Northern War Stories: The Dene, the Archive, and Canada's Atomic Modernity

From *Witness: Perspectives on War and Peace from the Arts and Humanities*, edited by Sherrill Grace, Patrick Imbert, and Tiffany Johnstone. McGill-Queen's University Press, 2012, pp. 174-188.

Peter C. van Wyck

Site

Great Bear Lake in Canada's Northwest Territories is a vast inland sea; nearly thirty one thousand square kilometers. On the far eastern shore, where no one lives today, just below where the tree-line cuts across the immense glacial body of the lake, carved into barely fathomable depths sometime in the late Pleistocene, at the far end of what is now called McTavish Arm, buttressed in ancient granites by the very western edge of the Precambrian Shield, lies Port Radium. This land, home to the Sahtú Dene for some number of millennia, is also a site of considerable significance to Canada's atomic history. A point of origin, one might say, where a frontier economy with its currency of fur, shifted awkwardly toward the very contemporary projects of an atomic modernity. From here, on Great Bear Lake, uranium ore was transported south by river and rail, leaking as it went, for processing at Port Hope, and then into the productive centers of World War Two – The Manhattan Project as it is conventionally known – subsequently extending itself over the clear morning skies of Hiroshima and Nagasaki, and back again into the Dene community at Déline in the form of cancers, stories, addictions, and depression. This is a very long and complex route, in part

material, topographic, narrative, archival and memorial. It has come to be called the Highway of the Atom.[i]

For many in this North the Highway of the Atom pertains to a history that is very much alive in the present. If one is prepared to follow this route, it tells a story, or stories – fragile, marginal, unasked, and unheard – about history and memory, landscape and trauma, and ethics. But also, and significantly, it tells us about Canada's silence on topics pertaining to its wartime activities. It tells us of a piece of marginal history, at the dawn of the Second World War, where a wilderness outpost became a nexus of connections and flows linking the pre-modern routes, practices and peoples of the fur trade and the atomic modernity in which, quite suddenly, Canada found itself. It tells us also about a profoundly occluded vision available to those of us at a distance from all of this. And indeed this impaired vision supports and ratifies the very idea that "we" are *at a distance*, to begin with. For the southern researcher it poses important challenges – philosophical, archival, methodological – for thinking through some of the warring atlas of calamity that was the 20th century.

Archive

I want to tell you a story that begins (or ends) at a place not far from where I now sit. Library and Archives is home to some 34 meters of objects – more often called records – belonging to Eldorado Nuclear Limited (ENL).[ii] The corporate predecessor of ENL, Eldorado Gold Mines, was the central corporate protagonist in this piece of marginal history. From the *terra nullius* of the mid-Depression Canadian North, Eldorado was to "invent" a decidedly modern North, not once, but twice, from a site on Great Bear Lake, at a place known to some as Port Radium. From this place, Eldorado pioneered two uniquely modern Canadian staples.

This particular North began in 1930 with one of the richest radium and silver mines in the world – a "mineral museum," it was called, featuring an *abécédaire* of minerals

and metals, but most valuable of all was the radium-bearing pitchblende. At the time (and ever, as far as I know) radium was the most valuable commodity on earth. It was held to be a substance of miraculous power; it was *action* at a distance, a tonic for health, and scourge of the cancerous cell. Reminiscent of the recent and ongoing public furor concerning Atomic Energy of Canada's isotope production (nuclear McGuffins, for sure), radium – due to its apparent inexhaustibility – was once poised to fulfill a promise of medical democracy – radium for all. In the second instance, this time at the dawn of the Second World War – with an Eldorado about to be transformed and fortified as a corporation of the Crown – it was seen as a critical and strategic Allied source of uranium and technologies of refinement. This ore made its transformed debut at Alamogordo in July of 1945; its entrance was reprised shortly thereafter, over Hiroshima and Nagasaki.

The aptly named Eldorado archive, vaulted in the archives of Library and Archives Canada is a kind of black box, a grail, on the Highway of the Atom. It pertains to the development of the radium mine from 1930; its radium refinement activities and markets from 1932; the closure of the mine in 1940; its re-opening in 1942 as a rich source of uranium; its strategic reinvention as a Crown Corporation in 1944; the dealings between Eldorado and the Canadian, American and British governments concerning the procurement, refinement and sale of uranium; and the general corporate minutiae concerning transportation, health and safety, human resources, and so on. It contains papers – the reports, minutes, and drafts, the marginalia and maps, and photographs, sketches, tables and figures – that collectively might, one could imagine, divulge something about the details of Canada's involvement in a war effort to invent something that promised to eradicate war itself. Yet, the material contained in the archive has remained largely inaccessible to researchers – the majority of its contents deemed to be secret – since the time of its deposit.

The contemporary published record on all of this is scant. The circle of citation orbits around two corporate biographies – one on Eldorado, and another on Atomic Energy of Canada Limited – and both of these volumes were researched and written by the historian Robert Bothwell under contract to the corporations involved.[iii] Nonetheless, this work (and to a lesser extent the AECL history), have and continue to function as authoritative, historical datum for virtually all research, journalism, activism, dispute, and land claim-related work that touches on this history; that is, the work of a single author under a contractual arrangement with a corporate body, has come to constitute the field of historical facts for all questions pertaining to Eldorado.[iv] The archive itself remains a largely unexplored repository – a phantastic abridgment of testimonies and stories – of considerable interest to those who may wish to understand this time through the optic of what was kept and concealed, of the remains. Yet we do not know what it might divulge. It remains a silent presence.

Like so many projects that have and continue to take place in the North of Canada, this archival silence refers to the stories of those people that actually live there, that laboured on the Highway of the Atom in a project of a war they had no knowledge of, who watched as their lands were contorted into a site of "national self-realization" (Evenden 1999, 165).[v] Yet their story, their stories, remain closed for us in different ways as well. Of course they are inaccessible, if we mean by that geographically remote; a pious and ironic alibi. But more than this, they are closed because those of us from elsewhere have not had ears with which to hear them. It seems clear as well that voices from the North seldom gather sufficient force to rise above the colonial din of southern, settler life. The secrecy around the central archival record, a residual and lingering piece of the wartime exception itself, adds only another measure of pathos to it all.

The Dene

"The question of the archive is not . . . a question of the past" (Derrida 1995, 36).

About the time I was beginning to think about all of this, I saw a documentary film by the Canadian filmmaker, Peter Blow. His film, *The Village of Widows*, which aired on the Canadian cable channel *Vision TV*, was exactly the history I was thinking about; only it was told from the point of view of the Sahtú Dene of Great Bear Lake (Blow 1998).

Made from contemporary video shot on location by Blow and his crew, extensive archival footage, photographs, newsreels – he did a lot of research – *Village of Widows* is a harrowing tale about which, at the time, almost no one south of Yellowknife knew anything. So he told the story. *Village of Widows* relates the experience of the Dene, who have resided in the region for 3 or 4 thousand years – or forever, if you ask them – and their involvement over a (comparatively brief) period of 30 years with the development of these exceedingly modern staples on their land. They were deeply involved, as Blow's film demonstrates, in the handling and transport of radioactive pitchblende ores from the mine-site on Great Bear Lake. With testimony from Elders and other community members, Blow's film reveals an unknown narrative concealed within a story itself largely unknown. The Dene had also been involved at and around the mine site in various support roles – from providing moose, caribou and fish for the mine's kitchen, firewood and building timbers, beading, crafts and clothing, and other miscellaneous jobs. Several Dene men were employed as river boat pilots on the Great Bear River. The Canadian Government has concluded there had not been any Dene miners (CDTU, Canada-Déline Uranium Table 2005). I'm not so sure. The answer to this probably remains to be unearthed in the archives.

For the Dene, as it appears to me at a distance, the film was instrumental in a process of completely resignifing the preceding half century.[vi] It is not that the pieces started

to fall into place; it was just pieces. Falling. An imperceptible tide of suspicion washed over the past. In a stroke, lives lived in and around the mine, on the river and the portage, on the lake, were transformed into something quite different. The health and abundance of fish and game, the unimaginably vast lake, the land, upon which everything depends, all this was thrown into question. Domestic life, the very intimacy of the home, the *oikos*, was also and retroactively contaminated. Families began to recall that they had been living with radioactive ore dust, ore bags repurposed for domestic and sanitary uses, contaminated building materials scavenged and used elsewhere, and that standards of hygiene appropriate to hazardous radioactive materials and gasses (radon) were not enforced, much less taught or recommended. Details gathered new and grave significance. Dust and dirt became "tailings." Hands not washed became precautions not taken. Caribou and fish freighted with risk. Even, and perhaps particularly, the deaths of those who had already passed were no longer secure. Symbolic death denied to the dead.

In this way, the past, their past, was itself rendered toxic via a retroactive catastrophe of knowledge; a traumatic reversal toward events not experienced as traumatic in the first place. In any case, as a result of this labor, the Dene contend that they have suffered the loss of many of their kin, men mostly, and children. Cancer.[vii]

As it turned out, and quite unbeknownst to them, not only had the radium and uranium mined from their land contaminated an unknown extent of their waters and lands, animals and peoples, but the uranium had come to be used in the development of the bomb, and in the massacre of Japanese civilians – as we and the Dene were told – to save lives, and end a war in which the Dene at least had had no hand. This was a revelation. Nearly a generation had passed. The miners: gone. Boats and barges beached and sold. It was about the middle of the 1980s that the Dene became *officially* – that is, publicly – aware of the nature of their historical activities; until then, it hadn't really been a question.

That is, their collective history project did not register the fact of the Highway, its purpose, and the threat posed by its material, memorial, and symbolic legacy. Contamination. The absolute invisibility of radiation. From Port Radium to Déline, down the river to Tulita, then up the Mackenzie and into Southern Canada, and well beyond. The rocks from their land, the cancers in their community: these things had not relayed into correct concepts. Not until then.

By the mid-1990s the Dene had become well informed about the connections between the mine, the war, their labour and the health of their community. The reaction was complex. Certainly it politicized the community around questions of health and radiological contamination. A report was authored that collected their memories and assembled what little documentation was then available (Déline Dene Band Uranium Committee 1998). Notwithstanding their general invisibility to Bothwell, his book provided the historical foundation of the report. Their task was to write the history of their exclusion, using the very documents that excluded them. Nonetheless, what they were able to show was that they were in fact there; that they had worked for Eldorado in a number of capacities; that the Government was fully aware of the danger posed in the mining, handling, and processing of pitchblende ores; and that they had never been told any of this.

As it appears to me, in the wake of these realizations the Dene came to interpret their role in a most complex manner; as both accomplice *and* victim. As both agent of war, and subject to it; in both cases unwittingly. One can see something of this in stories that have circulated in recent years.

I relate here a story told by the late George Blondin that refers to an ancient Dene prohibition about the very site of Port Radium.[viii]

In the old days, the Sahtú Dene used to travel across the lake towards the Barrenlands every summer, to hunt caribou. Some of these Dene hunters were paddling near shore on the east side of Sahtú (where Port Radium is today) and they came to a place where rocky cliffs rise high over the water. Like all Dene, they believed it was bad medicine to pass in front of this rock: it was said that loud noises came from within it. These particular hunters pulled their canoes out of the water, but decided not to portage . . . . Instead they camped near the cliff. During the night everybody was awakened by the singing of the medicine man . . . . In the morning, when the medicine man stopped singing the people at last spoke to him . . . . "Why did you sing all night . . . ?"

“I foresaw many things and I was disturbed," replied the medicine man . . . . The medicine man told them of his strange vision. "I saw people going into a big hole in the ground – strange people, not Dene. Their skin was white . . . [and] they were going into a hole with all kinds of metal tools and machines . . . . On the surface where they lived, there were strange houses with smoke coming out of them . . . . I saw . . . big boats with smoke coming out of them, going back and forth on the river. And I saw a flying bird – a big one. They were loading it with things . . . . I watched them and finally saw what they were making with whatever they were digging out of the hole – it was something long, like a stick. I wanted to know what it was for – I

> saw what harm it would do when the big bird dropped this thing on people – they all died from this long stick, which burned everyone. The people they dropped this long thing on looked like us, like Dene . . . . But it isn't for now; it's a long time in the future. It will come after we are all dead."
>
> (Blondin 1990, 78-9)

I will note just two things here. First, this was the story that was fore-grounded by the Dene when they came to realize what they had been involved with in their relations with Eldorado, and which they published in 1998 in the community-based report, *They Never Told Us These Things* (Déline Dene Band Uranium Committee 1998). It is at once a kind of oracular speech, attributed to the greatly respected community prophet Ehtseo Ayah (1858-1940), Grandfather as he was called (See Blondin 1997, 109-13). *We knew it all along*. But also striking about this story is its instability; a prohibition – stay away from this place – a transgression – why did they camp there to begin with? – and a prophetic moment follows. The function of this story is so central that this tension is fascinating. As the story that comes into circulation at the very moment when the past, their past, is undergoing massive revision in the light of their actual involvement, it seems to say both that they already knew (via Ayah's vision and story of the future), and that they should have known better.

In counterpoint to the *if only we had listened to what we already knew* tone of this story, another began circulating – a kind of creation story – in which the genesis of the mine itself was predicated on a theft of a pitchblende-bearing rock. In this story it is Gilbert LaBine – the main protagonist in white mining mythology – who steals a rock by trickery from a Dene man by the name of Beyonnie. The stolen rock revealed the secret of the radium and uranium

folded into the Precambrian hills, for which the Dene, of course, were never properly compensated.

Punctum

They had discovered many things, of course, and foremost they had discovered that they had been, by virtue of their actions, collaborators. The Dene disaster required that something be done. It was procedural. It required that a responsibility be acknowledged, and acted on; an apology was to be made. In other words, for the Dene, the entire apparatus of implication, all the exceptions called into presence by the war, the mining company, the crown corporation, the processing facilities in Port Hope, the secret laboratory at University of Montréal, the inter-jurisdictional industrial-military complex (the British, the Canadians and the Americans), the principal nations involved in the uranium economy (the Belgians, and the Germans), the entire route through which those materials passed, infinitely beyond their sphere of their knowledge, influence, and concern, was by-passed.

In August 1998, to coincide with the 53rd anniversary commemorative events of August 6, a delegation of ten Dene went to Japan, to Hiroshima.[ix] They went to the end of the circuit to convey their apologies for having been involved, and to acknowledge their responsibility. What had not been registered as traumatic in the first instance – or at least no more or less traumatic than any other of their historical and ongoing contacts with Europeans and southerners – was in a way even less so in the second (Laplanche 1976, 41-3). This was the *punctum* that drove me to this work. It leads me to ask how it is that one comes to assume responsibility for that over which one has no control. How? How in the midst of recognizing their own disaster, did they attend to the Japanese survivors? What economy could account for this? Was it, perhaps, a gift? Or was it a piece of ethical behavior called into presence by their disaster itself?

Struggle though I have, I cannot answer this question. It occurs to me though that Rudy Wiebe offers us a clue. He writes: "history sometimes offers us a moment, a crack as it were, where a certain light can illuminate our ignorance" (2003, 130). The crack of interest to him – in the supplementary Coda to the reissued *Playing Dead* – takes us to Fort Providence, a Hudson's Bay Company post, in December of 1821, where Franklin, Richardson, a sailor and a Metis translator have been brought, barely alive, having been rescued by a group of Dene (Yellowknife Indians). Franklin has explained to the Dene that the supplies from which he was to pay them for their generosity in (again) having saved them by sharing their meager supplies with the English exploration party had not, and would not, arrive that season. No supplies meant no payment could be made. As Richardson records this in his diary, upon hearing this sad news the Dene leader Akaitcho noted their disappointment. Richardson records Akaitcho's words:

> "The world goes badly," he said, "all are poor. You are poor, the traders appear to be poor, and I and my party are poor likewise, and since the goods have not come in, we cannot have them. But I do not regret having supplied you with provisions, for a Red Knife can never permit a White man to suffer from want on his lands without flying to his aid . . . . At all events," he added in a tone of good humour, "it is the first time that the White people have been indebted to the Red Knife Indians." (Wiebe 2003, 131)

Wiebe is fascinated by this moment, this crack, as am I. As Wiebe sees it, Akaitcho is telling his English friends: "This is our land. You came here without us inviting you, but we fed and clothed you so that you could live here. After you left us, and we heard

you were dying, we went to your aid immediately. We saved your lives because it is the nature of Dene people to help every human being" (Wiebe 2003, 141).

Perhaps, then, just perhaps, this is nothing new. I have come to think that the Dene's response to their slow-motion, retroactive disaster was irreducibly ethical – they had nothing to give. Yes, *the world goes badly*. Their actions did indeed graft something onto the real; it was profoundly ethical in this sense at least (Lacan 1992, 21). Yet an analytic optic on this is somehow not quite right. Ethics is more than damage control. More than reactive. Notwithstanding the conceptual seductions of trauma theory, one must be careful; the real remains a theoretical problem, not an alibi for, or gesture toward silence.

One may wonder if there are perhaps the seeds of a categorical imperative here, recast as something strange: behave toward the other *as though you were responsible* for their misfortune? Is that it? What then would constitute a Dene model of the accident? Is it that over which one has no control, and in spite of that (or, as I come to suspect, *because* of that) it is that for which one comes to assume responsibility? The archive ratified a memory of a trauma never experienced as such, and the Dene saw in their own suffering an ethical inducement toward a responsibility *for* the other. The mind reels; or mine does. And the mine did.

Erasure, redux

Some things we know. After their travels to Japan, in the late 1990s the Dene attempted to establish a claim with the Government of Canada. They wanted to know what the Government knew, and when, and why it failed to warn them. They wanted to know what legacy remains from this time. They wanted to know what happened, and why they were never told.

After an appropriate period of stalling, the Government agreed that some of the Dene's questions deserved to be answered, and so struck a five-year inter-jurisdictional investigative mechanism, the Canada-Déline Uranium Table (CDUT) that concluded its work in 2005.[x] The terms of reference of this body concerned the remediation of the mine site, and other contaminated areas, health and environmental studies and monitoring, and the question of compensation. All of this amounted to a very large piece of work in the community in the attempt to quantify and legitimate their resignifed history. That is, people came to understand that what they had actually been doing was quite different indeed from what they had *thought* they were doing; this is itself is cause for anxiety.

This recent formal process culminated, as many such northern events tend to do, in the production of a report: the "Canada-Déline Uranium Table Final Report" (CDUT, Canada-Déline Uranium Table 2005). As a document of the State, it is a tragic piece of work and a chronicle of disappointments suffered by a community. The report's main finding is that there was insufficient evidence to link the Dene's work for the mining company, Eldorado, to the cancers experienced in the community. Sorry.

The CDUT concluded that in fact all of the fear and anxiety that has gripped the community since their toxic history was revealed to them was groundless. No contamination of the lake would harm them, although considerable contamination was located; indeed some 740,000 tons of mine tailings were deposited directly into the lake (Canada-Déline Uranium Table 2005, 4). No site contamination would affect the wildlife they depend on; although considerable site contamination was located; some 170,000 tons of tailings remain on the surface of the site at Port Radium, some buried, some exposed (Canada-Déline Uranium Table 2005, 4). Although the document identified specific areas that exceed allowable radiological activity, and several areas with other forms of metal contamination, no danger at the site would remain; that is, once appropriate remediation had taken place. Indeed, it turns

out, their involvement living and working near the mine and along the transportation corridor could not be said to have exposed them to harmful levels of radiation (by today's standards).

As per the mandate of the CDUT, a fact-finder was engaged (Intertec Management Limited) to gather and assemble "all known information about this mine and its operations" (Canada-Déline Uranium Table 2005, iv). It is crucial to realize that central archive at Library and Archives Canada remained secret and inaccessible to the fact-finder researchers. "[A] request for information to Canada Eldor Inc., which now holds the records related to the operation of the Port Radium uranium mine, was declined with no reasons provided" (Canada-Déline Uranium Table 2005, 24; see also Intertec Management Limited, 2004). Nonetheless, it was determined that one or two additional deaths might have taken place over and above the "normal" expected cancer deaths for a similar statistical population. "It is not possible to know for certain if the illness or death of any individual ore carrier was directly caused by radiation . . ." (Canada-Déline Uranium Table 2005, vi). An attempt was made to join this study to other research that has been done on cohorts of miners from Port Radium, and other mines of that era. Even though the National Research Council published research to the contrary in 1935, the report claims that the understanding of radiation and health at the time of the mine was not advanced with respect to understanding long-term, sub-acute effects (see Leitch 1935, 11). So much for that.

So while the community has been injured because of radiation, concludes the report, it has not been injured *by* it. "One of the key findings by the physicians who conducted the assessments was a profound and pervasive fear of radiation and a tendency to blame any and all health problems on the mine and the legacy of the mining activities" (Canada-Déline Uranium Table 2005, 31). And whether or not this is true, it has become so. It is a tragic state of affairs in which the community's anxiety is at once acknowledged and invalidated. At least

insofar as its ground lies not in the past, but in the present. *A profound and pervasive fear of radiation*. Should there be any other kind?

That the cancer is a nonstarter should not be surprising. Epidemiological arguments are a tough game that select for aggregates, robust numbers, and rhetorically skilled practitioners. For example, between 1991 and 2001 there were forty-three deaths in Déline. On the face of it, this seems like a lot. And the cancer-related deaths during this period were 5 percent greater than in the total population of the Northwest Territories. This also seems like a lot. However, this difference amounts to only two additional deaths over a ten-year period. Aggregates in the North are just not that big. The numbers, as numbers, are too small to do the necessary work within an epidemiological frame; you just can't get there from here. In Henningson's recent documentary *Somba Ke: The Money Place*, Rosalie Bertell makes the argument that assessing the historical effects of uranium on the population of Déline cannot reasonably be done by using death records alone. To do so is to elide the burden of radio-toxicity that is already present as a function of their historical exposure. Bertell maintains that the only way to do this kind of investigation (she apparently offered this to the community) is to do blood and urine analyses, which would at least allow for correlation with exposure. (Henningson 2007) For the Final Report, the only statistically relevant expression of the Dene's grievance with the Canadian government is a body count. Yet the testimony of their dead has proven insufficient. Once again, the living are passed over in silence.

In any case, the upshot is that the community becomes sick in another sense. One must begin to look to other causes, to dis-junctures with traditional practices, to the histories of colonialism, to alcoholism, to nutrition, to traumatic stress, depression, and so on. But the specific practices around mining and transporting radium and uranium have now been effectively exonerated. And the community is made responsible for their own misery.

To read this document, the *Final Report*, is to remark how little the authors were able to discover about the mine and its operation. Even after engaging a fact-finding consultant, so very little is known to them.[xi] The report, the "Final Report," is cloaked in a language of adequacy. It acknowledges that there is much more to be known, that many questions were left unanswered, but through the bureaucratic logic of the situation, and the instrumental demands of the mechanism, the poverty of facts became the facts nonetheless. So in lieu of establishing the state of the archive (as per the terms of reference), "information about working conditions, and employment histories was largely gathered from oral histories," from community members. That this is the very testimony that was suspect to begin with – at least in so far as it was the specific recollections of ore carriers that the fact-finding sought to clarify from the outset – is simply ironic (Canada-Déline Uranium Table 2005, 27).

History

I might ask: *what, then,* is *the lesson of history here?* Clearly, this is not just about a war, about a country, "ours," a home and native land responding to decidedly real threats to freedom. The lesson here is both more and less than this, for it is not history that is doing the teaching; not directly, at least. Here history and memory and trauma and land, *and* ethics are terms in a strange algebra of invention; one that poses such questions as what it might mean to assume responsibility for events over which one had no control, or knowledge.

Yes, this problem is ours. And as other contributors to this volume would concur, it is a problem for memory. It is twofold, at least. First, how does one come to constitute in memory something that was not fully experienced to begin with, in the face of an archive that conceals itself, and a history which consumes itself, its witnesses, and its evidence. Second, and perhaps even more pressing, how to bring into memory, and thus bear witness to events

which we do not wish *to* remember, nor to *be* remembered for.[xii] The strange objects of our time cry our for modes of conceptualization that might lead us to such questions; these questions yet to come. They might.

---

[i] This text is selected and revised from a presentation given at the RSC: Academies of Arts, Humanities and Sciences of Canada symposium, Cultures of War and Peace, November 2008, and my *The Highway of the Atom*. My thanks to McGill-Queen's for permission to do so.

[ii] Only a fraction of this material – some 5-10% according to the archivist currently in charge of this collection – has been previously cleared for viewing by researchers.

[iii] The *Eldorado* volume, written between 1981 and 1984, is not historically inclusive (covering the company history only until 1960), nor is it a particularly critical work, nor does it give much consideration to issues of health and safety or aboriginal involvement, nor did Bothwell consult (or address) the Eldorado archive comprehensively. And while he was very interested in Canada and Eldorado's relationship to various war-related activities with the Allied Forces, in particular those supporting the control and procurement of uranium, and the bomb's development, the Indian labour force in the North was invisible to him. It is unclear why. Bothwell acknowledges that he had the support of Eldorado, wide access to its directors, employees, former employees and resources, and significantly, access to the company records *before* they were put on deposit with Library and Archives Canada in the fall of 1984.

[iv] In addition to Bothwell's work, and the inaccessible company papers, other sources of archival documents exist, although Ottawa remains the resumed El Dorado, so to speak. Visually, the mine is exceedingly well documented. These are in addition to the hundreds of photographs taken by the scores of journalists and other visitors to the mine over the course of its history. A German immigrant and photographer by the name of Henry Busse established a photography

---

club at Port Radium in the mid-1930s, and as a result there are thousands of photographs of life at and around the mine. Many of these photographs and a number of other documents, maps and journals are in the holding of Northwest Territories archives at the Prince of Wales Northern Heritage Center in Yellowknife. The offices of The *Northern Miner Magazine* in Toronto have very a good set of files with clippings covering the entire period from 1929 on. The museum in Norman Wells has an ongoing exhibit of documents and images from Port Radium. Two former employees have published books chronicling their time in the North: Fred "Tiny" Peet's *Miners and Moonshiners*, and Robert Jenkins' *The Port Radium Story*. There is also a very interesting and quite detailed unpublished manuscript by George Inglis entitled "History of Northern Transportation Company and Eldorado Nuclear Limited" that can be consulted in Ottawa. Eldorado began its own historical work in the late 1970s when it hired Jane Mingay to conduct an oral history project with former Eldorado employees.

[v] Although Evenden is writing in relation to Harold Innis' North attachments, it captures well the national mood that pervaded Canada's northern aspirations at the time.

[vi] Blow's film was also responsible for bringing a great of attention to the village of Déline, to the site of Port Radium and other significant locations along the Northern transportation corridor, to the very fact of Canada's integral role in the development of the bomb, and to the allegations that the former ore carriers and workers were dying of cancer as a result of their unprotected labors. In particular, Andrew Nikiforuk of the *Calgary Herald* wrote extensively about the "Village of the Widows," and the history it referenced. And other media outlets – e.g., CBC's "The National" program, Maclean's magazine, the *Toronto Star* – throughout Canada and elsewhere also covered the story in relation to their trip to Japan, and the community in relation to the *Village of Widows* documentary.

[vii] Although the dangers of mining and handling radioactive materials were well known to both the American and Canadian governments, neither the miners, nor the Dene was given much at all in terms of training or awareness about the dangers of the materials they were handling, the radon they were inhaling, nor the wastes that were strewn about at the mine and in the lake, at the airfield and the portages, and elsewhere on their land. There are many sources documenting the state of knowledge about the dangers of radioactive materials, particularly radium, that date from this period. In the United States, the industrial practices for the use of radium resulted in a considerable body count, and a sharp learning curve (in that order, sadly). In Canada the Federal government produced several key documents pertaining both to the dangers and best practice for handling such materials. See W.R. McClelland, "Precautions for Workers in the Treating of Radium Ore"; W.B. Timm, "Health Hazards in the Production and Handling of Radium"; and, John D. Leitch, "Health Hazards in the Radium Industry."

[viii] George Blondin died on October 12, 2008. Both he and his father worked at Port Radium.

[ix] As it was reported in Japan on the occasion of their visit, the "miners" have suffered, "both as victims of radiation exposure, and as victimizers who helped make the atomic bomb." Kyodo News International, "10 Ex-Miners from Canada to Attend a-Bomb Ceremony."

[x] The participants in this mechanism were the Déline Dene Band, Indian and Northern Affairs Canada (representing Health Canada and Natural Resources Canada), and the Government of the Northwest Territories.

[xi] Intertec Management Limited was engaged as the Fact Finding consultant. Following publication of the Final Report of the CDUT, Walter Keyes, a pronuclear, anti-regulatory lobbyist and director of Intertec went on to write a scathing and distorted review of *Village of Widows* making clear to me that the fact finding work for the Dene had been catastrophically

biased from the outset. See Walter Keyes, "A Review of the Video "Village of Widows": A Lesson of how much more powerful emotions can be than facts," and my *Highway of the Atom.*

[xii] I will resist drawing conclusions here. My sense is that any critical engagement with stories – whether those leaked from metropolitan archives, or those told by peoples of North – must stop short of interpretive closure. The ellipsis becomes a political and critical act… *both* deference *and* deferral.

Bibliography

Blondin, George. 1990. *When the world was New: Stories of the Sahtú Dene*. Yellowknife: Outcrop.

– – –. 1997. *Yamoria the Lawmaker: Stories of the Dene*. Edmonton: NeWest Press.

Blow, Peter. 1998. *Village of widows*. DVD. Directed by Peter Blow. Toronto: Lindum Films.

Canada-Déline Uranium Table. 2005. *Canada-Déline Uranium Table Final Report: Concerning health and environmental issues related to the Port Radium mine.* Ottawa: Ministry of Indian Affairs and Northern Development.

Clark, Claudia. 1997. *Radium Girls: Women and industrial health reform: 1910-1935*. Chapel Hill, NC: University of North Carolina Press.

Déline Dene Band Uranium Committee. 1998. *They never told us these things: A record and analysis of the deadly and continuing impacts of radium and uranium mining on the Sahtú Dene of Great Bear Lake*. Northwest Territories, Canada. Déline: Dene First Nation of Déline, (*Sahtúgot'ine*).

Déline Uranium Team. 2005. *If only we had known: The history of Port Radium as told by the Sahtuot'ine*. Déline, NWT: Déline First Nation.

Derrida, Jacques. 1995. Archive fever: A Freudian impression. *Diacritics* 25, no. 2 (Summer): 9-63.

Evans, Robley. 1933. Radium poisoning: A review of present knowledge. *American Journal of Public Health* XXIII, no. 10 (October): 1017-23.

Evenden, Matthew. 1999. The northern vision of Harold Innis. *Journal of Canadian Studies* 34, no. 3 (Autumn): 162-86.

Gernsback, Hugo. 1932. Radium – boon or menace? *Everyday Science and Mechanics* **Volume, and issue number** (June): 14-16, 76-78. (**Why are there two sets of page numbers?**)

Library and Archives Canada Eldorado Nuclear Limited fonds, R1220-0-5-E, Vol. 155, Series 3-b, Mingay Historical Project – "Eldorado's Historical Resources" – Report of the Jane Mingay History Project.

Hatfield Consultants. 1985. *An evaluation of environmental conditions associated with an abandoned uranium mine at Rayrock, and Echo Bay*. Yellowknife: Science Institute of NWT.

Henningson, David. 2007. *Somba Ke: The money place*. DVD. Canada: Urgent Service Films, Ltd.

Intertec Management Limited. 2004. *Port Radium Fact Finder Report*. Ottawa: Natural Resources Canada and the Déline Dene Band.

Library and Archives Canada Eldorado Nuclear Limited fonds, R1220-0-5-E, Vol 166, Historical miscellaneous – History of Eldorado Nuclear Limited and Northern Transportation Company Limted – "The Eldorado Story" written 1970 to 1973 by George Inglis.

Isacsson, Magnus. 1990. *Uranium*. DVD. Directed by Magnus Isacsson**.** Ottawa: National Film Board of Canada.

Jenkins, Robert G. 1999. *The Port Radium Story*. Summerland, B.C.: Valley Pub.

Keyes, Walter. 2005. A review of the video "Village of Widows": A lesson of how much more powerful emotions can be than facts. *CNS Bulletin* 26, no. 4 (December): 45-46.

Kyodo News International. 1998. "10 Ex-miners from Canada to attend A-Bomb ceremony." July 24. http://www.thefreelibrary.com/10+ex-miners+from+Canada+to+attend+A-bomb+ceremony-a050189705">10 ex-miners from Canada to attend A-bomb ceremony.

Lacan, Jacques. 1992. *The seminar of Jacques Lacan: Book VII: The ethics of psychoanalysis 1959-1960*. Trans. Dennis Porter. New York: W.W. Norton Books.

Laplanche, Jean. 1976. *Life and death in psychoanalysis*. Trans. Jeffrey Mehlman. Baltimore: Johns Hopkins University Press.

Leitch, John D. 1935. *Health hazards in the radium industry*. Ottawa: National Research Council of Canada, Bulletin 16.

Library and Archives Canada. Office of the Auditor General, R711-36-9-E, Vol. 14, File 1, Historical Files From 1974 and Prior Eldorado Mining And Refining Limited Correspondence (Includes Booklet "The Romance Of Canadian Radium," J. D. Leitch).

McClelland, W.R. 1931. Precautions for workers in the treating of radium ore. In *Investigations in ore dressing and metallurgy*, **edited by R.J. Traill and W.R. McClelland, 147-148.** Ottawa: Department of Mines**.**

Library and Archives Canada Eldorado Nuclear Limited fonds, R1220-0-5-E Vol 145, file: Mingay Historical Project-The Artists, date: Dec. 10.

Library and Archives Canada Eldorado Nuclear Limited fonds, R1220-0-5-E , Vol. 145, File: Mingay Historical Project-The Artists, Date: Dec. 10/02.

Library and Archives Canada Eldorado Nuclear Limited fonds, R1220-0-5-E , Vol. 147, File: Mingay Historical Project-Port Hope Refinery, Date: Dec. 10/02.

New York Times. 1925. New radium disease found; Has killed 5. May 30.

– – –. 1928. Radium victims win $50,000 and pensions in suit settlement. June 5.

Nikiforuk, Andrew. 1998. Canada's deadly secret: 50 years on, the world's first uranium mine is still taking its toll on a northern community. Why didn't the federal government, the guardian of the Dene, tell them of the danger? *The Gazette*. April 19.

Peet, Fred. 1983. *Miners and moonshiners: A personal account of adventure and survival in a difficult era*. Victoria, B.C.: Sono Nis Press.

Russ, Sidney. 1930. Radium: Its growth in national importance. *The Nineteenth Century & After, 1977-1930* CVII, no. 639 (**May**): 680-85.

SENES Consultants Limited. 1994. *Report on phase I, II, and III investigations of the historic northern uranium transportation network in the Northwest Territories and northern Alberta*. Port Hope: Low Level Radioactive Waste Management Office.

Sexty, Robert W. 2000. Stamping our history: The story of Canadian business as portrayed by postage stamps. *Revue Canadienne des Sciences de l'Administration* 17, no. 4 (December): 332-41.

Spence, H.J.M. Grandfather and the great bear. www.uilondon.org/grand.htm.

Timm, W.B. 1933. Health hazards in the production and handling of radium. In *Investigations in ore dressing and metallurgy*, Report No. 550, edited by W.B. Timm, 181-192. Ottawa: Department of Mines.

van Wyck, Peter C. 2002. The Highway of the Atom: Recollections along a Route. *Topia* 7: 99-115.

– – –. 2010. *The Highway of the Atom*. Montréal, QC: McGill-Queen's University Press.

– – –. 2005. *Signs of Danger: Waste, Trauma, and Nuclear Threat*, *Theory out of Bounds*. Minneapolis, MN: University of Minnesota Press.

Wiebe, Rudy. 2003. *Playing Dead: A Contemplation concerning the Arctic*. Edmonton, Alta.: NeWest Press.