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Co-Conjuration: Practicing Decolonial Nuclear Criticisms

Abstract: The article explores decolonial nuclear criticisms in transpacific contexts. It focuses on different cultural productions — film, play, ethnography, historical narrative, and literary criticism — to consider what I call cultural practices of co-conjuration. Co-conjuring practices in some of the texts I explore alert us to the entangled relations between apparently distinct nuclear catastrophes — for example, among radiogenic harm suffered by Indigenous communities, the wartime use of atom bombs, and the meltdown of nuclear reactors. By calling forth ghosts, memories, affects, and a sense of justice associated with nuclear-specific loss and pain in the *longue durée* of colonialism, militarized empires, extractive settler capitalism, and environmental crises, co-conjuring has the potential to produce relational sensibilities that can move us beyond the colonial partitioning of nuclear knowledge. The paper furthermore considers what must be wagered when we attempt to produce relational knowledge by connecting incommensurable histories and experiences across disparate times and spaces.

Keywords: Decolonial Justice; Nuclear Universalism; Relationality; Hauntology; The Sahtu Dene of Great Bear Lake; Hiroshima; Fukushima

Catastrophes…connect with the totality of interdependences that make up general equivalence….it is this equivalence that is catastrophic. —Jean Luc Nancy, *After Fukushima* (2015, 6)

Shortly after the declaration of nuclear emergency following the earthquake and tsunami that hit northeastern Japan on March 11, 2011, American historian Peter Kuznick published an online essay entitled, "Japan's Nuclear History in Perspective: Eisenhower and Atoms for War and Peace". Kuznick (2011) cited the following passage from a *Washington Post* editorial published in 1954:

> Many Americans are now aware … that the dropping of the atomic bombs on Japan was not necessary … How better to make a contribution to amends than by offering Japan the means for the peaceful utilization of atomic energy. How better, indeed, to dispel the impression in Asia that the United States regards Orientals merely as nuclear cannon fodder!

The editorial was part of President Eisenhower's public relations initiative known as the 'Atoms for Peace' campaign. The campaign aimed to contain the fierce grass-roots antinuclear movement that swept through Japan in the same year a Japanese tuna finishing boat, Lucky Dragon No. 5, was exposed to fallout from Castle Bravo, the largest among the sixty-seven nuclear tests the U.S. government conducted over the Marshall Islands during the period from 1946 to 1958.

Commonly known as the Bikini Incident, twenty-three Japanese crew members were exposed to the fallout in the vicinity of the Bikini Atolls, and one died after developing acute radiation syndrome. In part due to the worldwide antinuclear movement it triggered, the Lucky Dragon No. 5's plight seems to have gained a relatively secure place in the Global North's metropolitan memory of nuclear catastrophes. For the Marshall Islanders, by contrast, the nuclear bomb test was not a one-time event. The radioactive contamination of the atolls precipitated their forced removal from the indigenous land and sea, followed by unending exile. The devastations brought immediate harm to not only individual bodies, but to their existence and their whole way of life and livelihood (see Teaiwa 1994; Johnston and Barker 2010; Barker 2013). While there are notable exceptions, including Ōishi Matashichi (2011), one of the survivors of the Lucky Dragon No. 5, who long insisted that the 'Bikini Incident' is not a thing of the past for both the Marshall Islanders and himself, Japan's mainstream, nationalized

nuclear perceptions have failed to register the Marshall Islanders' continuing struggles against the nuclear order beyond the Bikini Incident. It is only within the recent decade that awareness about the acceleration of climate change and the threat of a breach and leak of the Runit Dome nuclear waste site in the Enewetak Atoll (Horowitz 2011; Jetñil-Kijiner 2017) has forced international publics to wonder if the radioactive hazards may no longer be containable to this space of nuclear colonialism.[1]

The *Washington Post* editorial Kuznick called forth from nearly six decades earlier suggested the remarkable transvaluation initiated by the 'Atoms for Peace' campaign. In effect, the campaign shifted the new technology's meaning from that which is associated with death and annihilation to a biopolitical one that promotes life, progress, and well-being. Through the clandestine collaboration between U.S. foreign intelligence and conservative Japanese media-corporate oligarchs and politicians — such as Shōriki Matsutarō whom U.S. authorities had saved from being indicted as an A-class war criminal — the 'Atoms for Peace' campaign successfully introduced U.S. nuclear power to postwar Japan. It was through this post-WWII, cold war transpacific management that General Electric built Fukushima Daiichi Plant's 'Mark 1' reactor. By the time the earthquake and tsunami triggered the meltdown in 2011, a total of fifty-four nuclear reactors were in operation in Japan, supplying approximately 30% of the country's electric power (Shushō 2011).

I opened my exploration of decolonial nuclear criticisms with Kuznick's intervention in the post-3.11 discursive space because it puts into sharpest relief the perniciousness of disconnected knowledge. Kuznick's essay clarified that the United States was fully aware of the geopolitical importance of Japan and, through the trope of reparation, mobilized the nation for the eventual success of the American nuclear military-academic-industry (Yoneyama 2016). But more importantly for this study, the midcentury episode Kuznick invoked in the post-3.11 discursive sphere highlighted the ways in which the links between Fukushima and Hiroshima had been disavowed in US-centered metropolitan nuclear perceptions. Of course, for many antinuclear activists, the connections between Hiroshima and Fukushima — and indeed many other sites of nuclear injuries including the Marshall Islands — could not have been more transparent. Yet for many others, the two time-spaces have been treated as if they are separable, each entailing disparate contexts and different utilities, such that their cross-referentiality for science, medical research, and policies is deemed questionable (Takahashi 2012). In other words, "Japan's Nuclear History in Perspective" brought together Hiroshima 1945 with Fukushima 2011 to illuminate the connection between the thermonuclear technology's war-

1 Danielle Endres (2008) on "nuclear colonialism." Laduke and Churchill (1985) on "radioactive colonization."

time use for weapons of mass destruction and its peacetime use for clean energy.

One of the key interventions in recent transnational American studies on race, empire, and colonialism has been the relational-comparative turn. Pointing to the limits of analogical thinking in the conventional comparative framework and the way it has produced false equivalences, the relational-comparative methodology (that is, epistemology and theory) has allowed many scholars to question geohistorical categories and processes not in isolation from each other but as entangled and produced relationally. Manu Vimalassery, Juliana Hu Pegues, and Alyosha Goldstein (2016), among others, have charted the problem of "colonial unknowing" and its underlying "analytic tendencies that foreclose or bracket out interconnections and relational possibilities" (3). This insight is especially important to my study. By suppressing relational analytics "colonial unknowing" or "colonial agnosia" has helped sustain colonial-modern knowledge formations. Likewise, framing the existing transnational nuclear order as a problem of knowledge, I hope to identify decolonial nuclear criticisms in those cultural practices that perceive and represent nuclear catastrophes at different geohistorical locations as entangled and produced inter-connectively. Such framing should direct our attention to the ways in which the nuclear world we live in is made known and not known to us. It calls forth critical reflections on the certitude with which we claim to know nuclear things and beings, such that we might begin to wonder about other epistemologies and other ontologies that are, in fact, closely entangled with our own. I contend that this repression of connectivity, or in the words of the three American studies scholars, the "preempting of relational modes of analysis" (1), is what helps sustain the colonial-modern order of which nuclearism is an integral part.

Extending Jacques Derrida's hauntology, sociologist Avery F. Gordon (2008) famously deployed the idea of spectrality in critiquing what she called "the retrieval enterprise" of social sciences and positivist knowledge. Ghosts and specters, according to Gordon, not only remind us of the instability, uncertainty, and imperfection of evidential knowledge. Underscoring the concerns for social transformation in the works of Luisa Valenzuela and Toni Morrison, Gordon concludes: "The ghostly phantom objects and subjects of modernity have a determining agency on the ones they are haunting" (201). Unlike those of continental deconstructionist and poststructuralists who have likewise engaged Derrida's concept of haunting, Gordon's ghosts are traces of ongoing material violence. They point to the immanence of colonial erasure, the unspeakability of liberal-inclusionary racism, and civilizational extermination that endure

even in disavowal. This spectrality, the haunting presence of the unknown absence, can prompt questions regarding how our knowledges might be disciplined and regulated according to conventional periodization, familiar geographies, and disciplinary boundaries; the problem akin to the "colonial unknowing" mentioned above.

It is with these insights in mind that I opened this paper with Kuznick's essay to offer his narrative as an instance of "co-conjuration." Co-conjuration, I submit, is a way of summoning, across disjointed times and discrepant geographies, those specters that potentially point to the connection and relationality that are elided in the production of nuclear knowledge. By doing so this practice contests the modes of "colonial unknowing" subtending the existing nuclear order. In my view, more than a demonstration of cause and consequence, the historian's narrative critically illuminated the proximities between 'the atoms for life' and 'the atoms for death'—the two nuclear activities mostly invoked as if discretely separable—and how the proximities between the two have had to be repressed and regulated for the maintenance of the transpacific nuclear order. By simultaneously conjuring the two disjointed times and spaces—the 1954 Bikini Incident and the 2011 Fukushima meltdown—the historian's intervention unsettled our commonsense about nuclear arrangements in the post-World War II, cold war transpacific. If there was a ghost haunting the historian's recitation of the 1954 editorial, it was there to mark the disavowal of the entangled connections between war and peace, death-world and life-world, violence and repair.

In the following, I will explore other instances of co-conjuration as cultural practice or the aesthetic strategy of questioning the colonial partitioning of nuclear knowledge. By aesthetics, I do not mean art per se, or the valuation of beauty and judgement in the Kantian sense, but refer to the sense, sensibility, and the experiences thereof, as well as the ways in which these senses are ordered, normalized, and regulated.[2] And by knowledge, I do not delimit it to so-called rational knowledge but include knowledges that are embodied, intuited, even haunting. I will examine cultural productions—literary text, play, historical narrative, ethnography, and literary criticism—that call forth memories, affects, and the ideas of justice concerning nuclear-specific loss and catastrophes as situated within the militarized political economy, old and new empires, and the settler state's extractive capitalism. Co-conjuration can be thought of as an aesthetic strategy that brings together the pained histories, grief, and grievances from dissimilar contexts to illuminate their connections; if even in transience. As such, not unlike Gordon's ghosts who alert us to "a something to be done" (202), the instances of co-conjuration I explore

2 Chuh (2019) on the concept of aesthetics.

below may potentially move us beyond the colonial agnosis that has shaped our knowledge and non-knowledge about the nuclearized world we inhabit. I will discuss, in concrete, *Village of Widows*, a documentary film by the Canadian film maker Peter Blow (1999) and the Metis playwright Marie Clements's *Burning Vision* (2002). Both have inspired robust creative and critical responses in North America over the past two decades. I will consider the two texts alongside the critical responses that have appeared in the forms of autoethnography and literary criticism. I will sift through the salient differences in the ways the interlocutors have perceived the film and the play, together or respectively, to ascertain what must be wagered in the practice of co-conjuration and in what ways it could steer us toward critically relational ways of knowing the nuclear. This paper is an attempt to suggest such methodological considerations toward a decolonial nuclear criticism.

Unfathomable Connections: *Village of Widows*

Peter Blow's documentary film, *Village of Widows*, portrayed the twentieth century history of the Sahtu (Sahtúgot'ine/Great Bear Lake) Dene people in the Northwest Territories and their entanglement with Canada's nuclear complex. From the very outset the film announces that its narrative arc will evolve around the Dene's struggle with the devastation brought on by the settler state's resource extraction. In the interview briefly inserted into the mournful opening scenes of the town of Déline, Shirley Baton recounts: "My dad died of cancer, my aunt died of cancer, my grandmother died of cancer, my mom is suffering because of her sickness and, like what about my children?" (1:10) This personal account of the generations lost to cancer, which is feared to be carried on into the future, is punctuated by another short interview with Cindy Kenny-Gilday,[3] this time underscoring the threat to Dene's collective existence: "Their survival as a society is at question because the young men are floundering. They don't have grandfathers, fathers, uncles to help them face this confusing world. It's a deep wound" (2:20). The film makes explicit that the Indigenous community's suffering relates to the nuclear age at large as the three snapshots of mushroom clouds — presumably of the nuclear explosions at the Trinity test site and the Marshall Islands — appear in a quick sequence behind the film's full title.[4] The voice-over narration that pulls together the interviews and archival film footage informs the viewer that the Dene people's collective suffering has resulted from their association with the mining industry in the region. The sound effects of the Japanese

3 Kenny-Gilday (2000) on the Dene knowledge based on oral history.

4 I thank Brenton Buchanan for transcription of the film and discerning the three images.

string and wind instruments merging with the native drums accentuates the entanglement of the Dene people with Japan.

Since the 1930s, mining activities in the Northwest Territories have relied on the Sahtu Dene people for their labor. The Eldorado Mine that operated in the area did not deploy Dene as miners but mainly to transport pitchblende from the mining site onto the boats docked at the bay. While men worked as carriers, women provided the labor of cleaning up dust and debris from the used and emptied ore sacks. In 1942 the Canadian government nationalized the mining operations in the area, then renamed as Port Radium, under the wartime mandate and exported the uranium for the Manhattan project to develop atomic bombs (Bothwell 1984; van Wyck 2010). The mine at Port Radium was decommissioned in the early 1980s but the community of Déline continued to experience a high-rate of cancer-related deaths among workers and families who had handled and carried the ore. Blow's film captured the Dene's struggle for survival nearly five decades after the end of World War II. During the 1990s the Dene organized themselves to voice their concerns about the prolonged detrimental effects of radioactive wastes in the Lake's vicinities. In 1998 the Déline Dene Band Uranium Committee (Uranium Committee hereafter) issued a report, *They Never Told Us These Things: A Record and Analysis of the Deadly and Continuing Impacts of Radium and Uranium Mining on the Sahtu Dene of Great Bear Lake*, emphasizing that the Dene people who worked at the mine had never been informed of the adverse health effects of radioactivity, nor had they been provided with any protection when handling the contaminated materials. Blow's film briefly introduces the Dene delegation's travel to Ottawa for a meeting with cabinet ministers in which they attempted to address their concerns and presented a fourteen-point action plan included in the report. While Uranium committee member Gina Bayha described the meeting as what "would be a historical moment" (27:51), the film captured constitutive indifference beneath the surface civility of the high officials and the impossible drudgery of facing what Carmella Gray-Cosgrove called "the bureaucratization of Sahtúgot'ine knowledge" (2015, 81). The narration summarized the community's disappointment: "For all the expressions of sympathy in the six months since the Ottawa meeting, there has been very little progress on any of the communities' fourteen points" (32:41).

Summarizing the results of a five-year investigation by the Canadian state, The Canada-Déline Uranium Table (2005) acknowledged that the Dene workers were not properly informed of the radiation hazard (1999–2004). But it denied the risk of radiation-induced cancer and fell short of recommending a full investigation. In 2007 the Canadian government

launched a $7 million remediation effort. Risk assessment reported in 2006 indicated that "the radionuclides present at the Port Radium mine site are not a cause for concern from an ecological perspective" (ix). Henningson's documentary (2007) builds on Blow's film and traces the Dene's subsequent decision to resume mining operations in the aftermath of remediation. While highlighting the predicaments the Indigenous communities must face when choosing their future under the constraints of settler colonialism, the film nevertheless included an interview with the Navajo Nation's leaders on their community's decision to ban uranium mining on Navajo land; thus suggesting the possibility of trans-Indigenous dialogue and solidarity toward another future delinked from the global nuclear order's extractive capitalism.

Village of Widows did not merely represent the Dene community's experiences. Rather, it actively contributed to the Sahtu Dene's efforts to raise public awareness about the settler state's past and ongoing disregard for their lives and existence. Canada-based environmental anthropologist Peter van Wyck extensively commented on the film in his field journal, *The Highway of the Atom*, in which he chronicled the journey of uranium across Canada. Reflecting on how the film and its story were taken up by the national public television and other media, van Wyck summarized the film's far-reaching impact on Canada's national consciousness as follows:

> In a way, until Blow's film was made, there was no story to be told—but through the patient organizing of oral narratives and historical and archival materials, it created a key moment in the retroactive and traumatic re-evaluation and politicization of the past that the Dene were becoming engaged with at the time the film was made (2010, 48).

To be sure, as discussed below, Canada cannot be singled out in the global nuclear order for its history of sacrificing Indigenous communities and their land for nuclear development, whether for mining, nuclear tests, refineries, or siting of radioactive waste facilities (see Voyles 2015). At the same time, Canada's dominant self-image has been one of innocence and multicultural humanism in contradistinction to the racialized and aggressively militarized image of the United States. Arguably, then, Blow's film generated a catalytic moment for Canada's self-examination of its national history as one grounded on the extractive settler state's relationship to Indigenous life and the land.

Blow's documentary has, moreover, captured the attention of many cultural critics for its representation of an unprecedented encounter between the Dene and survivors of the Hiroshima bombing. In 1998 the

Uranium Committee sent a delegate to visit Hiroshima. The film narrates that the Dene had learned that, unbeknownst to them, the uranium mined from their land had been used to develop the atomic bomb that had destroyed the city. The Dene's unintended involvement in the incineration of people on a foreign land had long been foretold. According to the late Dene lawmaker and community leader George Blondin (1990), among the many Sahtú Dene stories is a prophesy of striking resemblance to what actually happened toward the end of WWII: a medicine man once prophesized that, "a long time in the future," strangers will come to dig up something harmful from their land which will be dropped on people who "looked like us, like Dene" and burn them all (79). The Dene delegate's visit to Hiroshima was thus underpinned by a keen awareness of the uncanny historical entanglement and the knowledge that their land and labor had been implicated in Hiroshima's destruction. In the film, Kenny-Gilday delivers a speech to her hosts in Hiroshima: "a Dene from Déline, I take on a personal responsibility for what's happened here" (41:54).

In *The Highway of the Atom*, van Wyck referred to the Dene delegates' travel to Japan as an unthinkable act of "apology." This characterization has invited further inquiries into the question of justice and accountability. This is regardless of the curious fact that, as the Native American and nuclear literature studies scholar Kyōko Matsunaga (2020) has astutely pointed out, none of the Dene interviewed in Blow's film uses the term, "apology." Nor did they indicate that the purpose of their trip was to apologize to the victims of the Manhattan project for their land having been implicated in the atrocity. For van Wyck, the Dene's unfathomable apology suggested an ultimate ethical attitude in the face of the environmental crisis. As I will discuss below, literary critic Molly Wallace followed van Wyck and appreciated Dene's "apology" as exemplifying a responsible attitude necessary for thinking risk society. Literary critic David Eng (2015) likewise addressed the Dene's sense of responsibility and, following Derrida, called it an "absolute apology." For Eng, the Dene's sense of accountability toward the history beyond their own making suggests an alternative to the conventional concept of reparations. It is indeed worthwhile noting that in his critique of the global proliferation of the truth and reconciliation commissions at the turn of the new century, Derrida (2001) distinguished between "conditional" and "unconditional" forgiveness. Observing the ways in which apology and forgiveness have become increasingly instrumentalized for the interests of states and other international actors, he insisted on "the necessity of maintaining the reference to an aneconomical and unconditional forgiveness; beyond the exchange and even the horizon of a redemption or reconciliation" (38). For Derrida, "the right

of grace could not be exercised without injustice" (47). As far as the film reveals, the Dene delegates' "apology," if at all, did not ask for forgiveness. To the extent that apology and forgiveness were not to be exchanged, Dene's gesture of apology was unconditional and precluded the injustice of the power/right of grace. In this sense, Dene's visit with the survivors in Hiroshima points to a horizon of new sociality, a justice without instrumentalization.

The Highway of the Atom was perhaps the first attempt to theorize the broader implications of the Dene visit to Hiroshima, specifically for ecocriticism. Noting how Dene were simultaneously "positioned as both victim and accomplice," van Wyck elaborated on this doubleness as follows: "as to the former [victim position], the Dene sought recognition and compensation from the Government of Canada [.] [...] As to the latter [accomplice position], they disavowed the vortex of history and archive, and also the vortical administrative discussions of sovereignty, rights and self-government, and moved directly into the realm of the ethical" (41). It is with regards to the latter position that van Wyck understood that Dene had visited Hiroshima to offer "apology to the Japanese" (19). The Dene apology, as he put, was "to assume responsibility for events over which one had no knowledge or control" (19). Characterizing the Dene's apology to the victims of U.S. nuclear attack as unfathomable — "something exemplary, unthinkable" (41) — van Wyck further generalized this unfathomability to draw an analogy between Dene's sense of responsibility and what he considered a new ethical paradigm of ecological thought. Ecological disasters and the way Dene's history was complicit in the nuclear disaster, as van Wyck surmised, are similar in that they both suggest the "unfathomable thread of causality" that led to what happened.[5] Dene's attitude about the historical connection between Port Radium and Hiroshima, then, "amounts to a paradigm [...] of the workings of ecological disaster. Something happens here and now, because it really happened over there and then. This [...] is par excellence the great conceptual achievement of ecological thought. Not the logic of [...] isolated events in time and space" (48). *The Highway of the Atom* thus drew parallels between Dene's apology and ecological criticism. It deciphered Blow's film to offer a conceptual framework for considering how we might respond ethically to ecological disasters and their complex of causes and consequences: namely, the unfathomable linkages that implicate us all, anywhere, anytime, beyond knowledge of our own involvement.

5 van Wyck extends Derrida's rendering, "the unfathomable threads of causality" (2010, 203).

Transpacific Nuclear Entanglements: *Burning Vision*

Canada-based literary critic Molly Wallace (2016) explored the works by Blow and a couple of other cultural workers that had thematized the history of uranium mining in the Northwest Territories. According to Wallace these texts can be regarded as constituting an archive of risk criticisms. As "a way to theorize the megahazards of the present," Wallace attempts to bring "nuclear criticism and ecocriticism together under the rubric of something like 'risk criticism'" (5). One of Wallace's primary concerns lies in what has been known since the turn into the new century as the "nuclear renaissance." *Risk Criticism* raises questions about the ways in which the political imperatives of carbon emission reduction and the shift away from dependence on fossil fuels have reignited the promotion of nuclear power as a renewable energy source. Wallace finds it especially troubling that such a pronuclear environmentalist stance has gained ground in many nuclearized countries despite the fact that the ongoing Fukushima crisis exemplifies the "worst circumstances" (182) of failed risk management, at least in the eyes of those who refuse to accept nuclear power as a solution to ecological disasters. Taking a cue from van Wyck's conviction that the history of Port Radium "amounts to a paradigm [...] of the workings of ecological disaster," (2010, 48) Wallace further extended this idea to argue that the site can also be regarded as a "paradigm case for thinking risk today" (2016, 26). If, as van Wyck insisted, the ecological thinking of environmental disasters such as climate change perceives that "something happens here and now, because it really happened over there and then," (2010, 48) precautionary thinking about unmanageable risks, nuclear or otherwise, similarly relies on a logic of connectivity among different times and spaces.

The Metis playwright Marie Clements's play, *Burning Vision* illustrates for Wallace the "importance of thinking across time and space" (159) in addressing risk through precautionary registers. The play portrays the Indigenous community of the Northwest Territories and its connection to Japan. It brings together the multiple trajectories of transpacific nuclear entanglement through the literary-theatrical plots of fictionalized encounters, overlapping temporalities, and interchangeable places and characters. Since it premiered in Vancouver in 2002, *Burning Vision* has garnered much critical appraisal in North America for its multiracial, multiethnic casting, multilingual stage production, and as a high-profile event in the history of the Indigenous theater performance. For example, Courtney Elkin Mohler (2015) directed the play with the understanding of "*Burning Vision* functioning as indigenous theatrical praxis that encompasses

a philosophy of ecological sustainability" (11) while Jaye T. Darby, et. al. (2020) notes that Mohler "recognized that play's complexity would require special audience engagement and education, such as an interdisciplinary symposium on the play's themes, an extended program and curated lobby display, and talkbacks with Clements herself" (168). If *Village of Widows* successfully exposed in documentary form the suffering of the Sahtu Dene people to the point of offering a foundational narrative for the subsequent cultural texts on this subject, *Burning Vision* reimagines Port Radium as a site from which the intersecting ontologies and epistemologies of the nuclear transpacific emanate.

Burning Vision stages the Dene prophecy through the voice of the Dene See-er who foretells the devastations the history of uranium mining would bring to both the Dene community and people in Hiroshima and Nagasaki. Known historical events — such as WWII as well as Canada's mining operations that had long been a void in historical knowledge — and the attendant memories, affects, and social identities are embodied in several interchangeable anthropomorphic figures. The two atomic bombs that destroyed the two Japanese cities are transmuted into two characters, one, an innocent Little Boy and the other, Fat Man, who poses as an iconic figuration of militarized masculinity. Miner, who mines the pitchblende at Port Radium, meets Radium Painter who paints "glow-in-the-dark" wristwatches. The latter figure invokes the history of women workers known as "radium girls" who were employed to paint wristwatch dials with radium, a material that turns luminous in the dark and was commonly used into the late twentieth century. Many workers developed radiogenic illnesses, including bone fractures and necrosis of the jaw. Radium, moreover, was a highly valued product which was also mined from the Eldorado Mine before accelerating demands for uranium.

Similarly in another scene, the Metis Woman's mixed-raced in-betweenness and her yearning for home and belonging are rendered analogous to the affect featuring Tokyo Rose/Round Rose, one of the interchangeable double-cast characters. Tokyo Rose's name derives from a historical figure, Iva Ikuko Toguri D'Aquino, an Asian American radio personality who is best known for her imprisonment after World War II on the charge of treason for her wartime pro-Japanese propaganda broadcasts, while its doubled-cast, Round Rose, is a fictional character. Not unlike the way the play positions Metis Woman, the doubled character of Rose is caught between two racial/national interpellations, thus making her loyalty and membership suspect. We learn that Rose eventually falls in love with Koji, a Japanese character who will be lost to the atomic bombing in Hiroshima. The closing act brings the Northwest Territories and Hiroshima into convergence

through Koji's Japanese grandmother. Grandmother, at discovering her grandson's death in the aftermath of the Hiroshima bombing, however, transforms into Dene Widow who awaits and mourns for her long-lost husband, a specter of a uranium ore carrier. *Burning Vision* thus stages cacophony and the overlapping encounters produced by the transpacific North American nuclear empire. The dead, ghosts, suffering, and grief in differently situated, multiple times and spaces are invoked throughout the play to be conjured up simultaneously.

In her attempt to bring "nuclear criticism and ecocriticism together" for the advancement of risk criticism, Wallace underscores the play's "technique of simultaneity, of overlapping times and spaces" (2016, 171) as an important literary device that can render the specific history of Port Radium into "a vehicle for considering other sorts of hazards" (185). For Wallace, Clements's *Burning Vision* presents "precautionary thinking associated with risk society" (188), a society faced with a whole array of toxicity, chemical exposures, and the hazards of climate change. Precautionary thinking about risk, according to Wallace, differs from the discourse of risk management which is "in effect an attempt to control the future" (187). The latter operates according to analogy: "past events will have been like future ones, and thus risk can be managed, mitigated, and insured against" (188). In contrast, the precautionary thinking disrupts this analogy across time and space by suggesting the unpredictability of the future. The play's nonreferentiality is especially effective in conveying this perception. It invites the sensibility for the unimagined, prompting us to question how we can make ourselves accountable for unknowable future catastrophes. "What the play offers," Wallace observes, "is [...] the uncertainty of the precautionary principle, a different orientation toward the future, with different implications for thinking about knowledge and responsibility" (173). Dene See-er's prophecy intimates such an uncertainty of knowledge and yet goes unheeded. *Burning Vision*, then, demonstrates the ways in which "risks, which are largely prospective, turn into catastrophes when risk management fails" (171). The clinching statement made by one of Clements' characters: "be sorry before you have to say you are sorry" (Clements 2003, 91) indicates for Wallace a responsible attitude necessary for precautionary thinking with which one can project present risks into the future so that unprecedented disasters can be averted.

When read in this way, even the play's use of a most commonplace post-disaster practice might appear to help reorder knowledge by linking nuclear crises to environmental disasters. In search of Koji after the destruction of Hiroshima, Grandmother leaves a handwritten note on a burnt cherry tree. The note reads: "If we ever get separated, you are to

wait for me here. Wait for me here and I will come for you" (Clements 2003, 111). In the ashes of the annihilated cityspace, people did indeed resort to the mundane practice of leaving such notes, hoping for the eventual safe return of missing family and loved ones. Yet this same practice of reaching out to missing persons has often been seen in the aftermath of other catastrophic events. Critics have long noted that prevailing atom bomb narratives intimate natural disasters such as earthquakes and wildfires, and that such naturalized representations of Hiroshima and Nagasaki have depoliticized nuclear narratives by obscuring the agency of perpetrators. But the immanence of the most banal practice of post-disaster message boards may suggest a material connection that is often disavowed yet critically illuminating. Rather than dismiss such a conflation as only contributing to the obscuring of critical differences between natural and human-made disasters, it is equally possible to insist, with Rob Nixon (2013), van Wyck, and Wallace, that the natural disasters of the Anthropocene and in the age of climate change are as much an outcome of the settler states' extractive militarized violence.

Between Nuclear Universalism and Decolonial Justice

In her examination of transpacific connections represented in literary works by Native North American writers, the nuclear literature scholar Kyōko Matsunaga (2000) contrasts *Burning Vision* with Blow's film. Matsunaga argues that while the latter offered the possibility of grasping Hiroshima's atomic bomb narrative within the context of colonialisms, *Burning Vision* hardly makes such a gesture. The trope of the cherry tree is especially troubling for Matsunaga because of its nationalist associations. She furthermore questions another critic's interpretation that Koji may be part Ainu, arguing that when his character is tied to the quintessentially nationalist and often militarized symbol of the cherry tree in the play, such a reading could end up cancelling out the colonial asymmetry between the ethnic Japanese and Ainu people.[6] Matsunaga thus concludes, by too easily connecting Dene's radioactive exposure to the "Japanese" atom bomb experience, *Burning Vision* fails to advance the decolonization of Hiroshima narratives that had been initiated by Blow's documentary.

Historical specificities of the nuclear injuries suffered by the Sahtu Dene community at the hands of the settler colonial state may in part appear muted in *Burning Vision* due to the unilinear, progressive temporality of the prophecy that consequently subsumes all contradic-

6 Matsunaga (2020, 49) on Sophie McCall (2012).

tory elements of the play. The overarching voiceover that prophesizes the disaster, into which the Dene land and its people would eventually become implicated, increasingly overwhelm the multidirectional traversals of time-space and the intermingling and interchanging of characters. The future anterior with which Dene See-er foresees Hiroshima's nuclear catastrophe is the play's ultimate endpoint. This framing lends the whole story a sense of preordainment. The play opens with and culminates in the familiar image of atomic explosion — the "sound of an explosion that lasts a long time and reaches far into the distance, until at last the explosion is complete and it is quiet," (8) although the final explosion is both that of the Hiroshima bombing and ones that are yet to come; elsewhere and anywhere. Meanwhile, Tokyo Rose/Round Rose eventually falls in love with a Japanese figure Koji and bears his child. The unseen future's serendipity is undermined by the unwavering telos of the unaborted reproductive temporality, as the double-cast Rose gives birth to a live child despite all the predicaments and tribulation. In this way, the play's initial positing of the disruptive potentiality of the cacophonic, multivalent emplotment of contradictory time, space, and characters becomes increasingly betrayed by the bomb's teleology as the play comes to close. In the final scenes the three disparate ticking sounds — of Miner's Geiger counter, the Radium Painter's 'glow-in-the-dark' watch, and the heartbeat of a fetus inside Rose — converge at the moment of explosion. Rather than suggesting the relationality among incidents of nuclear violence that are contingently grounded in different and distinct times, spaces, and positionalities, the fabulously complex characters and the confounding of time-space produces, in the end, a flattened-out impression, devoid of geohistorical and material differences. Clements's characters travel too freely. They are unmoored from historical specificities, until they become integrated under the exceptional narrative of Hiroshima's atomic catastrophe in their apparent assimilability, equivalence, and commensurability.

Matsunaga's discontent with the way the colonial theme recedes in *Burning Vision* prompts a further consideration of the predicaments of thinking and representing connectivity across time and space when garnering universalistic knowledge. For critics like Wallace whose primary concern is the risk of society at large, Dene See-er's prophecy suggests the essence of precautionary thinking about risk, whereby present knowledge, however uncertain, ought to be taken seriously to avert unforeseeable future disasters. Commenting on the stage production of *Burning Vision* by Annie Smith (2010), the Indigenous and performance studies specialist, Wallace appreciates the way in which Smith directed the stage performance so as to urge the audience "to read analogically, to see in these

new contexts [of other environmental harms] a repetition of a structure from the past" (Wallace 2016, 184). Smith directed the performance so that it "abstracts the nuclear content, rendering a mobile metaphor or allegory for risk more generally" (2016, 185). As Wallace observes, "though the play's subject matter is nuclear, Clements' abstract, symbolic, and suggestive treatment also renders the play more mobile, as, restaged in new contexts, it might speak to new risks [...]. a vehicle for considering other sorts of hazards" (184). Wallace's exploration of risk criticism concludes with an assertation that the ecological ethics suggested by Port Radium "only becomes more apparent" when "like those islands in the Pacific…the people in the north are also disproportionately affected by climate change's uneven effects" (186). As *Burning Vision* becomes "a mobile metaphor or allegory for risk more generally," the referentiality of the Dene people's suffering and struggles becomes transmuted and rendered exchangeable, if not equivalent, with the suffering of others who have experienced analogous catastrophic environmental disasters.

It is here that I wish to caution against the marginalization of geohistorical specificities that such a universalizing hermeneutics might bring into effect. There are at least two contrasting ways of perceiving the Dene's connection to Hiroshima's nuclear annihilation. On one hand is a reading of Blow's documentary as that which addressed the long disavowed and incommensurable sufferings in a distinctly situated settler colonial context. On the other, is the valorization of commonality and universality extrapolated from the Indigenous community's history and its association with a generalized critique of 'the world at risk' and ecological thoughts that bypass considerations for 'sovereignty, rights and self-government.' This tension concerns what I once called the problem of nuclear universalism (Yoneyama 1999). Nuclear universalism refers to the normative idea that Hiroshima's nuclear catastrophe must be remembered from the transcendent and anonymous position of humanity, and that the remembering of Hiroshima's tragedy should invoke thoughts, sentiments, and moral attitudes not delimited by any national or geographical boundaries. It valorizes the remembering and understanding of Hiroshima's disaster from the anonymous, universal position of humanity, while marginalizing the knowledge produced by specifically named subjects. Nuclear universalism and its problem have manifested, for instance, in the disavowal and marginalization of Korean minorities' wish to mark their critical colonial difference in memorializing the city's past. It has moreover served to exceptionalize the atomic bomb as unprecedented in its scale and in history, while obscuring myriad other, less spectacular, everyday violence.

Etienne Balibar's theorization of universal humanism in relation to rac-

ism and sexism may prove useful in further illuminating the pernicious effect of this tension between what appears universal and that which becomes particularized by contrast. Balibar (1991) not only questioned how universal*ism* relies on the supplementary relation between the universal and the particular — that is, we regard something as universal only in contradistinction to that which is considered particular — even when what appears universal is in fact the provincial masquerading as universal. He also observed that modern organizations and ideologies have always regarded what is deemed universal (values, practices, beliefs) as superior to that which is less common, singular, hence particularized. It is not difficult to see, then, how the extrapolation of cultural productions thematizing Dene's nuclear entanglement for the purpose of universalistic criticism (that supposedly concerns humanity as a whole) could threaten to render questions of sovereignty, land rights, settler violence and nuclear colonialism (faced daily by Indigenous peoples) as particularistic and provincial, hence secondary.

Perhaps one of the most illuminating accounts of the problem of nuclear universalism on a global scale has been Gabrielle Hecht's investigative history of uranium mining and trade (2012). Deploying the neologism, "nuclearity" — a concept that suggests whether a thing can be considered nuclear is contingent on the negotiation between techno-scientific knowledge and power — Hecht's work powerfully demonstrated the ways in which Africa as a site of resource extraction has been marginalized in the discussion of nuclear-related issues at large.[7] African nations such as the former Belgian Congo (The Republic of Congo) and Angola have been central to the geographies of the global nuclear complex and the world market in which uranium has been traded as a "banal commodity" (2012, 35). And yet, the catastrophic signs of annihilation, mushroom clouds, and the blast — Akira Mizuta Lippit's "catastrophic light" (2005) — that came to predominate the Global North's nuclear imaginary have consequently overshadowed the serious and daily radiogenic harm the transnational mining industry and the global uranium trade have inflicted on Indigenous African communities. Much like Kuznick's narrative that illuminated mid-century transpacific entanglements by co-conjuring the two temporalities of wartime and peacetime, Hecht's narrative on uranium mining and the market — and how they have been integral to Africa's colonial and post/neocolonial histories and the question of sovereignty — exposed how profoundly much of our knowledge is spatially segregated and managed in the service of the transnational nuclear order. To borrow from the cultural critic Iyko Day's succinct summary:

7 Hecht (2012) on the distinction between radiation as "a physical phenomenon that exists independently of how it is detected or politicized" and nuclearity as a contingently "technopolitical phenomenon" (5).

> [I]t is largely Indigenous people across the globe who experience the chief impact of the entire nuclear fuel cycle, from uranium mining and refining to nuclear power and weapons production and testing [...] [Indigenous communities in Africa and North America] are the largely unknown zones of resource extraction where Indigenous land and communities are targeted for what Traci Brynne Voyles calls 'wastelanding'" (2018, 85).

It is precisely because of the disproportionate burden the Indigenous communities have had to endure that scholars like Matsunaga (2019) insist that we need to turn to Native North American literatures and thoughts for post-nuclear epistemologies of survivance. How are we to know and act otherwise across these pernicious spatial and temporal nuclear divides? Once again, there is an urgent need for critical methodologies with which we can sensitize ourselves to what the colonial order of nuclear knowledge necessarily elides, subjugates, and makes unknowable.

Whether or not "apology" is an apt characterization, the reparative investment in Dene's Hiroshima visit cannot go unnoticed in Blow's film. The Sahtu Dene people's understanding of their relationship to the land, and the sense of responsibility for people they encountered on their journey to Hiroshima, may be deemed as gesturing toward an alternative ethics and accountability. But if we are to seriously consider the existing transnational nuclear order and Canada's settler condition, we are equally compelled to read Blow's film along its narrative grain. At the film's outset the director introduces Kenny-Gilday who announces the purpose of the journey to Hiroshima: "It's a justice issue for them. On many, many, many levels. They have to make amends of some kind. So, they have to go to the surviving relatives of the Japanese people and say, this is the way it happened. And in telling that story, they heal themselves" (5:04–5:11). This opening proclamation is followed through in the film's final ten minutes with a seemingly fulfilling narrative and images about the revitalization of Sahtu Dene values and spirituality. Kenny-Gilday's interview is inserted, once again, but this time to observe, "there's a whole ritual and culture building around what is a big hole" (35:11).

The vibrant scene of ceremonial gatherings in Déline, trailed by cuts from the delegates' visit to Hiroshima, brings closure to the story. Blow, thus, quite literally denotes that the Dene's visit to Hiroshima bears profound significance for the healing and revitalization of the Indigenous community nearly decimated by Canada's uranium mining. Reparation and healing are sought 'in telling that story' of 'the way it happened,' that is, the collective ability to recuperate the long-redacted knowledge of their land's association with the bomb and to tell their story as the subject of

that history in their own manner. At the same time, the concept of justice Blow's film has brought to light must operate "on many, many, many levels," as in Gilday's words. When violent histories are grasped as deeply entangled and mutually implicated — as in the way the Sahtu Dene people felt about the destruction of Hiroshima — and precisely because many of the entangled acts of violence are slow, structurally overdetermined, and ongoing — as in the case of Canada's settler colonialism, extractive transnational capitalism, climate change, and the harms of residual radiation — justice for such multilayered violence cannot be attained uniformly and one-dimensionally through a linear path from the past injury to a repaired future. Rather, justice must be conjured as polyvalent, overlapping, and sought on multiple, intersecting ways.[8] Reconciliation and remediation attempted through a single, homogenizing trajectory of justice will ultimately invite unredressed remainders to return to undo that which appears settled and complete.

Conclusion: Radiontology, Ghosts, and Decolonial Nuclear Criticism

Fukushima Daiichi's unfolding nuclear crisis continues to affect the soil and water, the mountains and forests, humans, fish and animals, the dead and the unborn, within and beyond the national borders and across the oceanic currents. For those who hold the Fukushima incident close to their hearts and memories, vicarious or immediate, it is tempting to believe that the relational awareness about histories' entanglements — such as the one addressed by Blow's film — is a post-3.11 or post-Fukushima epistemology. Indeed, there are many who argue that such an ethos emerged after 3.11 (see Komori 2014; Genkaiken 2017). Japanese literature scholar Kimura Saeko (2013; 2018), among others, has identified what she calls the genre of "post-earthquake" literatures and criticism. According to Kimura's post-earthquake literary critique (2018), literatures that were produced since the 2011 earthquake figuratively, but sometimes straightforwardly, evoke the mass deaths brought on by the earthquake and tsunami, but especially the apocalypse suggested by the Fukushima meltdown in relationship to the familiar tropes of Auschwitz, the two World Wars, Hiroshima and Nagasaki, Minamata disease, and Chernobyl. Kimura suggests that post-earthquake literatures can conjure up memories of disasters across different times and spaces in part because one distinctive quality of radiation is that it is unfathomable and knows no geographical and temporal boundaries.

8 Yoneyama (2016) on the limits of redress, reconciliation, and forgiveness.

We need not evoke the registers of iconic human tragedies such as Auschwitz and Chernobyl to appreciate how Fukushima's crisis has been understood as intimately and relationally entangled with other, less spectacular yet ongoing violence of the transnational nuclear order. On April 6, 2011, Yvonne Margarula (2011), representing the Mirrar people in Australia, sent a letter to the then UN Secretary General Ban Ki Moon. In it she reiterated her people's long-standing objection to uranium mining on their land and expressed solidarity with people of Japan based on the understanding that at least some of the uranium that fueled TEPCO's Fukushima Daiichi reactors was extracted from their land. Since the 1970s Japan has imported the uranium from Mirrar land. The letter reads: "Given the long history between Japanese nuclear companies and Australian uranium miners, it is likely that the radiation problems at Fukushima are, at least in part, fueled by uranium derived from our traditional lands. This makes us feel very sad [.] [...] [The nuclear industry] is an industry that we have never supported in the past and that we want no part of into the future. We are all diminished by the awful events now unfolding at Fukushima." Not unlike the delegates of the Sahtu Dene people who needed to tell *their* story of the Eldorado Mine, Manhattan Project, Hiroshima, and "the way it happened," Margarula's letter addressed the way her land has been implicated in the suffering caused by Fukushima's nuclear emergency. The letter expresses "sadness" as a collective sentiment — sadness at both the knowledge of how her community has been tied to Fukushima and the counter-historical realization that, if not for their existence diminished by the transnational settler-corporate interests, the disaster might have been averted.

Radiation is indeed ghostly; it is a presence in absence. It exists yet often escapes our sensory perceptions in its absented presence. Its effects — or especially what medical scientists have called the "radiation late-effects" — can manifest only belatedly. Like ghosts, radioactivity lingers on with us without our knowledge, in our bones, soil, and water. It reappears unannounced in unanticipated times and spaces. And this radioactive ghost, like Gordon's, has agency. In their materialist reading of Clements' *Burning Vision*, the Diné (Navajo) cultural critic Lou Cornum (2020) appreciated the way it represents radiation as "generative." Like radio waves, an element Clements deployed in the play, radiation has "the capacity for connection." Because radiation actively "seeks to dissolve the discrete national and continental boundaries," according to Cornum, "the obscured bonds and binds" are illuminated in "the invisible force of radiation."

To think and live nuclear by rendering agency and force to this ghostly presence of radiation, as Kimura and Cornum have, might be best described as radiontology. We can define radiontology as an onto-epistemology that comprehends radiation and its physical effects in their singularities, while acknowledging their agency and animate power. Radiation brings humans into negotiation with its activities in such a way that would forge knowledge, sociality, politics, and even alliances but without evoking universal history and its subject. And like ghosts, radiation claims a place but only in transience, not to settle but to unsettle. In fact, we can detect the social force of radiation and its performative agency in the encounter between the Dene delegates to Hiroshima and the Korean atom bomb survivors. This scene in Blow's film has caught many critics' attention as a meeting between two colonialisms, but without ever having probed its history and how such a connection became possible in the first place.

The Kawamura Hospital that the Dene delegates visited — which was mistakenly captioned in the film as "Korean Hibakusha Hospital" — began accommodating overseas *hibakusha* (those exposed to the atom bomb and/or radiation) in 1984 to support the grass-roots activism which had sought to extend application of the government subsidized medical care beyond Japanese denizens. The activism was led by a handful of Hiroshima survivors who saw the acute asymmetry between their officially sanctioned status in Japan and the Korean survivors who had left Japan to return to Korea after the latter's liberation from Japanese colonial rule. Radiation's immediate and belated effects on the survivors' bodies require long-term care and treatment and, yet, Korean *hibakusha* in Korea had not received the same level of attention as Japanese and Korean *hibakushas* living in Japan. It was the survivor-activists' embrace of radiation and its adverse, often fatal, effects that manifest unannounced and much belatedly that compelled them to organize a fund-raising campaign and instituted a network, with the involvement of local doctors such as those at Kawamura hospital, through which they could bring overseas survivors to Hiroshima for medical examinations and treatment. At the time of Blow's filming, Toyonaga Keisaburō, a schoolteacher who had led this activism from the outset, suggested that George Blondin and his fellow delegates visit Kawamura Hospital where Yi Hong-I, Roh Sŏk-I, and Jung Bunsŏn, among others, were staying for their three-months visit from South Korea.[9] For Toyonaga and others, their campaign did not aim to reconcile the colonial difference between the Japanese and Korean survivors (Yoneyama 1999, 169). Lobbying for the broader governmental and societal support through the rhetoric of equal treatment for all *hibakushas*, the campaign did not presume equivalences among different *hiba-*

9 Personal correspondence, September 15, 2022. See Toyonaga (2001) for his autobiography and the activism.

kusha experiences. Their activism did not propose to reconcile the asymmetry in the two positions of former colonizers and the colonized but, instead, embraced it as a historical present, while pushing for social and political changes so that the lingering radiogenic effects of cancer, malaise, alienation, poverty, and unending fear could be addressed and redressed simultaneously. In other words, their activism has long been propelled by the awareness about the geohistorical situatedness of Korean and Japanese survivors, just as much as it appreciated the specific ways in which the Sahtu Dene visitors have been made to suffer under settler colonialism. The encounter of the two colonialisms in Hiroshima could not be presumed and was therefore far from automatic. It was the product of the long, laborious local reckoning of colonial entanglements and incommensurability, a process subtended not by another universalism but radiontology.

Concurring with theater art scholar Theresa J. May (2010), who considers *Burning Vision* a performance of "transnational countergeography" which can render "previously invisible relationships explicit and meaningful," (7) Cornum concludes that the play makes "visible the intimate connection between settler expansion within North America and Western imperialism abroad while also posing possibilities for border-crossing and unlikely alliances" (2020). In contrast to the universalist extrapolations of *Burning Vision*, however, both their responses do not subordinate local imperatives for decolonization. Here, Cornum, along with May, finds a co-conjuring practice at play in Clements's complex and provocative confounding of time-space, by pointing to the way it sheds light on otherwise unknown connections and relationality. If etymologically 'to conjure' means not only to call upon but to also band together to adjure, co-conjuration can then be thought of as a practice insisting that the loss and violence experienced in different historical contexts at distant places and by alien people are evoked as related and grieved together. Co-conjuring thus sensitizes us to the gaps in our knowledge, urging us to wonder how a nuclear order we picture may begin to look differently if we learn to mourn the death of a Dene ore carrier, together with the long-overlooked suffering of survivors in Korea, the contaminated water affecting the Mirrar people, the disappearance of caribous in the Northwest Territories, and the continuing forced evacuation of human residents in some towns of Fukushima.

Our interconnected-ness, of course, is a result of the centuries-long expansion of the capitalist political economy which has thrived by the logic of equivalence and the ability to convert and instrumentalize all things and ideas as exchangeable across different geographies. We are connected as

well by our own implications in the histories of imperialism and colonialism which seem to have left no externality to the political modernity of the racialized Enlightenment and its regime of respectability. Yet, as Vimalassery, Hu Pegues, and Goldstein (2016) have problematized, these same structuring processes are sustained by the "colonial unknowing" which hides the very relationality and connectivity they themselves produce. The practice of co-conjuration I have tried to elucidate helps upset the comfort we take in the *un*knowing of intimate associations among different nuclear histories and irradiated geographies. It compels the sense of interconnectedness. Appreciating relational connectivity, however, cannot be confused with building another version of humanistic, universal knowledge based on putative sameness and surface commonality at the expense of the geohistorical specificities of radiontology. Co-conjuration, then, must hold in tension sensibilities for interconnectedness on one hand, and on the other, the ability to perceive radical incommensurabilities and to refuse false equivalences, assimilation, and facile analogies.

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Bibliography

Balibar, Étienne. 1991. "Is There a 'Neo-Racism'?" In *Race, Nation, Class: Ambiguous Identities*, edited by Étienne Balibar and Immanuel Maurice Wallerstein, 17–28. London: Verso.

Barker, Holly M. 2013. *Bravo for the Marshallese: Regaining Control in a Post-Nuclear, Post-Colonial World*. California: Wadsworth Cengage Learning.

Blow, Peter. 1999. *Village of Widows*. Canada: Lindum Films.

Blondin, George. 1990. *When the World Was New: Stories of the Sahtu Dene*. Yellowknife: Outcrop, the Northern Publisher.

Bothwell, Robert. 1984. *Eldorado, Canada's National Uranium Company*. Toronto: University of Toronto Press.

Canada-Déline Uranium Table. 2005. "Final Report: Concerning Health and Environmental Issues Related to the Port Radium Mine." Assembly.nu.ca. https://assembly.nu.ca/library/Edocs/2005/001195-e.pdf (last accessed September 23, 2017).

Chuh, Kandice. 2019. *The Difference Aesthetics Makes: On the Humanities "After Man."* Durham: Duke University Press.

Clements, Marie Humber. 2003. *Burning Vision*. Burnaby: Talonbooks.

Cornum, Lou. 2020. "Radioactive Intimacies: The Making of Worldwide Wastelands in Marie Clements's *Burning Vision*." *Critical Ethnic Studies* 6 (1). https://www.jstor.org/stable/48628949.

Darby, Jaye T, Courtney Elkin Mohler, Christy Stanlake, Kevin J. Wetmore, and Patrick Lonergan, eds. 2020. *Critical Companion to Native American and First Nations Theatre and Performance: Indigenous Spaces*. London: Bloomsbury Publishing.

Day, Iyko. 2018. "Beyond Atomic Beauty: Transnational Warping in Lisa Yoneyama's *Cold War Ruins*." *Amerasia Journal* 44(3): 83–88.

Endres, Danielle. 2009. "The Rhetoric of Nuclear Colonialism: Rhetorical Exclusion of American Indian Arguments in the Yucca Mountain Nuclear Waste Siting Decision." *Communication and Critical/Cultural Studies* 6(1): 39–60.

Eng, David. 2015. "Reparations and the Human." Lecture, May 19, Jackman Humanities Building, University of Toronto.

Genkaiken, ed. 2017. *Higashi Nihon daishinsaigo bungakuron*. Tokyo: Nanundō.

Gordon, Avery. 2008 (1997). *Ghostly Matters: Haunting and the Sociological Imagination*. 2nd University of Minnesota Press ed. Minneapolis: University of Minnesota Press.

Gilday, Cindy K. (2000). "A Village of Widows." In Gurcharan S. Bhatia and Gurcharan S. Bhatia, eds., *Peace, Justice and Freedom: Human Rights Challenges for the New Millennium*, pp. 107–119. Edmonton: University of Alberta Press.

Gray-Cosgrove, Carmella. 2015. "Bedrock Stories: A Critical Geography or Radium and Uranium Mining in the Sahtu Regions, Northwest Territories." M.A. Thesis, Department of Geography, Memorial University.

Hecht, Gabrielle. 2012. *Being Nuclear: Africans and the Global Uranium Trade*. Cambridge, Mass: MIT Press.

Henningson, David. 2007. *Somba Ke: The Money Place*. Film Makers Library.

Horowitz, Adam Jonas. 2011. *Nuclear Savage: The Islands of Secret Project 4.1*. San Francisco: Video Project.

Jetñil-Kijiner, Kathy. 2017. *Iep Jāltok: Poems from a Marshallese Daughter*. Tucson: The University of Arizona Press.

Johnston, Barbara Rose, and Holly M. Barker. 2010. *The Consequential Damages of Nuclear War: The Rongelap Report*. Walnut Creek: Left Coast Press.

Kimura, Saeko. 2013. *Shinsaigo bungakuron: atarashii Nihon bungaku no tameni*. Tokyo: Seidosha.

Kimura, Saeko. 2018. *Sonogo no shinsaigo bungakuron*. Tokyo: Seidosha.

Komori, Yōichi. 2014. *Shisha no koe, seija no kotoba: bungaku de tou genpatsu no Nihon*. Tokyo: Shinihon Shuppankai.

Kuznick, Peter. 2011. "Japan's Nuclear History in Perspective: Eisenhower and Atoms for War and Peace," Bulletin of the Atomic Scientists, April 30. Updated June 9, 2023.
https://thebulletin.org/2011/04/japans-nuclear-history-in-perspective-eisenhower-and-atoms-for-war-and-peace-2/#post-heading.

LaDuke, Winona, and Ward Churchill. 1985. "Native America: The Political Economy of Radioactive Colonialism." *Journal of Ethnic Studies* 13(3): 107–132.

Lippit, Akira Mizuta. 2005. *Atomic Light*. Minneapolis: University of Minnesota Press.

Margarula, Yvonne. 2011. "Yvonne Margarula's letter to the UN expressing solidarity with the people of Fukushima." Updated June 9, 2023.
http://static1.1.sqspcdn.com/static/f/356082/11963020/1303983838710/Yvonne+Margarula+Fukushima+Lett.

May, Theresa J. 2010. "Kneading Marie Clements' Burning Vision." *Canadian Theatre Review* 144: 5–12.

Matsunaga, Kyōko. 2019. *Hokubei senjūmin sakka to <kaku bungaku>: apokaripusu kara sabaibansu e*. Tokyo: Eihōsha.

Matsunaga, Kyōko. 2020. "Umi o wataru uran no monogatari: 'kafu no mura' to Kanada senjūmin bungaku." *Ekokuritishizumu rebyū* 13: 43–53.

McCall, Sophie. 2012. "Linked Histories and Radio-Activity in Marie Clements' Burning Vision." In Godard, Barbara, and Eva C. Karpinski, eds., *Trans/Acting Culture, Writing, and Memory: Essays in Honour of Barbara Godard*, pp.245–265. Wilfrid Laurier University Press.

Mohler. Courtney Elkin. 2015. "A Burning Vision of Decolonization: Marie Clements, Ecological Drama, and Indigenous Theatrical Praxis." *Ecumenica* 8(2): 9–26.

Nancy, Jean-Luc. 2015. *After Fukushima: The Equivalence of Catastrophes*. New York: Fordham University Press.

Nixon, Rob. 2013. *Slow Violence and the Environmentalism of the Poor*. Massachusetts: Harvard University Press.

Ōishi, Matashichi. 2011. *Bikini Jiken no shinijitsu: inochi no kiro de*. Tokyo: Misuzu Shobō.

"Shushō, genpatsu zōsetukeikaku o hakushi minaoshi Fukushma Daiichi subete hairo," *47 nyūsu, accessed March 31, 2011,* http://www.47news.jp/CN/201103/CN2011033101000461.html (site discontinued).

Smith, Annie. 2010. "Atomies of Desire: Directing Burning Vision in Northern Alberta." *Canadian Theatre Review* 144 (144): 54–59.

Takahashi, Hiroko. 2012. *Fūinsareta Hiroshima, Nagasaki: Bei kaku jikken to minkan bōei keikaku.* Tōkyō: Gaifūsha.

Teaiwa, Teresia K. 1994. "bikinis and other s/pacific n/oceans." *The Contemporary Pacific* 6 (1): 87–109.

Toyonaga, Keisaburō. 2001. "Colonialism and Atom Bombs: About Survivors of Hiroshima Living in Korea." Eric Cazdyn and Lisa Yoneyama, trans. In T. Fujitani, Geoffrey M. White, and Lisa Yoneyama eds., *Perilous Memories: The Asia-Pacific War(s)*, pp.378–394. Durham: Duke University Press.

Van Wyck, Peter C. 2010. *The Highway of the Atom*. Montreal: McGill-Queen's University Press.

Vimalassery, Manu, Juliana Hu Pegues, and Alyosha Goldstein. 2016. "On Colonial Unknowing." *Theory & Event* 19 (4): 1–13.

Voyles, Traci Byrnne. 2015. *Wastelanding: Legacies of Uranium Mining in Navajo Country*. University of Minnesota Press.

Wallace, Molly. 2016. *Risk Criticism: Precautionary Reading in an Age of Environmental Uncertainty*. Ann Arbor: University of Michigan Press.

Yoneyama, Lisa. 1999. *Hiroshima Traces: Time, Space, and the Dialectics of Memory*. Berkeley: University of California Press.

Yoneyama, Lisa. 2016. *Cold War Ruins: Transpacific Critique of American Justice and Japanese War Crimes*. Durham: Duke University Press.