

Now I am Become Death":  
Japanese and Canadian Industrial  
Contamination in Michiko Ishimure's  
*Paradise in the Sea of Sorrow: Our  
Minamata Disease* and Thomas King's *The  
Back of the Turtle*

Shoshannah Ganz  
Memorial University, Canada  
shganz@grenfell.mun.ca



A Journal of Canadian  
Literary and Cultural Studies

ISSN 2254-1179

VOL. 7 (2018)

pp. 9-14 • ARTICLES



**SUBMITTED:**

22/05/2017

**ACCEPTED:**

05/10/2017

---

## KEYWORDS

Canadian Literature; Canadian Cultural Studies; Japanese Literature; Japanese Cultural Studies; eco-criticism; Minamata Studies; Ishimure Michiko; Thomas King

## ABSTRACT

Canada and Japan share a history of industrial contamination that has resulted in mercury poisoning; the inhabitants of both Minamata, Japan and the Indigenous community of Grassy Narrows, Ontario have suffered from what would come to be known as Minamata disease. Environmental activists, proponents of industrial progress, individuals in the affected communities, and novelists Michiko Ishimure and Thomas King discuss and weigh the possibilities of economic and material progress against the problems of environmental degradation and industrial contamination leading to disease and death for humans and ecosystems. This paper will show how Ishimure and King discuss the possibility of hope and renewal through the tourist industry, but will also question the efficacy of “dark tourism.” Is it possible to balance an ethics of care and respect for those whose lives have been destroyed by industrial contamination with the need of those who remain to make a living through tourism? This paper will explore the fictional possibility offered by King alongside the actual recovery and tourist industry generated in the aftermath of the Minamata poisoning and subsequent clean up efforts. Is it possible to reimagine and reclaim industrial wreckage as sites of pleasure and recreation? Do these regenerated sites of industrial destruction promote the common good or further victimize the individuals and communities destroyed in the name of progress?

## RESUMEN

Canadá y Japón comparten un largo historial de contaminación industrial que ha derivado en envenenamientos por mercurio; los habitantes tanto de Minamata, Japón como de la comunidad indígena de Grassy Narrows, Ontario, han sufrido lo que se ha llegado a conocer como ‘la enfermedad de Minamata’. Activistas medioambientales, partidarios del progreso industrial, individuos en las comunidades afectadas y los novelistas Michiko Ishimure y Thomas King discuten y sopesan las posibilidades de progreso económico y material en contra de los problemas de degradación medioambiental y contaminación industrial que están suponiendo la muerte y enfermedad de seres humanos y ecosistemas. Este artículo expondrá cómo Ishimure y King discuten sobre la posibilidad de la esperanza y la renovación a través de la industria turística, pero además cuestionará la eficacia del “turismo oscuro”. ¿Es posible equilibrar la ética de cuidado y respeto hacia aquellos cuyas vidas han sido destruidas por la contaminación industrial con la necesidad de los que siguen procurando ganarse la vida con el turismo? El presente trabajo explorará la posibilidad ficticia ofrecida por King junto a la recuperación real y la industria turística generada a partir del envenenamiento de Minamata y a los consiguientes esfuerzos para paliarlo. ¿Es posible reimaginar y reclamar las ruinas industriales como lugares de ocio y esparcimiento? ¿Promueven estos sitios reconstruidos a partir de la destrucción industrial el bien común o victimizan a los individuos y las comunidades destruidas en nombre del progreso?



Canada and Japan share a history of industrial contamination that has resulted in mercury poisoning; the inhabitants of both Minamata, Japan and the Indigenous community of Grassy Narrows, Ontario have suffered from what would come to be known as Minamata disease. Environmental activists, proponents of industrial progress, individuals in the affected communities, and novelists Michiko Ishimure and Thomas King discuss and weigh the possibilities of economic and material progress against the problems of environmental degradation and industrial contamination leading to disease and death for humans and ecosystems. This paper will show how Ishimure and King discuss the possibility of hope and renewal through the tourist industry, but will also question the efficacy of “dark tourism.”<sup>1</sup> Is it possible to balance an ethics of care and respect for those whose lives have been destroyed by industrial contamination with the need of those who remain to make a living through tourism? This paper will explore the fictional possibility offered by King alongside the actual recovery and tourist industry generated in the aftermath of the Minamata poisoning and subsequent clean up efforts. Is it possible to reimagine and reclaim industrial wreckage as sites of pleasure and recreation? Do these regenerated sites of industrial destruction promote the common good or further victimize the individuals and communities destroyed in the name of progress?

Instead of beginning this discussion by looking into the historical past or the related fictional and documentary accounts of mercury poisoning and the perspectives offered by various writers, activists, academics, and movements fighting for recognition and reparation in both Japan and Canada, I would like to mention a possible and probable future scenario of mercury poisoning, which the Newfoundland and Labrador government and related industry Nalcor are currently working towards creating in the name of clean energy, economic opportunity, and progress. In his 2016 article “Labrador dam could expose hundreds of Inuit people to toxic mercury,” Michael Schulman discusses recent independent scientific studies related to the construction of the hydroelectric facility at Muskrat Falls, Newfoundland and Labrador. The Muskrat Falls project is expected to result in “excessive levels of methylmercury, the most toxic form of mercury” (Schulman/ CTVNews.ca); recent independent studies commissioned by the Nunatsiavut Government and led by researchers from Harvard University and the University of Manitoba, among others, show that “flooding the Muskrat Falls reservoir could cause an ‘overall increase’ in the exposure of local Inuit people [to methylmercury] . . . depending on the clearance of trees and

1 Lennon and Foley originate the term “dark tourism” to denote the tourist and related industry that are devoted to the seeking out, commodification and consumption of “death, disaster and atrocity” (3).

brush” (Schulman CTVNews.ca). Of course, these findings contradict the Nalcor studies “which showed no measurable effects of methylmercury at Lake Melville. It said that the toxin would break down as it moved downstream” (Schulman CTVNews.ca). Independent scientists have made a number of recommendations to lower and monitor mercury levels, but Nalcor disregards these and makes no plans to alter the mercury-releasing strategies currently in place, as Nalcor claims not to “believe the Muskrat Falls reservoir poses an increased risk to the people of Lake Melville” (Schulman CTVNews.ca). While dams across the continent are being torn down, Nalcor and the Newfoundland and Labrador government continue to tout the environmental and energy benefits of the project, all in the face of growing dissent and concerns about the overall health impacts of the reservoir on Indigenous peoples.

I draw attention to this contemporary debate and media discussion because it replicates the discussions and problems of the past —ones I will be discussing at some length in what follows. The Muskrat Falls project is not a new story, or really a story of the future; it is rather part of an ongoing story that keeps repeating, with little variation from the first and now infamous mercury poisoning incident in Minamata, Japan, in the 1950s. This was followed by a second incident of mercury poisoning in Niigata, along the western coast of northern Honshu. In this second incident, the chemical plant owned by Showa Denko dumped untreated effluent containing mercury into the Agano River. Over six-hundred people were poisoned and seventy died. The people of Grassy Narrows reserve outside of the town of Dryden in northern Ontario were similarly affected in the 1970s by the mercury coming from the chemical process at the Dryden pulp and paper plant. These stories are told and retold by various community members, leaders, activists, academics, and novelists, and contribute to the seemingly cyclical toxic narratives<sup>2</sup> that have become ubiquitous in the fiction and non-fiction of the post-industrial global literary canon.<sup>3</sup>

2 Lawrence Buell's *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond* Chapter 1 titled “Toxic Discourse” opens with the following: “The fear of a poisoned world is increasingly pressed, debated, debunked, and reiterated” (30). Buell notes that this takes place in the disciplines of “medicine, political science, history, sociology, economics, and ethics” (30). To this I would add the literary discussion exemplified here by King. Buell claims that “toxicity as discourse” can be discussed “as an interlocked set of topoi whose force derives partly from the anxieties of late industrial culture” as well as other factors, which he notes take the entire chapter to flesh out. For our purposes here, using Buell's words, “it can be sweepingly defined as expressed anxiety arising from perceived threat of environmental hazard due to chemical modification by human agency” (Buell 31).

3 The post-industrial literary canon can be most broadly understood as any world literature written in the era following the widespread expansion and demise of extraction and processing of primary resources as the leading economic mover. I am referring particularly, however, to the post-industrial literature that consciously reflects on the growth and decline of industry and the lasting impact of

Brett L. Walker, in *Toxic Archipelago: A History of Industrial Disease in Japan* (2010), argues that “toxicity was an inevitable outcome of cultural innovations that viewed nature as a resource waiting to be exploited towards useful human ends” (x). In the march towards progress, however, the place of humans as part of nature was neglected; as Walker puts it “[o]ur own bodies are porous to the ecosystems we inhabit” (xii). Further, “[o]ur health depends on the permeability of our bodies to the very nature from which we imagine we might isolate ourselves. So when we fill the world around us with toxic substances, we fill our own bodies with those substances as well” (xii). According to Walker, the pain humans experience as a result of this toxicity is very possibly nature’s way of communicating to humans the harm they are doing to nature (xii). Thus, implicitly, nature has a degree of agency—even the power to communicate—not accorded to it in the earlier models of nature as a resource for human exploitation.

Walker is far from alone in this turn to the material. Donna Haraway’s work “offers comprehensive and compelling transformations of the category of nature” (12) in which “[t]he nature–culture divide is unthinkable” (12). Haraway goes so far as to question what “‘nature’ means in the complex practices of contemporary society” (12). Likewise, Nancy Tuana, in a discussion of Hurricane Katrina, argues for “the interactionist ontology of viscous porosity” (13) articulated as a “theoretical position [that] rematerializes the social and takes seriously the agency of the natural” (13). Other theorists and literary scholars, such as Vicki Kirby, work to reconceptualise “the nature of nature by considering the possibility that what we have been calling culture ‘was really nature all along’” (13). Lawrence Buell further notes that “the nature–culture distinction itself is an anthropogenic product” (3). Stacy Alaimo and Susan Hekman argue in *Material Feminisms* to “situate human bodies within specific environmental contexts, reading human processes and events as inseparable from specific biophysical relations and interconnections” (“Introduction” 14). This paper will follow the lead of these scholars in exploring the inseparable materiality of humans, culture, and all of nature. As Walker contends, the porousness of humans within their environment is explicitly revealed when nature tells the human, often through physical pain, that industrial progress is destroying nature, of which humans are an inseparable part.

---

industrial activity on the human and more-than-human landscape. Jonathan Campbell’s *Tarcadia* (2004) set in industrial and post-industrial Cape Breton, Nova Scotia is one such work of fiction. Julie Salverson’s *Lines of Flight: An Atomic Memoir* (2016) is a work of non-fiction that similarly reflects on the environmental and human impacts of mining and related activities in the far North of Canada. More widely known works such as Margaret Atwood’s MaddAddam trilogy are likewise characteristic. John Joseph Adams’ *Loosed Upon the World: The Saga Anthology of Climate Fiction* gathers together 27 contemporary world authors whose work reflects on the near and far-reaching impacts of human industry on the climate and a variety of global regions.

Mercury poisoning—called Minamata disease after the place of its first occurrence, in Minamata, Japan—is in many ways a case study of the porousness of humans and nature and the indivisibility of what we try to separate as “natural” or “human built” (Buell 3). Mercury poisoning in Canada resulted from the building of dams and the use of mercury in the pulp and paper industry. In Japan, Minamata disease was the first and largest post-war Japanese industrial poisoning and was caused by the dumping of mercury into the water by Chisso, a manufacturer of pesticides and plastics. According to Minamata disease scholar and activist Harada Masazumi, Minamata is the outcome “of a historical collusion between an expansionist, industrial, capitalist culture and an authoritarian, imperial nation-state that caused the devastating Asia Pacific War, and which in the postwar period was replaced by a fragile ‘democratic’ system that has tended to restrict and control citizens’ autonomy and agency” (qtd. in Monnet ix).<sup>4</sup> In the Canadian context, Minamata disease and mercury poisoning can be related to a neoliberal capitalist model that favours industrial expansion and economic growth over the health and welfare of its most vulnerable citizens. Mercury poisoning in Canada has particularly affected, and continues to affect, the customs, health, and livelihood of Indigenous communities, causing a host of social and cultural problems beyond the biological effects of the poison on the body.

While there are numerous incidents in many different industries of environmental poisoning that lead to dire consequences for both the environment and the humans who are part of that environment, this paper intends to focus on the havoc wrought particularly by mercury poisoning. I will begin with the now most infamous case in Minamata, Japan, and then look at the corollary situation of mercury contamination in the Canadian community of Grassy Narrows, Ontario. Finally, I will consider Thomas King’s examination of the everyday effects of industrial capitalism on the players in industry, the scientists, and the community, and what Lauren Berlant terms “cruel optimism” with regards to renewal through tourism.

### Minamata

The first sign that something was wrong in the fishing villages near Minamata city occurred in 1953 when fishermen noticed that their cats were acting strangely. They described the cats’ behaviour as “mad” and “dancing.” Like the canary in the coal mine, this was the first warning sign that something was wrong. The inhabitants of these communi-

<sup>4</sup> Livia Monnet is the translator of Michiko Ishimure’s *Paradise in the Sea of Sorrow: Our Minamata Disease*. Monnet’s introduction serves as a conduit for a variety of Japanese sources of information on Minamata disease that would otherwise not be available to English readers.

ties, however, could not know that this was the prelude to an environmental disaster that would ruin their livelihoods and destroy their families, leading to years of court battles and stigmatization of the effected individuals and communities at large. Initially the local leaders welcomed Chisso, a company that promised to replace the local industries of salt production and coal transportation. As a result of Chisso, the community grew and Chisso channelled money into modern infrastructure to support the expansion of the company and region. Beginning in the 1920s, the Chisso factory produced fertilizers, synthetic fibres, explosives, oils, and industrial chemicals. When Chisso expanded into the Minamata region, they were the largest producer in Japan of vinyl chlorides. Pushed to expand economically, the company dumped untreated effluent into the Minamata bay. The effluent contained mercury that poisoned the bay, the fish, the cats that ate the fish, and eventually the people. Dr. Hajime Hosokawa, director of the Chisso hospital, began treating patients with a host of symptoms, such as “numbness of the extremities and the area around the mouth, constriction of the field of vision, loss of hearing, motor and speech disorders, loss of muscle coordination, convulsions, and sometimes mental aberrations” (Mishima 9–10). Hosokawa suspected that the effluent might be the source of these problems and began a series of experiments on cats. When he reported his results to the company, he was ordered to destroy his findings and refrain from further experiments. Chisso continued to pollute the bay in spite of the growing sickness of people in the area and the confirmation of the disease’s source by their own doctor and related experiments. The people affected by what came to be known as Minamata disease were ostracized by the community, in part because the “rumours” that they were being poisoned by Chisso threatened the local economy.

Michiko Ishimure lyrically weaves the testimony of mercury disease survivors, family, doctors, and her own eyewitness accounts from the first signs of an unnamed disease to the eventual reparation by government and industry for Minamata disease victims and families. This account attempts to balance the needs of the community for employment and progress against the devastating and life-destroying forces that contaminated the people and environment of the community. Ishimure’s account could be considered, in Stacy Alaimo’s words, a “material memoir” (*Bodily Natures* 85–112). In a discussion of Audre Lorde’s *The Cancer Journals*, Alaimo delineates the genre of the material memoir as “genre bending” (*Bodily Natures* 87). This is useful in the discussion of Ishimure’s *Paradise in the Sea of Sorrow*, as according to Alaimo, the “contemporary material memoir . . . incorporates scientific and medical information in order to make sense of personal experience” (*Bodily Natures* 87). In the case of Ishimure, the material memoir, with its

inherent critique of the distinction of “expert knowledge” from “personal experience,” is in its very form a sustained criticism of modernity, “as the author examines her own life story through a scientific lens” (*Bodily Natures* 87). Ishimure, in fact, extends from the personal to the experience of the community, further undermining and emphasizing what she critiques as modernity’s silencing of the rituals, stories, and belonging that are part of the community. As Alaimo suggests, “The most important difficulty of the material memoir, a difficulty that is simultaneously political, epistemic, and generic, is that autobiography by definition surfaces from one individual person, yet at present it is not feasible to trace the exact causes of cancer or other environmentally generated illnesses within an individual” (*Bodily Natures* 88). However, by looking at the self in the context of the stories of the larger community, Ishimure provides compelling evidence through a number of what could be considered case studies, thus lending credence to the experience of the individual. In fact, it seems that Ishimure has anticipated this critique and thus expanded the potential of the material memoir as a viable political tool. Ishimure’s work was critical in the fight for recognition of Minamata disease and her memoir continues to be used as evidence in scientific studies and referenced in subsequent cases of mercury poisoning, including the one at Grassy Narrows reserve.

Ishimure’s account of Minamata disease is not, however, the only perspective or even personal account offered on the devastating environmental impacts of mercury poisoning on individuals and communities in the quiet seaside city of Minamata on the Fukuro Bay of the Shiranui Sea. Various aspects of the human cost and suffering of this first and most infamous case of mercury poisoning are the focus of, among others, Akio Mishima’s *Bitter Sea: The Human Cost of Minamata Disease* (1992), and *Rowing the Eternal Sea: The Story of a Minamata Fisherman* (2001), and chapters in Brett L. Walker’s *Toxic Archipelago: A History of Industrial Disease in Japan* and Jun Ui’s *Industrial Pollution in Japan* (1992). *Rowing the Eternal Sea*, while the account of one fisherman, Ogata Masato, of the effects of the mercury poisoning on himself and his immediate and extended family, is also an account worthy of some attention; it documents his central role, over the course of over two decades, in fighting Chisso—the mercury dumping, contaminating, and polluting company—and the government, for recognition and reparation for the suffering and loss of livelihood caused by the mercury poisoning. I will return to this account in relation to the promise offered by the tourist industry, as this is an aspect of the reparation that was strongly resisted by Masato and other people personally affected by mercury poisoning. In fact, the celebrations and tourist promotions planned by the company and supported by the government could be viewed, according to Masato, as sustaining and continuing

the damage and outrage Chisso perpetuated in the name of progress. Masato claims that even the environmental efforts in the area act as a distraction and superficial solution to the graver issues of humanity's dependence on technology. Speaking about progress in the area of "environmentalism" Masato says, "I feel they [these efforts] divert our eyes from the core issues, allowing us to be satisfied with superficial solutions. They enable us to deceive ourselves" (qtd. in Colligan-Taylor 13). Finally, Walker's study, unlike the personal accounts offered by members of the community, takes an in-depth look at Chisso, including its long history of exploitation of workers in Korea and its early knowledge, furnished by its own scientists and studies, of the effects of mercury on organic bodies. Together, these accounts fill in the larger picture of accountability and connections between science, the company, capitalism, industrialization, the environment, community, individual fishermen and activists, and the more lyrical account offered by Ishimure.

Livia Monnet, the translator of Michiko Ishimure's *Paradise in the Sea of Sorrow: Our Minamata Disease*, begins her introduction by discussing the "moyainaoshi movement"<sup>5</sup> launched in 1994 "to revitalize Minamata's economy and boost civic pride while actively promoting environmental conservation and reconciliation with the Minamata disease victims" (vii). While Monnet notes that part of the project is an attempt to find "reconciliation with the Minamata disease victims" (vii), the launching of this project is far from welcome for many of the activists and victims, who still feel overlooked and pushed away by the mainstream economic efforts of the community. The victims themselves are still locked away in wards of hospitals or taken care of by family members who must assist them in the simple tasks of eating and cleaning themselves. The pittance offered and given by the government for the maintenance of some of the victims of mercury poisoning does little to change the life-altering and community-destroying effects on the lives of the already marginalized and impoverished fisher families. These moyainaoshi movement activities and celebrations are mentioned by Ogata Masato in *Rowing the Eternal Sea: The Story of a Minamata Fisherman*. He boycotted these events and views the proceedings both as diminishing the damage done to his life and family and as trying to force closure on the event—closure that is not possible for the people poisoned and the families destroyed. Masato was delighted when it rained on the day of a major celebration; the downpour forced people away, resulting in a less than successful turnout. The victims, including Masato, have a long memory of "several decades of discrimination, ostracism, and neglect by Minamata residents, by the

5 The "moyainaoshi" movement is the Japanese name given to the efforts to revitalize the Minamata community following the destruction of the community by mercury poisoning. There is no English translation of the name for the movement offered by the translators of any of the texts.

city and the Kumamoto Prefecture administration, by the local labor unions, by Minamata Disease Certification Committees, and by fishers' cooperatives" (Monnet viii). Further, the more recent revival of movements to change the name of Minamata disease, first begun in 1968, is but one of the battles that continues to divide community members and victims. Rather, Masato claims that individual people and the community need to consider "how can we each go on living with our own Minamata disease?" (153).

The moyainaoshi involved the "construction of museums, educational institutions, monuments, and meeting halls" (Monnet vii). These included the following: Minamata Disease Museum, the Environmental Education Center, the Minamata Memorial, the Minamata Moyainaoshi Center, along with "numerous citizen waste recycling campaigns; and a flurry of locally held conferences, symposia, exhibitions, and other cultural events including the Sixth International Convention on Environmental Mercury Pollution and the National Citizens' Forum in Minamata" (vii–viii). Together, the events, institutions, monuments, and campaigns contribute to the revitalizing efforts of the community. Minamata, then, has become a centre for the study of mercury poisoning and a model for citizen activism resulting in repair of the environmental damage in the community. Minamata could even be viewed as a tourist—or at least educational and activist—destination, which hosts conferences and gatherings and has become the centre for interdisciplinary Minamata disease studies. Nonetheless, beginning the introduction to Ishimure's work with a discussion of the modern, industrial, capitalist response to the problem of industrial poisoning is a strange way to introduce the work of an author who rails against the changes wrought in the name of industrial progress and the destruction, for some, of a way of life that celebrated community, family, spirituality, and connectedness through tradition. In fact, the institutions of modern reclamation and memory keeping are hollow reminders of the way of life that was destroyed but is memorialized and celebrated by Ishimure in her writing. If anything, this introductory "conclusion" to the ongoing project of modernity completely counters the lament and testimony the author is setting down in *Paradise in the Sea of Sorrow*. In *Dark Tourism: The Attractions of Death and Disaster*, John Lennon and Malcolm Foley note that "tourism as a form of educative enterprise is strongly associated with the key principles of modernity" (7). In resisting the relentless project of progress associated with modernity, Ishimure is repulsed by the government- and industry-funded museums created to study the disease, and rather describes and enters into the individual lives most affected by the mercury poisoning. *Paradise in the Sea of Sorrow*, which Livia Monnet refers to as "resistance literature," (xii–xx) contributed to the public knowledge and acknowledgement of the Minamata poisoning incident, yet it is also a kind of counter-hegemonic memory—one that

in its very lyricism contests the medicalization and academicizing of human suffering. In later academic studies of Minamata disease, writers such as Walker turn to the individual accounts of victims, often quoting Ishimure's work at length, leaving her words and constant repetitions intact.

### Grassy Narrows

In charting the environmental, social, cultural, and economic degradation of the Ojibwa community of Grassy Narrows in northern Ontario, I will be looking particularly at two texts: George Hutchinson and Dick Wallace's *Grassy Narrows* (1977) and Anastasia M. Shkilnyk's *A Poison Stronger Than Love: The Destruction of An Ojibwa Community* (1985), which detail both the events leading up to the mercury poisoning and the lives of the Ojibwa people in the aftermath.

Even before the rivers were poisoned with mercury, and the way of life and livelihood of the people of Grassy Narrows and Whitedog reserves were forever changed and destroyed, the people of Grassy Narrows were in a state of distress. Crime, murder, and suicide rates were higher than anywhere else in Canada, including other reserves. They had already undergone a large-scale relocation of their community. While they had been promised a school and housing, the infrastructure provided undermined the traditions of the community and was far from adequate. Rather than "the good life" (Berlant 15) they had been promised, the community disintegrated into violence and hopelessness as a result of the loss of space, loss of privacy, and loss of pride in their village. The poisoning of the waterways took away the members' livelihoods as seasonal guides for the fishing and hunting lodges in the region. Further, the destruction of the regular source of nutrients provided by the waters led to financial and dietary problems; the community's only store was very expensive and the frozen fish alternative provided by the government proved an inadequate solution. The Indian Affairs Minister, Judd Buchanan, "blamed pollution of the waterway for severely disrupting the 'cycle of life' at both Grassy and the neighbouring Whitedog reserve" (17). Further, Buchanan argued, "The social problems that exist on the reserves although not directly attributable to mercury have been intensified by the elimination of many jobs related to the tourist industry" (17).

Similar to the debates in Japan regarding who was responsible for the situation, the problem in Canada was shuffled back and forth between the federal and provincial governments, with party politics delaying any real discussion of solutions. Moreover, the Progressive Conservative Party "was convinced that what was good for industry was good for people" (Hutchinson and Wallace 40), and what was good for industry was economic growth at

whatever cost. In this case, and many others, the "discharge of waste and its subsequent impact on the environment was seen as an unfortunate necessity of an industrialized society" (Hutchinson and Wallace 40). While people on the reserves were eventually tested for their levels of mercury, the results were not explained.<sup>6</sup> Further, the waterways were not shut down; rather, signs were posted to "fish for fun," so people continued to fish without understanding the dire effects on their health. According to Aileen Smith, the government "spent more money trying to cover up the issue" (qtd. in Hutchinson and Wallace 111) than trying to find solutions or educating people about the associated health problems. In March 1975, a coalition of doctors and activists from Minamata, Japan, came to the Grassy Narrows and Whitedog reserves and spoke with the people and conducted a number of tests. The Japanese doctors concluded that "There is no doubt that the occurrence of Minamata disease" (Hutchinson and Wallace 109) is evident. The people of Minamata provided solidarity, testimony, and evidence for the effects of mercury poisoning, but even with the input of the Japanese doctors and activists, the Canadian government remained unmoved and unwilling to acknowledge that there was a problem. In July 1975, a delegation from the reserves was invited to come to Minamata:

We invite you . . . to Minamata, because we want you to see what the dread of mercury is. It will be a blessing if our long years of suffering can help you in even one single way. We feel you will understand the dreadfulness of the pouring out of poisons and pollution that is spreading over this earth. If we can help you in changing the anxiety that you have in your hearts in even one single way—it will be good." (qtd. in Hutchinson and Wallace 113)

The people of Minamata provided solidarity and an example of the long battle for recognition. The fight for compensation, however, for the people at Grassy Narrows and Whitedog reserves would continue. As in the case of Minamata, when the settlement eventually came, the money could not give people back their way of life or their previous harmony with nature.

<sup>6</sup> There was a public meeting where an unnamed government man told the people of Grassy Narrows that "tests on some band members had been completed and the mercury levels discovered were sufficiently high to make him repeat that fish consumption should be reduced" (Hutchinson and Wallace 81). When the people of Grassy Narrows asked "Now that you've made us sick, what do you have to make us well?" (Hutchinson and Wallace 81-82) the answer was that "mercury damage to the human body was irreversible" (Hutchinson and Wallace 82). Following the short meeting, Dr. Stopps gave out envelopes to people with their mercury readings, but there was no explanation about what the mercury levels in peoples' bodies meant or any information about symptoms or effects.

### *The Back of the Turtle*

In his novel, Thomas King grapples with the question of individual and industrial responsibility from the shifting perspectives of Dorian Asher, a captain of industry and the CEO of Domidion; Gabriel Quinn, a scientist coming to terms with his role in creating a defoliant that spilled and killed his family and Indigenous community; and the people who remained and survived following “that one bad day” (27). While King’s industry leaders, like the Canadian government in the case of Grassy Narrows, claim through their PR machines that “North America needs oil. The price of freedom is energy” (307). The “list of man-made [industrial] disasters” (318) grows and the loss of life increases over the course of *The Back of the Turtle*.

King embeds intersecting and interrelated toxic narratives within the larger and looming problems of climate change. Dorian Asher, the CEO responsible through his decisions for a variety of toxic events, reflects on the climate more generally: “It had been predicted, the matter studied until the public had gotten tired of being told what was going to happen. Yet now that it was happening, everyone was indignant and annoyed, as though the longer, colder winters, the lost springs, and the tentative summers were somehow an unexpected personal affront” (11). Dorian Asher’s own body is experiencing and registering pain, nausea, confusion, and a “propensity to see catastrophes in canaries” (12) —a turn of phrase that particularly alerts him to the unidentified sickness that he increasingly considers life-threatening. Perhaps a mirror for the toxic overload he is responsible for in his various ventures as CEO of Domidion, his body calls attention to the problem of his life —the loss of it or the continuation of it. While he still finds pleasure in the power of his money to purchase luxury items like expensive condos and watches, he is also experiencing “days when the optimism of science and business couldn’t carry him past the suspicion that the world had somehow slipped through his hands” (25).

While there are toxic narratives<sup>7</sup> in the text that loom large —those that decimate life and make international news— there are also markers of increasingly ordinary aspects of life that are marked by toxicity —a toxicity that is well within the recognized government regulations, but that nonetheless keeps him awake at night. Asher is due to go for tests at the hospital, however, he is unable to face the possible results of these tests because he is repeatedly reminded that all his money and all the money the company controls cannot stop the growing personal and global toxicity that is now invading and changing his body. Early in the text, Dorian is found “speed-reading a Japanese study that measured toxicity in furniture, and wonder[ing], once again, if his health issues might be related to the bed that he ... had purchased” (39). Dorian’s experience with furniture toxins begins as follows:

“when the new mattress arrived and the plastic wrapping was removed, their bedroom immediately filled up with a violent odour that irritated their eyes and set both of them to coughing” (39). While Dorian is assured that this is a “natural” process called “off-gassing” and that the “emissions were within government regulations and did not pose a health hazard,” even after the smell disappeared, he and his wife still woke up in the morning with headaches and sore throats (39–40). Seemingly a personal anecdote of only a couple paragraphs in the text, this short, strange incident with his mattress points to an interlocking system of toxicity that the responsible companies, media, and, in this case, the sales person attempt to control with special coverings, deals, and reframing of the questions of health into personal sensitivities, thus redirecting the questions and story. In this case, Dorian wonders again if the symptoms he is having and the months of health problems he has endured are related to the “off-gassing” of the bed. His “propensity to see catastrophes in canaries” is an important and apt signal of the general toxicity that his body and mind have begun to register; his mind and body are signalling danger in spite of what the government has deemed acceptable levels of risk or the price of doing business.

There are three central and fictional toxic narratives intertwined in the text. Two are ongoing; the third occurred in the past but continues to haunt the narrator, Gabriel Quinn. These narratives are clearly based on a number of other historical industrial accidents that are repeatedly invoked, remembered, and in some ways commemorated in the text. The repetition of these stories mirrors the oral storytelling quality of Ishimure’s memoir. Gabriel Quinn, the scientist responsible for developing a defoliant that killed his family and destroyed all life on his mother’s reserve, writes the names of various environmental disasters on the walls of his small rented home. These include Chernobyl, Idaho Falls, Chalk River, Rakkasho, Lanyu, Bhopal, and Grassy Narrows, among others. The noting of Grassy Narrows in the first list of these disasters is significant to this study (23–4) as it connects King’s novel to the mercury poisoning of the previous discussion.

The third major environmental/toxic narrative in the text is the missing *Anguis*, intertwined with the toxic destruction brought about, in part, by Gabriel Quinn’s scientific experiments. The *Anguis* was “one of a dozen heavy-capacity barges that Domidion ran under a Bolivian registry and flag. Six months ago, the ship had left Montreal on a routine run to dump a mountain of toxic waste and incinerated biohazards into the ocean” (18). There were various sightings of the ship, and “[i]t should have been a relatively easy matter to find someone who would take the waste. In the past, the corporation had always been able to find poor countries and desperate governments who needed money” (19).

<sup>7</sup> See footnote 2 for definition of toxic discourse.

This practice, according to Graham Huggan and Helen Tiffin in *Postcolonial Eco-criticism: Literature, Animals, Environment*, is a classic example of environmental racism “exemplified in the environmentally discriminatory treatment of socially marginalised or economically disadvantaged peoples, and in the transference of ecological problems from their ‘home’ source to a ‘foreign’ outlet” (4). Further, the authors note that environmental racism can involve “the actual re-routing of First World commercial waste” (4). In a book-length study of just this practice, Jennifer Clapp’s 2001 *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries* opens with an excerpt from a leaked internal memo from Lawrence Summers, the 1991 chief economist of the World Bank. According to Summers, and echoing or influencing King’s rendition of the repeated practice of dumping toxic waste in poorer countries, “Just between you and me, shouldn’t the World Bank be encouraging *more* migration of the dirty industries to the LDCs [less developed countries]? . . . I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that. . . . I’ve always thought that under-populated countries in Africa are vastly *under*-polluted” (qtd. in Clapp 2). Ursula Heise, drawing on the work of Ulrich Beck, suggests that a “vision of an international risk-based solidarity” (158) is the needed response to the World Bank’s plans for dealing with toxic waste.

In King’s novel, the problem with using the *Anguis* to dispose of toxic waste was that “the barge had become such a powerful symbol of what was wrong with North American culture,” and so “not even the Haitians were willing to take it” (19). While the barge does not sink to the bottom of the ocean as Domidion hopes, it does return to the site of the central toxic narrative of the text. This is something of a return home, as the barge ends up off the coast of the place where the defoliant SDF 20 had originally decimated the human and more-than-human life of Quinn’s mother’s reserve—a former tourist destination for turtle hatchings in British Columbia.

The second ongoing and major crisis of the text has to do with Domidion’s “sizeable interest” (112) in the Alberta tar sands. Dorian supplies some quick facts about the tar sands, including that “[t]he process required to extract bitumen was complicated and expensive. It used enormous amounts of fresh water and produced four times the greenhouse gases of extraction from wells. More troubling was the proximity of the processing plants to the river and the danger that the tailing ponds posed” (113). Past problems with the tailings ponds are detailed: “In 2008, more than 1,600 ducks had been killed when they landed on one of the tailing ponds. In 2010, another 350 ducks died in the same manner” (113). In the current situation, one of the ponds is seeping into the Athabasca River and

dead fish have begun to appear on the banks of the river (113). Domidion later learns that they have dumped 242 million gallons of toxic waste into the Athabasca River system. “The spill will kill everything in the river. In less than a week, the toxins will reach Lake Athabasca. From there the toxins will join the Mackenzie River system and everything will wind up in the Beaufort Sea” (289). Dorian views “the spill [as] a public relations nightmare and an economic annoyance” (303), reflecting that “[t]he river wasn’t that pristine to begin with. For much of the last century, sawmills and farms along the way had been dumping furans, chlorinated dioxins and phosphorous into the watershed. The river would eventually clean itself” (303). Dorian concludes, “I don’t want us running for cover on this. I don’t want us looking guilty, because we’re not. . . . [T]he occasional spill is the price we pay for cheap energy” (305). When the news comes in that “several communities along the Athabasca [have been] adversely affected by the spill” (437) and that “people are dying” (437), the experts at Domidion can only conclude that “[f]ortunately . . . most of these are Native communities where the mortality rate is already higher than the norm . . . [m]aking it difficult to determine whether the additional deaths are the result of the spill or lifestyle” (437).

This discussion echoes the type of rhetoric surrounding the Grassy Narrows and Whitedog mercury poisoning incidents, where politicians argued that it was impossible to isolate the cause of the problems as mercury poisoning because of the already existing problems of poverty, alcoholism, drug use, and so forth. This is clearly an example of what Huggan and Tiffin argue is a “form of ecological imperialism” (4) or environmental racism, whereby “in theory and practice” there is a connection between the oppression of nature and the oppression of Indigenous people (Curtin 145). Further, it seems that industry and government, whether in King’s fictional version or in the historical stance taken by the Japanese and Canadian governments in relation to mercury poisoning, is unapologetic and, rather, claims that these “mishaps” are the price of doing business. The position of business and government in relation to the costs of toxic industry and waste is a “self-privileging view” (4) or what Val Plumwood terms hegemonic centrism (4). The capitalist and neoliberal business model is one that champions profit and progress regardless of the cost to nature and the people who live in and depend on this nature: Indigenous peoples. King draws attention to the disproportionate impact of oil extraction, and industry more generally, on nature and the lives of Indigenous people—surely an extended example of environmental racism resulting from hegemonic centrism. Further, the Canadian government and King’s fictional Domidion clearly show hegemonic centrism when they suggest, through their actions, that Indigenous lives are worth less in the daily business equations involving profit versus life.

The central and major “environmental nightmare” of the text is the development of SDF 20, a genetic modification of the “naturally occurring bacterium that grew in the root system of every plant” (42), SDF 15. SDF 20 killed every plant and, according to Domidion, “was one of those mistakes that gave agribusiness a bad name and got the public up in arms about genetically modified organisms” (43). The use of SDF 20 at Kali Creek had been to clear the land in order to lay a pipe line that had been delayed due to “trouble with environmental groups and First Nation communities, problems with the terrain and the thick underbrush” (320). All that remains following The Ruin is “carcasses and bones” (33); “It had destroyed all life in the bay and pushed the kill zone out into the ocean some twenty kilometres” (324). However, there is eventually hope for regeneration because “the Smoke was running clean again, and you could reach into the water and draw your hand back without incident” (47). There “were signs of resurrection at the edges of the desolation” (344). Like the cleaning up of Minamata Bay and the celebration of its tourist potential, King’s ruined community and the possibility of renewal are connected to the tourist industry. However, as the victims of Minamata make clear, there is also the potential through tourism of covering over and forgetting the suffering of the people destroyed by the toxic industry. Thus, one type of industry is simply replaced by another type of industry. In the end, regardless of how the media spins the solution, both types of industry—toxic and tourist—celebrate and support the same destructive model of neoliberal progress. Likewise, any form of tourism will have an impact on nature and the lives of the people in the community, whether in Minamata or on the reserve in King’s version. However, another version of events would suggest that by restoring the area and creating a tourist destination, the community is being given another way to survive and possibly heal.

While before The Ruin tourists had come to the area to see the hatching of the turtles, following the death of all nature the reserve becomes a site of dark tourism. Mara<sup>8</sup>, describes the abandoned reserve as “an authentic Aboriginal Ghost Town” (99): “Indians. See where they died. Tour their homes. Relive their last moments. That could be fun” (100). Mara further describes “the tourists and transients who had tramped through the reserve, invaded homes, scavenged for souvenirs, and marked the buildings. Not at first, of course. Not when people were dying. No one came then” (105). As Elspeth Frew and Leanne White note in the introduction to *Dark Tourism and Place Identity: Managing and Interpreting Dark Places*, one of the motives for visiting sites of atrocity and death is “ghoulish titillation” (3); certainly, Mara seems to be suggesting this type of motivation for a tour of the “Aboriginal Ghost Town” (99).

<sup>8</sup> Gabriel is in the beginning stages of a relationship with Mara. Mara grew up with Gabriel’s sister and was his sister’s best friend. Mara returned to the reserve following The Ruin.

While there is discussion of the area becoming a tourist destination once again and thus providing livelihood for the members of the community, healing for Gabriel comes through community and engaging once again in the rituals of the drum circle and storytelling. As Mara considers “Gabriel’s problem” (189) she sees his lack of community as being a possible source of his distress: “Maybe he didn’t have a community, didn’t have anyone to anchor him to life. People weren’t single, autonomous entities. They were part of a larger organism. When her mother and grandmother were alive, Mara had flourished. Now that they were dead, she was diminished” (189). Storytelling is an important part of Anishinaabe culture and in diverse ways is important to the characters in *The Back of the Turtle*. Significantly, the story told at Crisp’s birthday, “The Woman Who Fell from the Sky,” is an Anishinaabe story that has many versions and is told in different ways and by different characters in many of King’s works.<sup>9</sup> The other story that is told and retold by Crisp and Mara is the story of The Ruin. Mara asks Gabriel if Crisp has told him the story and proceeds as follows: “He hasn’t told you how the river ran bright green that morning? How the people sickened and died? How they continued to die in the weeks and months after? How the turtles and every living thing in the river’s path were destroyed? . . . It can be quite a production. Every bit the equal of his version of ‘The Woman Who Fell from the Sky’” (248).

As Bruce Allen, writing of Michiko Ishimure, notes, “[H]opefully, she suggests, we are still engaged in an ongoing and renewable story” (36). King, in *The Back of the Turtle*, appears to mirror Ishimure’s hope for the possibility of renewing the story and renewal through the story, as evidenced by a discussion of the survivors of the defoliant tragedy. Gabriel asks, “So what are we supposed to do?” (226), and all Crisp can answer is, “Finish our story” (227).

Allen also writes that “for Ishimure, facing the problems of modernity requires a restoration of language, stories, and dialect” (41). This seems true in the case of King’s response to The Ruin and the environmental impacts on Indigenous communities more widely as much as it holds true for the community of Minamata. King’s *Green Grass, Running Water* likewise provides a powerful example of how changing the historically racist stories of the past and telling new stories can change the present and the future. Further, *Green Grass, Running Water* depicts a variety of acts of resistance to the building of a dam in part through what Cheryl Lousley discusses as “the comic mode” (17).<sup>10</sup> Ishimure’s

<sup>9</sup> See any of the following for King’s version of the well-known Indigenous creation story: *Green Grass, Running Water*, *Truth and Bright Water*, and *The Truth about Stories: A Native Narrative*, among others.

<sup>10</sup> See Cheryl Lousley’s article “Hosanna Da, Our Home on Natives’ Land”: Environmental Justice and Democracy in Thomas King’s *Green Grass, Running Water*” for a discussion of the various

novel *Lake of Heaven* likewise revolves around the long-term impacts of damming on Indigenous land in Japan. Ishimure is particularly concerned with the ways in which the relocation of the village has an impact on the local traditions, way of life, and stories of the community. While recent examples of Indigenous resistance to Nalcor's activities in building a dam at Muskrat Falls have not been successful in changing the outcome of that story, the story is still far from over. Beothuk energy is now proposing to build an off-shore wind farm in Western Newfoundland and this alternative form of energy could undercut the further and future impacts of hydro-electric dams in the province.

Further, while much of the story of Grassy Narrows is a sad one, Anna J. Willow's *Strong Hearts, Native Lands: The Cultural & Political Landscape of Anishinaabe Anti-Clearcutting Activism* (2012) offers an updated reading of the community of Grassy Narrows. Willow shows the connection between the impacts of mercury on Indigenous health and welfare in Grassy Narrows and a change to their understanding of the relationship between environmental degradation and their health. This understanding, as a result of the history of mercury poisoning their waterways, led to the Grassy Narrows community actively protesting the clearcutting of their forests. According to Willow, "the economic and health impacts of mercury poisoning at Grassy Narrows intertwined to produce important changes in First Nations residents' views of the natural world. These changes ultimately set the stage for the community's anti-clearcutting campaign" (77). The following is what the former Treaty Three grand chief and blockade supporter Leon Jourdain has to say about the connections between Anishnaabe health and environmental protection: "When the land is sick, our people get sick. When the land is abused, our people are abused ... personal health results from social health and, for Anishnaabe people, social health depends heavily on cultural relationships to the land, including the forest" (qtd. in Willow 78). Thus, in the above discussion of Grassy Narrows, the community finds the strength to resist the further destruction of their land and health as a result of what they have learned from the impacts of mercury poisoning in the past. While on the one hand it is possible to read the sickness, violence, and lack of employment as a community destroyed by mercury, this more recent study shows evidence of a community united in fighting against the clearcutting of their land, and suggests resilience, resistance, and hope. Ultimately, Willows allows the voices of the people of Grassy Narrows to re-write the story of the destruction of their community. The destruction of one way of life becomes part of the story and the prelude to the rebirth of the community.

[ways in which King demonstrates forms of resistance to the building of a dam on Indigenous land. Importantly, Lousley connects King's story to historical situations and legal battles around the building of dams on Indigenous land.](#)

The final pages of *The Back of the Turtle* also suggest the possibility of rebirth. There is the return of a turtle and the return of people to the area. However, whether the potential revival of tourism and return of tourists is something to celebrate or one of the problems related to the entire capitalist enterprise, encapsulated in this text by the all-powerful Domidion, is not, in fact, a part of the *The Back of the Turtle*. Although Mara is bitter about the reserve being a site of dark tourism, the return of tourists to the area as a site of nature tourism is seen by the members of the community as hopeful. It seems, though, that Michiko Ishimure and others who fought for recognition of Minamata disease fully recognize the dangers of tourism as a way of forgetting the destruction of the community. However, in Minamata, Grassy Narrows, and the community in King's story, survival and the life of the community is shaped in part by how the story is told and who is telling the story. Ultimately in the bleakest situations of poisoning and death, individuals and the environment are connected and both show the possibility for resilience and rebirth, in part through active participation in the process of telling the story. In all of these situations it is up to the individual and community to reclaim the story from industry and government in order to shape the future stories to celebrate the protection of the land and people.

#### Works Cited

- Adams, John Joseph. Ed. *Loosed Upon the World: The Saga Anthology of Climate Fiction*. Saga Press, 2015.
- Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Indiana UP, 2010.
- Alaimo, Stacy. "Trans-Corporeal Feminisms and the Ethical Space of Nature." *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 237–64.
- Alaimo, Stacy and Susan Hekman. "Introduction: Emerging Models of Materiality in Feminist Theory." *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 1–19.
- Alaimo, Stacy and Susan Hekman, editors. *Material Feminisms*. Indiana UP, 2008.
- Allen, Bruce. "First There Were Stories: Michiko Ishimure's Narratives of Resistance and Reconciliation." *East Asian Ecocriticism: A Critical Reader*, edited by Simon C. Estok and Won-Chung Kim, Palgrave Macmillan, 2013, pp. 35–57.
- Atwood, Margaret. *MaddAddam*. M & S, 2013.
- . *Oryx and Crake*. M & S, 2003.
- . *The Year of the Flood*. M & S, 2009.

- Berlant, Lauren. *Cruel Optimism*. Duke UP, 2011.
- Buell, Lawrence. *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond*. The Belknap Press of Harvard UP, 2001.
- Clapp, Jennifer. *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries*. Cornell UP, 2001.
- Colligan-Taylor, Karen. "Translator's Introduction." Keibo, Oiwa. *Rowing the Eternal Sea: The Story of a Minamata Fisherman*. Narrated by Ogata Masato. Translated by Karen Colligan-Taylor, Asian Voices, Rowman & Littlefield, 2001, pp. 1-16.
- Curtin, Deanne. *Environmental Ethics for a Postcolonial World*. Rowman & Littlefield, 2005.
- Frew, Elspeth and Leanne White. "Exploring Dark Tourism and Place Identity." *Dark Tourism and Place Identity: Managing and Interpreting Dark Places*, edited by Leanne White and Elspeth Frew, Routledge, 2013, pp. 1–10.
- Haraway, Donna J. "Otherworldly Conversations, Terran Topics, Local Terms." *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 157–87.
- Heise, Ursula K. *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*. Oxford UP, 2008.
- Huggan, Graham and Helen Tiffin. *Postcolonial Ecocriticism: Literature, Animals, Environment*. Routledge, 2010.
- Hutchinson, George and Dick Wallace. *Grassy Narrows*. Van Nostrand Reinhold, 1977.
- Ishimure, Michiko. *Lake of Heaven*. Translated by Bruce Allen. Lexington Books, 2008.
- . *Paradise in the Sea of Sorrow: Our Minamata Disease*. Translated by Livia Monnet, The Center for Japanese Studies, U of Michigan, 2003.
- Keibo, Oiwa. *Rowing the Eternal Sea: The Story of a Minamata Fisherman*. Narrated by Ogata Masato. Translated by Karen Colligan-Taylor, Asian Voices, Rowman & Littlefield, 2001.
- King, Thomas. *The Back of the Turtle*. HarperCollins, 2014.
- . *Green Grass, Running Water*. HarperCollins, 1993.
- . *Truth and Bright Water*. HarperCollins, 1999.
- . *The Truth about Stories: A Native Narrative*. Anansi, 2014.
- Kirby, Vicki. "Natural Convers(at)ions: Or, What If Culture Was Really Nature All Along." *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 214–36.
- Lennon, John and Malcolm Foley. *Dark Tourism: The Attraction of Death and Disaster*. Continuum, 2000.
- Lousley, Cheryl. "Hosanna Da, Our Home on Natives' Land": Environmental Justice and Democracy in Thomas King's *Green Grass, Running Water*." *Essays on Canadian Writing*, Winter 2014, Issue 81, pp. 17-44.
- Mishima, Akio. *Bitter Sea: The Human Cost of Minamata Disease*. Translated by Richard L. Gage and Susan B. Murata, Kosei Publishing, 1992.
- Monnet, Livia. Introduction. *Paradise in the Sea of Sorrow: Our Minamata Disease*, by Ishimure Michiko, Translated by Livia Monnet, The Center for Japanese Studies, U of Michigan, 2003, vii–xxxi.
- Plumwood, Val. *Environmental Culture: The Ecological Crisis of Reason*. Routledge, 2001.
- Salverson, Julie. *Lines of Flight: An Atomic Memoir*. Wolsak & Wynn, 2016.
- Schulman, Michael. "Labrador Dam Could Expose Hundreds of Inuit People to Toxic Mercury: Study." *CTVNews.ca*, April 18, 2016.
- Shkilnyk, Anastasia M. *A Poison Stronger Than Love: The Destruction of an Ojibwa Community*. Yale UP, 1985.
- Tuana, Nancy. "Viscous Porosity: Witnessing Katrina." *Material Feminisms*, edited by Stacy Alaimo and Susan Hekman, Indiana UP, 2008, pp. 188–213.
- Ui, Jun. *Industrial Pollution in Japan*. United Nations UP, 1992.
- Walker, Brett L. *Toxic Archipelago: A History of Industrial Disease in Japan*. U of Washington P, 2010.