary vision of the Starfish Orchard offers a creative practice of commoning that generates alternative health futures of well-being. It invites us to "becom[e] planetary" (Gabrys 4) by imagining and "stitch[ing] together improbable" and insurgent "collaborations" (Haraway 136) that move toward a commons but might never fully come to pass.

Notes

[1] HöST is a homonym for Hoechst, the German chemical and pharmaceutical daughter industry of IG Farben, the handmaiden of Hitler's Nazi regime. It conducted illegal human experiments, and its research contributed to the Holocaust and Hitler's mobilization for war (Lindner esp. part 4). See also Lai's use of SS member Wernher von Braun's V2 rocket (*Tiger Flu* 316), the first long-range ballistic missile that Braun developed for Hitler. Braun was later secretly hired by the United States to work for NASA, where his rocket helped to launch the space age.

[2] The de-extinction of the Caspian tiger is symbolically significant because the recovery of DNA from extinct specimens has revealed the almost genetic identity of Caspian and Armur tigers and helped to reintroduce — quasi de-extinct — the Armur/Caspian tiger to Central Asia. The Caspian tiger's earliest and hazardous migration patterns also anticipated the Silk Road, the ancient trading route between China and the Roman Empire. Thus, the de-extinction of the Caspian tiger does not suture losses but reveals ruptures of multiple histories and temporalities. See Dybas.

[3] The narrative device of the tiger flu responds, as Lai says, to the anti-Asian racism that erupted during the outbreak of the Asian avian flu in 2003 and to the HIV/AIDS virus, which initially appeared to affect only the planet's variously marginalized populations. See her interview with Jiaqi Kang (Lai, "Conversation").

[4] My understanding of the commons is indebted to the concept of the "aesthetic commons" (Weizman and Fuller 198) as a political practice of rupturing, sensing, and rebuilding futures. For more on the commons, see Hardt and Negri; and Härting.

[5] The World Health Organization defines inequity as "differences which are *unnecessary*

and *avoidable*, but in addition, are considered *unfair* and *unjust*" (cited in Amri et al. 1). For a critique of its claim to universality, see Borde and Hernández.

[6] See Moten and Harney on contemporary "undercommons" comprised of the fugitives of global neoliberalism.

[7] Consider, for example, the lack of a political response to the brief *Joyce's Principle* submitted by the Council of the Atikamekw Nation to the Canadian and Quebec governments in November 2020. The brief addresses the systemic racism that Indigenous people suffer in Canada's health-care system.

[8] I am adapting Haraway's term "naturecultures" (125).

[9] The Commons Network's report *Living Well on a Finite Planet* (2021) suggests that the sustainable development goals operate on "a trajectory of 3% annual exponential growth in GDP" (19) and use an increasing GDP as a central "indicator of progress" (85). For a detailed critique of sustainability and the planetary, see Chakrabarty's argument that sustainability is a "human-centric term" interested in "durability" and "resilience" and opposed to planetary "*habitability*" (83).

[10] For example, the CIHR promises to up*scale* current research evidence and invest in science "discoveries," including "technology, virtual care, and artificial intelligence" (*Strategic Plan* 20).

[11] It is no coincidence that the abbreviation for "time after oil" is TAO and references Taoism, about which Lai and Le Guin have spoken in the past.

[12] Lai already explored olfactory senses as material modes of knowledge production in *Salt Fish Girl*.

[13] For vibration as a transformative practice of planetary sensing, see Nina Sun Eidesheim's discussion of Juliana Snapper's underwater operas composed in the wake of Hurricane Katrina.

Works Cited

Adams, Vincanne. "Against Global Health? Arbitrating Science, Non-Science, and Nonsense through Health." *Against Health: How Health Became the New Morality*, edited by Jonathan M. Metzl and Anna Kirkland, New York UP, 2010, pp. 40-58.

Amri, Michelle M., Geneviève Jessiman-Perrault, et al. "Scoping Review of the World Health Ambiguities, Inadequacy, and Contradictions." *International Journal for Equity in Health*, vol. 20, no. 70, 2021, pp. 1-16, doi:10.1186/s12939-021-01400-x.

Baucom, Ian. *History 4° Celsius: Search for a Method in the Age of the Anthropocene*. Duke UP, 2020.

Borde, Elis, and Mario Hernández. "Revisiting the Social Determinants of Health Agenda from the Global South." *Global Public Health*, vol. 14, nos. 6-7, 2019, pp. 847-62, doi :10.1080/17441692.2018.1551913.

Bresnihan, Patrick. "The More-than-Human Commons: From Commons to Commoning." *Space, Power, and the Commons*, edited by Samuel Kirwan et al., Routledge, 2015, pp. 93-112.

Calvo Pascual, Monica. "*The Tiger Flu*: A Posthumanist Response to the Illusion of Transhumanism." *Revista Hélice*, vol. 7, no. 1, 2021, pp. 99-110.

Campbell, Peyton "Queer Science Fiction, Queer Relationality, and Utopian Insurgency." *The Routledge Companion to Gender and Science Fiction*, edited by Lisa Yaszek et al., Routledge, 2023, pp. 131-37.

Canadian Centre for Policy Alternatives. "The TRIPS COVID-19 Waiver," 2023, policyalternatives.ca/newsroom/updates/trips-covid-19-waiver.

Canadian Institutes of Health Research (CIHR). *Framework for Action on Global Health Research, 2021-2026*, 2021, cihr-irsc.gc.ca/e/documents/CIHR_framework_2021-en.pdf.

—. *Strategic Plan 2021-2031: The Best Health for All Powered by Outstanding Research*, 2021, cihr-irsc.gc.ca/e/52331.html.

Chakrabarty, Dipesh. *The Climate of History in a Planetary Age*. Kindle ed., U of Chicago P, 2021.

Commons Network. *Living Well on a Finite Planet: Building a Caring World beyond Growth*, 2021, www.commonsnetwork.org/wp-content/uploads/2022/05/Building-a-Caring-World-Beyond-Growth-Full-Report-Commons-Network-2021.pdf.

Connolly, William E. *Climate Machines, Fascist Drives, and Truth*. Kindle ed., Duke UP, 2019.

—. *Facing the Planetary*. Duke UP, 2017.

Council of the Atikamekw of Manawan/Conseil de la Nation Atikamekw de Manawan. *Joyce's Principle*, Nov. 2020, principedejoyce.com/sn_uploads/principe/Joyce_s_Principle_brief___Eng.pdf.

Dimock, Wai Chee. *Weak Planet: Literature and Assisted Survival*. U of Chicago P, 2020.

Donn, Katharina. "Porous Skins: Pandemic Posthumanism in Speculative Fiction." *C21 Literature: Journal of 21st-Century Writings*, vol. 9, no. 1, 2021, pp. 1-17, doi:10.16995/c21.3228.

Dybas, Cheryl Lyn. "Is 'Extinct' Forever? Central Asia's Caspian Tiger Traverses the Comeback Trail." *National Geographic* blog, 21 Feb. 2015, web.archive.org/web/20180908092606/https://blog.nationalgeographic.org/2015/02/21/is-extinct-forever-central-asias-caspian-tiger-traverses-the-comeback-trail/.

Eidesheim, Nina Sun. *Sensing Sound: Singing and Listening as Vibrational Practice*. Duke UP, 2015.

Farman, Abou, and Richard Rottenburg. "Measures of Future Health, from the Nonhuman to the Planetary." *Medicine Anthropology Theory*, vol. 6, no. 3, 2019, pp. 1-28, doi:10.17157/mat.6.3.659.

First Nations Health Authority. *#itstartswithme. FNHA's Policy Statement on Cultural Safety and Humility*, www.fnha.ca/Documents/FNHA-Policy-Statement-Cultural-Safety-and-Humility.pdf.

Gabrys, Jennifer. "Planetary Health in Practice: Sensing Air Pollution and Transforming Urban Environments." *Humanities and Social Sciences Communications*, vol. 7, no. 35, 2020, pp. 1-11, doi:10.1057/s41599-020-00534-7.

Haraway, Donna. *Staying with the Trouble: Making Kin in the Chthulucene*. Duke UP, 2016.

Hardt, Michael, and Antonio Negri. *Multitude: War and Democracy in the Age of Empire*. Penguin, 2004.

Härting, Heike. "Reading in-Common: Configurations of the Incalculable and the Planetary Imagination." *Cahier Echinox/Echinox Journal*, vol. 38, 2020, pp. 277-96.

Hinchliffe, Steve, et al. "Planetary Healthy Publics after COVID-19." *The Lancet Planet Health*, vol. 5, 2021, pp. e230-36.

Klimenko, Marina. "Beyond 'The Last Doubler': Reproductive Futurism and the Politics of Care in Larissa Lai's *The Tiger Flu*." *Studies in Canadian Literature*, vol. 45, no. 2, 2020, pp. 161-80.

Lai, Larissa. "A Conversation with Larissa Lai." With Jiaqi Kang. *Sine Theta Magazine*, Sept. 2019, sinethetamag.medium.com/conversation-larissa-lai-73e0a19d7196.

—. "Insurgent Utopias: How to Recognize the Knock at the Door." *Exploring the Fantastic*, edited by Ina Batzke et al., Transcript Publishing, 2018, pp. 91-113.

—. "The Sixth Sensory Organ." *Bringing It Home: Women Talk about Feminism in Their Lives*, edited by Brenda Lea Brown, Arsenal Pulp Press, 1996, pp. 199-219.
—. *The Tiger Flu*. Arsenal Pulp Press, 2018.
—. "Tiger Symmetries: Pandemic as Gift." *Planetary Health Humanities and Pandemics*, edited by Heike Härting and Heather Meek, Routledge, 2024, pp. 142-58.
Le Guin, Ursula. "Tao Song." "Deep in Admiration." *Arts of Living on a Damaged Planet*, edited by Anna Tsing et al., Kindle ed., U of Minnesota P, 2017, loc. 3303-3309.
Lexchin, Joel. "The Pharmaceutical Industry and the Canadian Government: Folie à Deux." *Healthcare Policy*, vol. 13, no. 1, 2017, pp. 10-16, doi:10.12927/hcpol.2017.251952017.
Lindner, Stephan H. *Inside IG Farben: Hoechst during the Third Reich*. Cambridge UP, 2008.
Lovelock, James. *Gaia: The Practical Science of Planetary Medicine*. Gaia Books, 1991.
Martineau, Jarrett. *Creative Combat: Indigenous Art, Resurgence, and Decolonization*. 2015. U of Victoria, PhD dissertation, dspace.library.uvic.ca/handle/1828/6702/.
Mbembe, Achille. *Necropolitics*. Kindle ed., Duke UP, 2019.
—. "Thoughts on the Planetary: An Interview with Achille Mbembe." With Torbjorn Tumyr Nilsen. *New Frame*, vol. 5, 2019, www.newframe.com/thoughts-on-the-planetary-an-interview-with-achille-mbembe/.
Monbiot, George. *Out of the Wreckage: A New Politics for an Age of Crisis*. Ebook ed., Verso, 2017.
Moten, Fred, and Stefano Harney. *The Undercommons: Fugitive Planning and Black Study*. Kindle ed., Minor Compositions, 2013.
Sedgwick, Eve Kosofsky. *Touching Feeling*. Duke UP, 2003.
Spivak, Gayatri Chakravorty. "Epistemic Daring: An Interview with Gayatri Chakravorty Spivak." With Gianmaria Colpani and Jamila M.H. Mascat. *Postcolonial Studies*, vol. 25, no. 1, 2022, pp. 136-41, doi:10.1080/13688790.2022.2030600.
—. "Imperative to Re-Imagine the Planet." *An Aesthetic Education in the Era of Globalization*. Harvard UP, 2012, pp. 335-50.
Stengers, Isabelle. *Another Science Is Possible: A Manifesto for Slow Science*. Polity Press, 2018.
Wald, Priscilla. *Contagious Cultures, Carriers, and the Outbreak Narrative*. Duke UP, 2008.
Weizman, Eyal, and Matthew Fuller. *Investigative Aesthetics: Conflicts and Commons in the Politics of Truth*. Kindle ed., Verso, 2021.
Yussof, Kathryn. *A Billion Black Anthropocenes or None*. U of Minnesota P, 2018.