Virtual Aamjiwnaang: Indigenous Interactive Storytelling

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Laurence Butet-Roch

Abstract

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Stories shape how we understand ourselves and the world around us. They inform our sense of belonging, and connect us to our past. Stories are our lives. And we are our stories. Given their undeniable weight, we ought to question what their form and content teaches us. Increasingly, stories are shared as interactive digital experiences; a reshaping that impacts their configuration, their reach and their outcome. For Indigenous peoples, who continue to resist the colonial paradigm, digital storytelling can represent a weapon of subtle yet pervasive colonialism or be a tool to talk back.

Virtual Aamjiwnaang is an interactive platform that integrates Indigenous storytelling practices in recounting the lived realities of the Aamjiwnaang First Nation online. Inspired by the Two-Eyed Seeing approach, which encourages embracing multiple perspectives, and building on previous digital experiences, *Virtual Aamjiwnaang* proposes methods for creating digital territories that honour Indigenous ways of knowing.

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Introduction

The latest embodiment of a journey that began six years ago, *Virtual Aamjiwnaang* builds on the photographic essay *Our Grandfathers Were Chiefs*, which I started in 2010. For the Anishinabek locals, their home in Southern Ontario, Canada is both a refuge and a death trap. Their territory, now a merely 3000 acres of what was once a vast expanse that stretched on both sides of the St.Clair River from Lake Erie to Lake Huron, sits amidst Canada's densest concentration of petrochemical manufacturing. Their land is a green lung in the middle of a toxic landscape. A community survey of health concerns revealed high rates of respiratory illnesses, learning and behavioral problems, mental health diseases, cancer, miscarriages and stillbirths, amongst others. Moreover, members of the community noticed a decline in male births. Scientists believe that certain pollutants, many of which are released by the surrounding industries, are endocrine-disruptors, which can interfere with the hormones that determine the gender of the baby (Ecojustice, 2007) Despite these alarming numbers, little is being done to alleviate the situation. The community finds itself in an institutional limbo between different ministries and levels of government. In many ways, the pressing case of Aamjiwnaang is a telling example of the ongoing environmental racism embedded in the Canadian system (Wiebe, 2016)

In hopes of shedding light on the implications of this situation on the younger generation, I've been photographing and collecting stories from youths since 2010, witnessing their daily life, their ups and downs and the opportunities – or lack thereof – that they have. The environmental pollution makes it difficult for them to connect with the traditions of their ancestors, including hunting, fishing or gathering medicinal plants. Still, the 2012 #idlenomore movement, a manifestation of Indigenous cultural resurgence

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across the nation, has reawakened their pride in their heritage. Projects such as a species at risk census and a greenhouse for rehabilitating native plants are allowing them to rekindle traditional and sustainable practices.

Freeman (2000) and Regan (2010) stress the importance for descendants of settlers, such as myself, to self-locate prior to working with Indigenous communities. This much-needed introduction helps build relationships on strong grounds and acknowledge the biases we bear.

I was named after a river on which shore my parents met, in Sept-Îles, Québec. Both had moved there to take up jobs as high school teachers. My mother came from a rural community in Sarthe, France like most of her ancestors. My dad was an urban dweller from the Greater Montreal area. Though little information has been passed down about his forbearers, I learned, digging through family registries, that I'm related to Mathurin Fuseau Rocque. A salt smuggler, he left Poitiers, France some time in the early 18th century and spawned a family that would eventually bear the name Roch, which I carry. It is not known whether he crossed the Atlantic because of his illegal activities or if he took up the trade once in Canada. In fact, there are no records of what kind of man he was. The only other information the records give is that he wed Françoise Serre Saint-Jean in 1736, in the St-Laurent parish of Montreal, and had 7 children. Where he married came as a surprise to me, since it was where I was brought up even though no other member of my extended family lived there. My childhood was spent largely unaware of the Kahnawake reservation just South of where I resided or that my home stood on Iroquois territory. It took an invitation to photograph the Aamjiwnaang First Nation in Southern Ontario in the winter of 2010 for me to begin seeing the gaps in my education. What was meant to be a one-time visit to document the struggles and resilience of approximately 850 Anishinabek people living in the

shadows of 46 petrochemical plants has since been transformed into an ongoing friendship and journey that has led me here, caring about how technologies can relay Indigenous stories in a respectful and honouring manner.

I'm fully conscious that no amount of research or fieldwork will ever make me wholly comprehend the realities and entanglements of Indigenous lives. As Regan (2010) indicates: "A more preferable approach, they say, is one in which non-indigenous researchers fully embrace the uncomfortable epistemological tension that comes with the realization that they can never fully know the Other; nor should they aspire to do so" (p. 26). This said, witnessing and listening to others' stories is a privilege, one that should not be taken lightly. King (2003) spells it out. Once you've heard a story, "It's yours. Do with it what you will. Tell it to friends. Turn it into a television movie. Forget it. But don't say in the years to come that you would have lived your life differently if only you had heard this story. You've heard it now" (p. 29). Now that I have heard stories from the people of Aamjiwnaang, I cannot say that I did not know, or that had I known, I would have been different. I yield to Regan's (2010) advice that: "with newfound knowledge, comes an obligation to act –that is, for each of us to find our own ways to share this knowledge with others and to integrate it into our everyday work and civic life" (p. 55). *Virtual Aamjiwnaang* is one of the ways in which I hope to reciprocate the trust and gifts I have received from the people of Aamjiwnaang First Nation.

Feeling like some of the nuances of life in Aamjiwnaang escaped me, I sought new storytelling avenues. While studying Indigenous storytelling practices and interactive media, ideas for combining the two emerged.. In the midst of my reflections on the matter, news that the CBC had banned commenting on stories pertaining to Indigenous people because of the disproportionate number that violated the broadcaster's code of conduct reminded me of how much racism still plagues Canada, as well as of the hazards of cyberspace (CBC Office of the GM and Editor in Chief,

2015). In light of this, I was compelled to push on, hoping to promote a more diverse, fair and inclusive digital space, by asking the following: short of reinventing cyberspace, what can be done to create online territories that embody Indigenous storytelling practices?

This thesis synthesizes my approach and research findings, and offers suggestions for creating online environments more befitting of Indigenous stories. The whole project, as I explain in the first section, is premised upon the understanding that stories have tremendous influence over who we are as individuals and societies. Their power rests not only in their content, but also in their form, itself shaped by the culture they originate in. Allowing for Indigenous voices to be heard means providing them with the means and space to express themselves in accordance to their own practices. When contemplating how to approach the research that would enable me to reconcile two conflicting approaches to storytelling –the Indigenous oral tradition and the free-for-all digital mantra–, I, as I describe in the second part, grounded myself in the Two-Eyed Seeing methodology pioneered by Bartlett, Marshall M. & Marshall, A. (2012). I also drew lessons from the Indigenous research principles set forth by the likes of Smith (1999), Wilson (2008) and Kovach (2009).

Before outlining some of the considerations to bear in mind when thinking of indigenizing interactive storytelling, I ought to explain why such an endeavour presents a challenge. In short, for Indigenous people, cyberspace, like other Western-made technologies, is a double-edge sword. On the one hand, it can be a means for Indigenous people to connect to one another, reclaim their voices and contribute to the reframing of mainstream narratives; but on the other, it may also be a manifestation of colonialism that obscures Indigenous ways of knowing. A review of some of the literature concerned with Indigenous storytelling and the digital space helps recognize attributes of the former that should be heeded when sharing Indigenous stories online. Amongst

these, are 1) the importance of place and embodied experiences, 2) the relation between the storyteller and the listener, and 3) the 'sacred' nature of knowledge. These traits are intimately tied to one another. A breakdown in one affects the others. Though I recognize that there are other important defining characteristics, especially in terms of narrative, I will focus on these three structural features.

I will then move into analysing existing Indigenous online experiences, from interactive documentaries including: *God's Lake Narrows* (Burton, 2011) and *Bear 71*[1] (Allison & Mendes, 2012); video games such as *Never Alone (Kisuma Ingitchuna)* (Cook Inlet Tribal Council, 2014) and *Skahiòn:hati: Rise of the Kanien'kehá:ka Legends* (Skins Workshop, 2012); the online course *Learning from Knowledge Keeper of Mi'kma'ki* (Augustine & Cunsolo Willox, 2016) offered by the Cape Breton University; and the digital storytelling initiative *My Word: Storytelling and Digital Media Lab* (Rigolet Inuit Community Government, 2009). Finally, based on the lessons learned from these initiatives and my research, I will discuss how the features implemented in *Virtual Aamjiwnaang* contribute to creating an Indigenous territory within cyberspace.

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[1] Though not a story by or about First Nations, Inuit or Métis peoples, *Bear 71* is a telling example of the intersection of Indigenous and non-Indigenous concerns and narrative strategies; hence its inclusion in this study.

Premise: The Power of Stories

"The truth about stories is that that's all we are"

(King, 2003, p. 2)

"Stories are the key to the endless oratory, the teachings, and the knowledge of our people. It's not all we are, but when we remember the story, the flood of knowledge locked behind it is let loose."

(Maracle, 2015, p. 37)

Whether one agrees with King's proposition that we are embodiments of stories, or Maracle's gentle rebuttal, which reminds us that stories need to be recalled and acknowledged to wield their power, there is little argument against their importance. No matter our culture or affiliations, stories are how we connect to our ancestors, our heritage and our past. They shape how we understand ourselves and the world around us. They inform our sense of belonging and breathe life into us. Stories are our lives. And we are our stories. Beaucage (2005) articulates it as follows: "Stories go on and on like the wind moving through everything. Storytellers create and re-create the cosmos, giving form and meaning to the moment. Stories are medicine, they are our connection to the sacred power that is in all things" (p. 139). To a Western audience, these words may merely seem poetic, but to Indigenous people, they carry a deeper truth: stories can heal.

That variation in appreciation is attributable to the different epistemologies that underlie both cultures. Put succinctly, Western mind is concerned with establishing a definitive sequence of events that happened in a certain place over a set period of time; thus creating a fixed History. Indigenous ways of knowing are more intent on articulating

connections between people, places, and ideas; thereby allowing a multiplicity of stories to coexist (Howe, 1998; Smith, Burke & Ward, 2000; Beaucage, 2005). Whereas the former tends to be canonical, and, as such, easily accessed through a Google search, the latter favours fluid and multivalent understandings, gathered overtime from a variety of sources and perspectives. Hopkins (2006) notes: "Replication in storytelling, by contrast, is positive and necessary. It is through change that stories, and in turn traditions, are kept alive and remain relevant. In the practice of storytelling, there is no need for originality […] they are made by and belong to many" (p. 342). Rather than go to Google for answers, they are sought in teachings bestowed by Elders or Knowledge Keepers. These distinct understandings of what a story ought to be and do, in turn affect the ways in which they are told.

This became evident to me as I read novels by Indigenous authors, such as *Birdie* (Lindberg, 2015), which presented challenges in comprehension and interpretation. As a third person narrator recounts Bernice's (nicknamed Birdie) journey and that of her relatives, the reader is also privy to Birdie's *pawatamowin* (dreams) and offered *acimowin* (anecdotes, funny stories, asides, tales). None of it follows a chronological order. Rather, temporalities and geographies, whether spatial or emotional, shift constantly. Aware of the potentially disorienting nature of her style, Lindberg (2015) explains herself in the author's interview included at the end of the book. "The Storyteller is the one who is recording Bernice's story, her oral history in a way that it can teach others. When I started the work, I thought that it was an old man and pictured him telling the story in a way that tied *Pimatisewin*[2], Bernice and her family's lives together, years after they were gone, for people who needed to learn the lessons from a narrative and not a novel" (p. 266). Though inscribed on the page, *Birdie*

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[2] "Loosely translated, *Pimatisewin* means 'the good life'. In this work, I have written it to represent a tree of life" (Lindbergh, 2015, p. 265)

is an oral tale. Thus, it unfolds according to the whims of the storyteller rather than the conventions that usually instruct written works. My experience (read-listening to *Birdie*) is telling of the different principles that generally govern Indigenous and Western storytelling practices.

Acknowledging and valuing these differences is key in moving forward towards reconciliation. Case in point, in its final report, the Truth and Reconciliation Commission of Canada (TRC) (Government of Canada Truth and Reconciliation Commission, 2015), concerned with establishing a mutually respectful relationship between Indigenous and non-Indigenous peoples in the country, stresses the need to educate "the mind *and* hearts" (p. 285, emphasis in original text). Doing so implies valuing Indigenous knowledge systems by thinking outside of the traditional confines of the classroom and enacting projects that are not only informative but also deeply affective. Call to action 63) iii is an example of this plea for a more holistic approach to education. Not only should students learn about the history and legacy of residential schools, as well as other harmful assimilation policies, but educators should also concern themselves with "building student capacity for intercultural understanding, empathy, and mutual respect" (p. 290). Amongst other initiatives, supporting creative projects that champion different modes of expressions can go a long way in fostering such ability. In fact, the TRC (2015) recognizes the contributions the arts can make.

> Creative expression can play a vital role in this national reconciliation, providing alternative voices, vehicles, and venues for expressing historical truths and present hopes. Creative expression supports everyday practices of resistance, healing, and commemoration at individual, community, regional, and national levels. Across the globe, the arts have provided a creative pathway to breaking silences, transforming conflicts, and mending the damaged relationships of violence, oppression, and exclusion. (p. 329).

As the last sentence intimates, creative practices can go a long way in addressing some of the misinformation perpetuated by the media. Citing the Royal Commission on Aboriginal People and a 2013 Journalist for Human Rights (JHR) study, the TRC notes the damage done by poor coverage of Indigenous issues. The latter, analyzing Ontario's media coverage of Indigenous issue during three periods between June 1st, 2010 and May 31st, 2013 conclude that: "The Aboriginal population is widely underrepresented in mainstream media. With a cumulative average of just 0.28% of all news stories produced by news outlets […] it is clear that Aboriginal issues are barely on the radar of most media outlets" (Journalists for Human Rights, 2013, p. 18). Moreover, they're also often portrayed as renegades. The report noted that not only does the number of stories tend to increase when Indigenous people "choose to protest or 'make more noise", but so does the proportion of those with a negative tone (p. 19). Such stereotypical representation seldom helps establish mutual respect between Indigenous and non-Indigenous people[3].

This reading of the TRC's final report reveals the relation between education, the arts and journalism in fostering a more fair, just and respectful relationship between Indigenous and non-Indigenous communities. Given that the stories that educate us, as a society, are increasingly being shared online, we ought to design digital spaces that account for principles laid out in the TRC report including: 1) valuing and promoting Indigenous ways of knowing, 2) encouraging the use of different and creative means of expression, 3) resisting stereotyping and misrepresentation and 4) educating both the heart and mind. Committed to these, *Virtual Aamjiwnaang*, explores how the unique

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[3] Since sharing their findings, the JHR has been facilitating courses on reporting in Indigenous communities. Sterritt (2016, March 10) one of the instructor and a reporter for CBC, outline five tips including: avoiding common tropes; providing historical background; consulting a number of sources; balancing good and bad stories; and building positive long-lasting relationships.

features of cyberspace can be harnessed to share and honour Indigenous stories and

ways of knowing.

Methodology: Two-Eyed Seeing and Indigenous research methods

Along with making calls for Indigenizing education, several Indigenous and non-Indigenous scholars have grappled with how to reconcile Indigenous ways of knowing with Western academia. Archibald (2008), the Associate Dean for Indigenous Education in the Faculty of Education at the University of British Columbia, writes that the oral tale of *Coyote's Eyes*, as written down by Terry Tafoya in 1982, helped her approach that dilemma. In the story, Coyote begs Rabbit to teach him how to send his eyes out of his head and then call them back. Rabbit reluctantly agrees, and warns Coyote not to use the trick more than four times in a day. Excited, Coyote ignores the warning and as a result, loses his eyes. As he goes looking for replacements, he meets Mouse, who offers him one of hers. But, since it is so small, he sees as if looking through a tiny hole. Coyote continues his quest and encounters Buffalo, who takes pity on him and gives him one of his. However, because it is so big, it nearly blinds Coyote with the amount of light that comes in. And so, Coyote pursues his journey with mismatched eyes. (Archibald, 2008, pp.8-10). There are many meanings and teachings to derive from this story. Archibald (2008) takes it as evidence for the need to adopt a holistic and balanced approach to education, one in which different perspectives are valued. "At first, I likened the small eye to our oral tradition, which has been denigrated and diminished through Western literate influence. The large eye representing the Western literate traditions as often assumed an overpowering position, especially in educational context. Other times, the small eye became the research method, and the large eye represented Indigenous theory. Coyote was given the challenge of making her/his/its eyes work together in harmony and balance, in order to have a clearer view of the world" (p. 12). Much like thinkers who work both within Indigenous research and Western academia.

Coyote's Eyes brings to mind Bartlett, Marshall & Marshall's (2012) conceptualization of Two-Eyed Seeing, which amounts to "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all" (p. 335). According to them building on the strengths of both perspectives will help ensure that we arrive at the most appropriate solution: "Two-Eyed Seeing adamantly, respectfully, and passionately asks that we bring together our different ways of knowing to motivate people, Aboriginal and non-Aboriginal alike, to use all our understandings so we can leave the world a better place and not compromise the opportunities for our youth (in the sense of Seven Generations) through our own inaction" (p. 336). To function, Two-Eyed Seeing entails adopting certain behaviours. First and foremost, note Bartlett, Marshall & Marshall (2012), it demands that we recognize the co-dependency of Indigenous and non-Indigenous peoples. If we accept that we need and can trust each other, we acknowledge the value of each other's skills and ways of knowing, and thus can embark on a "lifelong co-learning journey" (p. 334). Failing to do so will eventually lead the partnership to unravel. Secondly, Two-Eyed Seeing also requires that the features of Indigenous epistemology be understood and appreciated, including its collective, experiential and sacred nature. Indigenous knowledge cannot be acquired by reading a textbook within a semester. It takes a lifetime and is grounded in lived experiences. It can be expressed through creative means, such as visuals and oral stories, and is most often delivered and validated by community Elders and Knowledge Keepers –as opposed to 'intellectuals'. Finally, and perhaps most challenging, weaving both epistemologies involves developing the ability to go back and forth between them "because in a particular set of circumstances, it may be that one has more strengths than the other, yet with changing circumstances, this can easily switch" (p. 335). Assessing the situation and evaluating how each perspective

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would handle it helps in identifying their strengths and shortcomings. So far, Two-Eyed Seeing has mostly been applied to environmental and health sciences, where there's a budding recognition that traditional knowledges are useful in addressing contemporary issues, such as natural resources depletion or struggles with mental and physical wellbeing (Martin, 2012; Hart, Castleden, Cunsolo Willox, Harper & Martin, 2014; Hall et al., 2015). Yet, Two-Eyed Seeing can also be useful in approaching new ubiquitous technologies. The Internet being the medium through which much of our stories are shared, it should reflect the balanced culture those committed to reconciliation hope to promote.

As mentioned earlier, Two-Eyed seeing hinges on recognizing and appreciating differences between Indigenous and non-Indigenous knowledge systems. Indigenous research methods, as theorized by the likes of Smith (1999), Wilson (2008) and Kovach (2009), prove useful in beginning to understand the disjunctions between Western academia and Indigenous ways of knowing, as well as how to negotiate them. Smith (1999) points out that Western codes of ethics are based "on beliefs about the individual and individualized property" (p. 118). Academic research, in other words, is a means to select, organize, present and favour certain views of history over others. It thus represents a dominant totalizing discourse. Take for instance the importance placed by Western researchers on objectivity. To this day, institutions value knowledge gathered by those who do not identify with the subject of their investigation, because they are thought to be able to observe without implicating themselves. This distance is believed to breed objectivity and neutrality. Yet, it ignores the subjectivity embedded in each and every one of us. Moreover, it leads to the silencing of Indigenous voices, many of which tend to see the establishment of long-term relationships as pre-requisites for collaboration and/or research, because it in fact breeds a higher degree of accountability. To illustrate her point, Smith (1999), a Maori researcher, draws from an

early personal experience conducting interviews with other Maori mothers. She explains that "insider" researchers face a heightened degree of accountability to their community exactly because they are part of it (pp. 137-141). This belonging not only allows them to notice intricacies that would be overlooked by outsiders, but also prods them to develop unique and supportive relationships that can weigh in when ethical debates arise. This ties in with how consent is approached. Whereas Western methodologies often see it as an agreement; Indigenous culture understand it as a relationship and an expression of trust. As Smith (1999) states: "it is not so much given for a project or specific set of questions, but for a person, for their credibility. Consent indicates trust and the assumption is that the trust will not only be reciprocated but constantly negotiated - a dynamic relationship rather than a static decision" (p. 136). Conceiving of consent as a reciprocal relationship shows respect and gives more agency to the subjects of research.

Wilson (2008) similarly emphasizes the importance of relationality and its corollary, accountability. Likening the purpose of Indigenous research to that of ceremonies –e.g. "to build stronger relationships or bridge the distance between aspect of our cosmos and ourselves" (p.11)– he believes that the two should be ruled by similar principles. Since Indigenous ways of knowing are grounded in relationality –the understanding that knowledge is in the relationship one forms with it, as opposed to believing in the existence of a Truth to be learned–, so should the methodologies that underpin Indigenous research. This then implies that the researcher should consider questions such as: "how do my methods help to build respectful relationships? How can I relate respectfully to the other participants involved in this research so that together we can form a stronger relationship with the idea we all share? What is my role as a researcher in this relationship, and what are my responsibilities?" (p. 77) This attitude, in

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turn, translates into research topics, methods of data collection, frameworks for analysis and mechanism for the dissemination of findings that are more aligned and accountable to Indigenous ways of knowing.

This said, reflecting on her research with Plains Cree, Kovach (2009) remarks that creating a "tribal-centered framework" within a Western system will inevitably lead to some "strategic concessions" (pp. 40-41). Even if a researcher follows Indigenous research methods, namely 1) to be explicit and honest about one's perspective as researcher and show how the perspective affects the method employed 2) to use a methodology in line with the community's values 3) to adopt systems that guarantee accountability and reciprocity, 4) to engage in critical reflexivity throughout, and 5) to present findings in ways that best align with community practices, Western academic constraints are such that some compromises will be made, and 'indigeneity' lost (Kovach, 2009). For instance, no matter the methods employed the qualities of oral storytelling, which underpin Indigenous ways of knowing, are hard to emulate in textual form: "The knowledges that we gather in the ephemeral moment of oral story, as told by a teller, as we sit in a specific spiritual, physical and emotional place are of different sort" (Vizenor cited in Kovach, 2009, p. 102). A story does not exist in a vacuum; the whole experience of listening to it contributes to our understanding. Nevertheless, stories and other creative means of expressions remain, in Kovach's (2009) opinion, the best way for approaching and disseminating research: "Stories are a vessel for passing along teachings, medicines and practices that can assist members of the collective. They promote social cohesion by entertaining and fostering good feeling. In times past, as now, stories were not always transferred in lexical form, but through visual symbols, songs and prayers" (p.95).

By reaffirming the primacy of stories, no matter their form, Kovach (2009) endorses the use of more creative and expressive approaches to research, a

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perspective that aligns with my intention to create a digital platform for the gathering and sharing of mixed media stories from and/or about Aamjiwnaang. In conceiving of this platform, I kept in mind the principles laid out in the Two-Eyed Seeing approach as well as Indigenous research methodologies. Wanting to develop an environment based on trust, respect, reciprocity, accountability, and relationality, I reached out to Aamjiwnaang Elders, to the Environmental Committee and to the youths I've been collaborating with in spring 2016. At the time, they voiced what they believe should be the goal and scope of the project, suggested design features and spelled out some of the stories they hoped to share. Their opinion will once again be solicited following the completion of the first prototype, in September 2016. From there on, we'll embark on an iterative process until all parties are satisfied with the platform.

The Digital Paradox: Technology as Trickster

When the Canadian government unilaterally decided to install satellite dishes in Inuit communities in the mid to late seventies, Kuptana (1982) who would go on to serve as the President of the Inuit Broadcasting Corporation (IBC), likened Southern broadcasting to the neutron bomb, one "that kills people but leaves the building standing. […] that destroys the soul of the people but leaves the shell of a people walking around" (par. 22). She was not rejecting television altogether, but expressing fears over the potential impacts Western broadcasting could have on her peers. She used this statement, delivered in front of the Canadian Radio-Television and Telecommunication Commission, to advocate for the creation of an Inuit-led production center, the IBC. Her provocative but no less discerning declaration could have been re-issued just over a decade later in regards to the increasing popularity and reach of Internet technology.

As Ginsburg (2002) suggests, the digital space can be a "seductive conduit for imposing the values and language of the dominant culture" (p. 51). Though hailed as a great equalizer, the Internet, originating from Western educated minds, operates under an intellectual tradition that values Western knowledge systems. Jason Edward Lewis, co-founder of Aboriginal Territories in Cyberspace, articulates it best: "Technology comes out of a very particular worldview and intellectual tradition […] that reflects assumptions about who people are and how they relate to each other. For instance, it makes the assumption that there's a clear distinction that can be made between data and process; it makes assumptions that privilege the individual over the collective. These support, in many different ways, a system that's built on an enlightenment era separation of the human and the natural." (personal communication, February 18, 2016). When using new digital technologies everyday, we risk absorbing little by little,

unconsciously, the values that underpins them, including those of the military-industrial complex that conceived of them, initially for their own purposes.

On the other hand, remarks Ginsburg (2002) digital spaces can be, if repurposed, places to "talk back to the structures of power and state" (p. 51). The accessibility of digital tools, which has turned consumers into producers, offers avenues for individuals and groups to express their discontent, provide alternative readings to mainstream narratives, and attempt to set the record straight. According to Wilson & Stewart (2008): "Indigenous media often directly addresses the politics of identity and representation by engaging and challenging the dominant political forms at both the national and international level. In this landscape, control of the media representation and of cultural self-definition asserts and signifies cultural and political sovereignty itself. As such, Indigenous media are the first line of negotiation of sovereignty […]" (p. 5). This belief that controlling media representation is the first step towards self-determination, aligns with that of Maskegon-Iskwew (1994), a visionary, who articulated the necessity of subverting digital tools with potency: "To govern ourselves means to govern our stories and our ways of telling stories. It means that the rhythm of the drumbeat, the language of smoke signals and our moccasin telegraph can be transformed to the airwaves and modems of our times. We can determine our use of the new technologies to support, strengthen and enrich our cultural communities" (background, par.1). Much like Kuptana's earlier warning regarding the risks of allowing one-way satellite technologies and her demand for Inuit control, the arrival and ubiquity of digital technologies begs for finding means to subvert its original design to make room for the expression of Indigenous realities.

Doing so means adopting an instrumentalist view of technology as opposed to a determinist one. In approaching web-based interactive media –Indigenous or otherwise– it is useful to consider Steven Loft's interpretation of cyberspace not as a tool, but as a

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cosmology. "Who knows how big it is? We can't conceive of its limits; we can see what we can see of it […] We're in it. We've always been part of it. We're only starting to see ourselves as part of it. It is, like the universe, a thing. We didn't create it. […] We just figured out how to tap into it." (Loft, S. personal communication, March 1st, 2016) According to him, we are still in the infancy of our dealings with cyberspace, and artists and creators have a major role to play in expanding the limits of what we can see and how we can interact with it. Loft (2005) also likens digital technologies to the Trickster, a dual character. "Technology exists as shape shifter (not unlike the Trickster himself) neither inherently benign nor malevolent, but always acting and active, changing, transformative, giving effect to and affecting the world" (p. 94). In other words, technology is malleable; we have the ability, through engaging with it, to affect its application and, thus its political, social and cultural reverberations.

Here, the Two-Eyed Seeing approach discussed earlier proves useful, because it compels us to consider the advantages and shortcomings of digital media from both an Indigenous and non-Indigenous perspective. It leads us to establish what the key storytelling practices that ought to be honoured in the digital realm are, as well as to identify some of the unique features of cyberspace that can be harnessed to make Indigenous online territories a reality.

Indigenizing Interactive Storytelling

Considering how to render Indigenous sensibilities within cyberspace begins by delineating some of the defining attributes of Indigenous storytelling that should be manifested within an online environment. As mentioned earlier, reflecting on my personal experiences reading and listening to stories by First Nations people, such as *Birdie* (Lindbergh, 2015), Indigenous storytelling practices, which are rooted in orality, are fluid, multivalent, polyvocal, embodied and relational. In this, they differ from Western norms, which, built around the written form, call for a more linear and authoritative approach. Howe (1998), a member of the Oglala Sioux Tribe from the Pine Ridge Reservation is extremely troubled by the disconnect that exists between Indigenous and Western practices. He warns against the blind embrace of technologies created by and promoting Western thought. He sees them as "exceedingly deceptive" (p. 27). Understanding his well-founded concerns is a first step in addressing them. His case rests on the belief that the Internet lacks the spatial, social, spiritual, moral and experiential dimensions that would make it an appropriate conduit for Indigenous knowledges. He states: "the pervasive universalism and individualism of the world wide web are antithetical to the particular localities, societies, moralities, and experiences that constitute tribalism" (p. 27). According to him a tribal, or Indigenous identity, is grounded in place, created through relations and built over time. The same could be said about the stories that carry and inform said identity. They too are rooted in a given locale, and shared between kin, one at a time.

BODIES IN PLACE
As mentioned previously, within Indigenous ontology, identities are intrinsically tied to place. Vine Deloria Jr., stresses that: "every location within [each tribe's] original

homelands has a multitude of stories that recount the migrations, revelations and particular historical incidents that cumulatively produced the tribe in its current condition" (as cited in Howe, 1998, p. 22). Locations carry stories of the past that inform a tribe's present and hints at its future. These binds are evident in the names locations bear. Take Aamjiwnaang, an Anishinaabemowin word meaning "at the spawning stream" and denoting an important gathering place (Aamjiwnaang First Nation, n.d.). It speaks far more to the history of the area, which rests where Lake Huron meets the St. Clair River, than the Western designation, Sarnia, the Latin version of a name borrowed from a faraway British island.

Since identity flows from the stories that are embodied in the land, recounted and experienced through time, the establishment of a relationship between both, often through ceremonies, is, according to Howe (1998) key: "Tribalism must be practiced. It must be lived and experienced. It is not merely a way of thinking or some nebulous feeling, […]. Tribalism requires full sensory interaction between tribal members, on the one hand, and between tribal communities and their surrounding environments, on the other hand" (p. 24). Because digital connectivity allows anyone to access information about anywhere from anywhere, it renders the need for a profound connection with the landscape that bore the story extraneous.

Moreover in the current virtual realm, sensory experiences are limited to sights and sounds. In cyberspace, the individual cannot feel the raindrops on his face, taste the richness of a wild berry, or in the context of Aamjiwnaang, smell the unusual odours of Chemical Valley. Maracle (2015) refers to the quality of information garnered from such lived experience, as "Sqwa: lewel", in Halq'eméylem, a Coast Salish dialect. She translates the term as "felt ideas", "felt thoughts", and "felt knowing" and points out that such type of embodied knowledge "feels more reliable than an idea arrived at by instruction, deduction, reduction, simple arithmetical reasoning, or any other such

objective analytical process. It feels trustworthy" (p. 14). Not only must an individual feel to know, one must feel to trust what one knows; hence the importance of educating the heart, as mentioned in the TRC.

Technology companies are, to a certain extent, aware of the potency of sensorial experiences. Many strive to make the virtual seem more and more real in hopes of making us feel more. Companies with names like FEELREAL, Somniacs, Gloveone and Teslasuits are working multi-sensory experiences, developing tools that would allow us to smell the air or feel the wind on our skin. Yet, these technophiles forget that whatever they create, the experience remains mediated by "virtual reality garments and accessories that, ironically, would further atomize individuals, isolating them from other individuals and from their surrounding environments" (Howe, 1998, p. 24). Just think of the virtual reality headsets, which transport each individual into their own world. Despite what innovation advocates might have us think, especially in regards to immersive devices, more technology can hardly replace real experiences.

RELATIONS MATTER

When going to visit Elders, Knowledge Keepers or storytellers in Aamjiwnaang, I am never certain of the outcome. As I inquire about one's family or daily life, the conversation takes a certain direction, which guides the stories that will be shared with me. For instance, having recently returned from a powwow, an Elder, in recounting his experience and impressions, was compelled to share a few stories associated with the ceremony. I didn't ask to be told stories about powwows and what they meant; rather the context in which we found ourselves, and the relationship that I had built with the Elder over the past years led him to relay those narratives to me.

Profeit-Leblanc (2004), a storyteller from the Northern Tutchone Nation, in describing her practice, articulates the ties that bind listeners and storytellers, stating

that: "it is the audience's character that usually determines which stories surface in the teller's mind and heart" (The Sacredness of Stories, par. 6). Because who makes up the audience, what they know and where they are matters, it is important for the teller and the storyteller to know one another, or at the very least, to be in a space where they can get to know one another. What happens then when the storyteller and the audience are not in the same room, can't see each other, and can't interact, as it is most often the case with digital media? How do you gauge the audience's reactions and tailor the telling accordingly? How do you ensure that misunderstandings don't arise; that the story is being listened to, respected and honoured?

In this disconnection, another issue arises, that of the information carried in the tone and style of the storyteller. In her published collection of oratories, Maracle (2015), struggling with translating spoken words into written ones, repeatedly stresses the importance of verbal speech for a culture firmly rooted in oral traditions, such as hers: "The presence of the speaker has always been a part of the story, song or poem. […] Voice, choice of words, sound, tone, diction, style and rhythm characterize the attitude attached to the speaker's memory" (p. 40). For instance, an elongated pause can signal the importance of the memory being recalled and thus used to let the information settle in the listener's mind. Speech also carries emotions: "When you speak you deliver a voice; everyone knows that what you think is also what you feel. In speaking, there is no problem delivering the integrity of your emotionality" (p. xii). We have all experienced this: who hasn't sent or received a text that was misinterpreted, because you couldn't hear the emotion that the tone carries. "Come here now", can be read as an angry order, a cry for help or an expression of excitement because something fascinating is happening.

The need to forge relationships also partly stems from the 'sacred' nature of Indigenous knowledge, as explained by Howe in hopes of further impressing upon us the notion that knowledge is not there for the taking. Given that knowledge is tied to a place and to a people. It has to be offered, willingly, without coercion and through means that mitigate the risks of appropriation. Some community members act as Knowledge Keepers, distilling information according to an individual's position, experience, preparation and/or attention (Howe, 1998). One of Howe's (1998) major qualms with cyberspace is the fact that it is premised on the "equal and immediate access to information by all netizens" (p. 23), a stark contrast from Indigenous belief that not all knowledge should be available to everyone at all times. Aligning with Howe, Profeit-Leblanc (2004) explains that:

> "Some stories are not to be told in mixed company: for example, some are specifically for women, and are shared only with them when the time dictates. […] Cabarets and bars are not my choice of places to do a performance! When questioned about this, I simply explain that the Elder who has given me their story would want the full healing force of the story to penetrate the minds of the listeners. This might be difficult with a person who is inebriated or under the influence of other drugs" (The Sacredness of Stories, par. 6).

Here, she also acknowledges the impact surroundings have on the audience's attention. As Maracle (2015) articulates: "Listening is an emotional, spiritual and physical act. It takes a huge emotional commitment to listen, to sort, to imagine the intent, and to evaluate, to process and to seek the connection to the words offered so that remembering can be fair and just. Spiritually, words are sacred; this makes listening a

ceremony" (p. 21). She thus suggests that there is an important difference between hearing and listening. The latter requires more than paying attention to sounds, which the former entails, it demands reflection and action. In the context of non-Indigenous peoples listening to Indigenous stories –a context that resonates with me– Regan (2010), the Director of Research for the Truth and Reconciliation Commission of Canada, draws attention to Roger Simon's concept of "double attentiveness", which is "a listening to the testimony of the one who is speaking and, at the same time, a listening to the questions we find ourselves asking when faced by this testimony […] We must pose questions to ourselves about our questions" (as cited in Regan, 2010, p. 191). By inquiring about our own reactions, we are made aware of our personal subjectivities and biases, which, often, act barriers to understanding. This further support the claim that stories ought to be shared in a space where the audience can commit to listening and engage their whole being. The ability to realize such state is far from a given with digital media since people can access a (web)site of knowledge from anywhere: a home office, a coffee shop, a library, etc. Some of these places seldom make for a reflective experience.

In the context of Aamjiwnaang, I am reminded of the progressive steps the community took in conveying to me the strength of their relationship to the land. Individuals began by telling me how they came to inhabit the territory, first in migratory terms, then through their creation stories. Recently, they invited me to join them on a snake census. The journey was premised by a recounting of a tale about Snake's role in the cosmos. That story and the experience of seeking snakes, taught me that a relationship to land also means bearing the responsibility to protect it, which helped me further understand why people of Aamjiwnaang choose to stay within what has become a toxic landscape. That teaching would have probably been entirely lost on me without the knowledge gathered during previous visits.

GUIDING QUESTIONS

Given the discussion above, several considerations emerge when thinking about

Indigenizing cyberspace, and, thereby guide the design of *Virtual Aamjiwnaang*:

- How to **ground the experience** in a place that is different from the one

in which the listener sits?

- How to **create a felt experience**; one that expresses, imparts and

generates feelings, as opposed to facts?

- How to **foster a relationship** between the storyteller and the

listener(s) that allows the former to acknowledge his or her audience

while enabling the latter to experience the storyteller's orality?

- How to **encourage attentiveness**?

- How to **distil information progressively** according to a person's

experience and context?

- How to ensure that **Indigenous peoples have sovereignty** over their

stories, knowledge and ways of knowing?

Indigenous Territories in Cyberspace

Digital media makers, many of Indigenous origins, have already started tackling some of these concerns. Their works, which varies in form, offer examples of how the disconnect between cyberspace's modus operandi and Indigenous ways of knowing can be address. The interactive web-documentaries produced by the National Film Board of Canada (NFB), *God's Lake Narrows* (Burton, 2011) and *Bear 71* (Allison and Mendes, 2012) suggest strategies for imparting the visitor with a sense of presence. The digital storytelling project *My Word* (Rigolet Inuit Community Government, 2009) and the online course *MIKM 2701* (Augustine & Cunsolo Willox, 2016) speak to the need and challenges of establishing virtual relations. While, the computer games *Skahiòn:hati* (Skins Workshop, 2012) as well as *Never Alone (Kisuma Ingitchuna)*, (Cook Inlet Tribal Council) supply insights regarding how to pace knowledge-sharing.

BODIES IN CODE

In comparing online games, such as the widely popular World of Warcraft, with Australian Aboriginal narrative systems known as "Dreamtime", Barrett (2013) notes several similarities in how both construct imagined places in ways that gives the participants a sense of existing within it. This leads him to conceive of a "distributed physical presence in space" whereby I can simultaneously be in my office in front of my computer and be taking part in an activity within a virtual world (p. 84). My physicality within the virtual world can take the form of an avatar that bears some likeness with me, a character whose movements I control, or of an observer with the agency to decide what I interact with. In all cases, the features of my virtual surroundings inform my actions. Based on real-life knowledge, I will tend to avoid territories where dangers and/or enemies lay in favour of those where I might find clues and/or allies. In turn, my

decisions affect the unfolding narrative. A feedback loop between the space, myself and the story emerges. Because "virtual worlds carry symbolic systems of meaning" (Barrett, 2013, p. 85), Barrett believes that through this interaction, ontologies[4] are created. Just like my real life experiences can inform my virtual decisions –I'll steer clear of a virtual cliff, because in reality it is associated with death– my virtual experience can shape my perception of reality.

This is what Burton (2011) is banking on with *God's Lake Narrows*. In its description of the project he explains that he hopes to transform the narrative of First Nations reservations as "endless loop of stories about poverty, illness abuse and death" by inviting us "to see 'reserve reality' as he knows it" ('About God's Lake Narrows' section). As I enter the site from my home in Toronto, he, as the online narrator, makes an assumption: "If you're not Indian, you've probably never been there either" (Introduction). The "there", refers to, the Mississaugas Of Scugog Island First Nation that, he tells me, lies just over 70 km where I'm sitting and is the closest Indigenous community to my home. The "either" refers to God's Lake Narrows, the Northern Manitoba Cree community he grew up in. That one, he tells me, is 1628 km away from where I am. He's able to give me these numbers in a millisecond, thanks to an algorithm that uses my computer IP address to determine where I'm located, find the nearest reserve and map distances. This is a situating act. I'm made aware of where I am in the real world – Montreal – and where the place that I'm about to visit virtually is in relation to me – 1628km away. By making clear that his and I's realities are miles and miles apart geographically, he prepares me for what I'm about to see: a place distinct from my own.

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[4] Wilson (2008) defines ontology as "the theory of the nature of existence, or the nature of reality" (p. 33). In other words, ontology is the set of belief held by an individual regarding what is real.

What follows is a carefully crafted guided tour. The visit starts outside the homes, shown from the side of the road, photographed dead on: a series of seemingly non-descript one-story rectangular boxes covered in vinyl siding. If, as Burton (2011) admits: "On some level the houses *are* all the same: built from the cheapest material shipped in from the big city", they also, for the trained eye, "tell you certain things" ('Read the story', par. 3). For instance, a functioning four-wheeler in front of a beat up porch door reveals that the homeowner places more value on mobility than material beauty. These fragments of information are delivered through text slides inserted in between each photograph. Burton addresses the visitor in the second-person as if they were touring his hometown together. Eventually, once the virtual guest has been taught a few key notions about the place, he's invited inside certain homes to meet inhabitants. Each is portrayed starring directly into the camera, a defiant gaze that acknowledges my presence and, thus, reinforces the impression of being there. Ideally, *God's Lake Narrows*, which, as suspected by its author, may well be the first time the netizen ever "visits" a First Nation reserve, serves as an example on how to behave when approaching an Indigenous community. It's a lesson in settlers-as-guests etiquette: know the history and your place within it; don't expect anything or feel that you are owed information; act as a patient and respectful guest; take time.

The following year, the NFB experimented with another method to give online interactive documentary participants a sense of presence. *Bear 71* (Allison and Mendes, 2012) recounts the life of a real female grizzly bear, labeled 71, from the Banff National Park, using the wildlife footage captured by the cameras placed throughout his habitat. After viewing a short video showing the three year-old grizzly bear being collared and tagged, the participant enters an abstracted 3D rendering of the park, as human

#XxxXxx[5]. The identification number positions him as an equal, rather than a superior to the rest of the animals roaming the territory. While Bear 71 narrates through voice-over how she was forced to adapt to the human transformed landscape, the visitor is free to move across the space, where he's bound to encounter other wildlife, also identified by their specie and a number. When clicking on one of these labels signifying the presence of another creature, a new window opens up displaying real surveillance footage of said animal alongside information about them. A 'meeting' with Wolf 77 reveals a female wolf running after a deer in a corrugated metal tunnel. The segment is accompanied by facts about her hunting methods, her resting heartbeat (125 bpm), weight (12kg) and age (3 years old). Hence, the visitor, through his movement across space controls secondary narratives. Encountering a wolf that chases its prey in a man-made structure drives home the notion that the habitat has been considerably altered. These meanderings also trigger a range of emotions, such as feeling loss within the unfamiliar abstracted landscape; hyper-alertness as we hope to catch glimpses of other animals, an attitude that mirrors the one we would have if we were on a real safari; wonderment at the wildlife or exasperation because of the uncertainty of encountering wild beasts. Thus, as Barrett (2013) suggested, an embodied experience is created through virtual movements that makes the visitor relate to Bear 71 ever more strongly. My visceral reaction to the ending is a testament to how present I felt. The lessons of *Bear 71* are made ever more potent because of that.

VIRTUAL RELATIONS

In both *God's Lake Narrows* and *Bear 71*, embodiment is used to create a virtual connection between the narrator and the audience. However, little room is left for both to

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[5]   The number is dependent on the number of people who have viewed *Bear 71*. On April 14th, I became human 2,926,481.

converse. Though, in the former, my presence and situation is acknowledged, the narrative unfolds in the same linear fashion whether I'm a resident of Toronto, Montreal or Kahnawake. We're all served the same story, no matter who we actually are. A similar observation could be made about *Bear 71*. Even if it allows for the participants to explore different secondary stories in varying orders, the main plot stays the same. In both cases, personal interests, previous knowledge, and/or experiences are seldom taken into account.

An early model for interactive story sharing that has been hailed as more 'participatory' is the "digital storytelling" paradigm championed by Joe Lambert (2013). Short videos are used to convey a personal narrative through the combination of varying forms of artistic expressions: illustration, photos, artefacts, letters, music, found footage, and so on. In 2009, a team of transdisciplinary Indigenous and non-Indigenous individuals launched such an initiative in the Inuit village of Rigolet, in Labrador, Canada. The goal was to engage members of the community on the topic of climate change and give credence to "place-based narratives, first-hand observations and experiences of environmental change and climatic variation shared through oral stories" (Cunsolo Willox, Harper & Edge, p. 131). The project *My Word* (Rigolet Inuit Community Government, 2009) resulted in the creation of a fully functioning digital medial lab and over thirty stories from different sources, creating a "nuanced tapestry of voices" that provide "context and depth to localized narratives and collective experiences" (Cunsolo Willox, Harper & Edge, p. 132).

This said, though it gives storytellers agency over how their experiences and knowledge is presented and preserved, it remains a process that largely reflects Western approaches to storytelling because of the rigidity of the format. The three to five minutes limit seldom allows for emulating the more meandering ways of oral storytellers. The time constraint forces them to shorten their tales to a mere few key plot points and

to significantly alter their pacing, tone and rhythm. Looking back at her work with the Rigolet community, Cunsolo Willox notes that: "The narrative process being used is still very much a Western framework: there's a beginning, middle and end because we really like these wrapped up narratives where you can feel that there's an ending. That I feel is a weakness because it doesn't respect some of the more circular ways of telling stories. And, digital stories are 3 to 5 minutes, whereas some stories take days to tell" (personal communication, March 18, 2016). As she intimates, there are several points of tensions between digital storytelling practices and Indigenous ones when it comes to respecting a rigid format; tensions that others, such as Iseke & Moore (2001) have faced. According to them, they include: 1) respecting the storyteller's tone and style – which, as Maracle (2015) explains, is an important source of information and emotionality, 2) preserving and honouring intricate storylines in an edited version of the recording, and 3) (yet again) being able to assess what the listener knows and adjust the telling accordingly.

Following that experience, Cunsolo Willox went on to design a live streaming class for the Winter 2016 semester at the Cape Breton University with Mi'kmaq hereditary chief Stephen Augustine, *MIKM 2701*. Of particular interest are the methods they employed to interact with the thousands of people from over 25 different countries that joined in remotely (Cunsolo Willox, 2015), especially their use of social media. Online attendees, by chiming in using a Twitter hashtag and/or a dedicated Facebook page as the lesson was unfolding, alongside many other remote students, could break their sense of isolation, while simultaneously developing a community. Individuals read each other's comments and engaged in discussions. Early on, questions regarding the spelling, pronunciation and meaning of Mi'kmaq words used by Stephen Augustine prompted members of the Internet audience familiar with the language to offer translation and interpretations of the terms live, on Facebook and Twitter. This on-going

online dialogue enabled the emergence of an online ecosystem where multiple voices contributed to the knowledge environment by adding to the teachings of the instructors.

Though social media often takes a life of its own, it's important to note that the dynamism of #taliaqCBU was encouraged by the constant engagement of Cunsolo Willox. A telling example is when, during the first class January 11th, 2016, embracing the culture of the Internet, she asked the online audience to send memes saluting the fact that #taliaqCBU was as popular as #StarWars in Canada. Creative individuals responded within minutes, leading her to share the best ones with Stephen Augustine and those seated in the room by turning over her computer screen. This simple gesture immediately established a connection between the online and onsite attendees, which continued throughout the course. Both she and others in the classroom acknowledged the presence of connected students by responding to their posts, and/or retweeting them. Acting as a mediator between the online chatter and the instructor, she also relayed questions and comments not as they came up, but at the appropriate time, thus engaging a discussion between both realms without interrupting the flow of the class. Throughout, neither audience was treated as more important than the other. The protocols and care given to one were also afforded to the other. For instance, aware of the sensitive nature of speaking about the residential school system, during the February 22nd, 2016 class dedicated to the matter, mental health support was provided for both audiences: mental health workers sat in the classroom and while phone numbers of crisis helplines were regularly posted on social networks' feeds and flashed on the digital transmission.

Making such an interactive and affective experience sustainable remains a considerable challenge. Holding a similar course every term would be taxing, especially for the guest speakers who share difficult stories. Yet, the customary massive open online course format (MOOC) is, according to Cunsolo Willox, ill-suited:

"How do you make sure that you're not commodifying Indigenous knowledge and Indigenous voices, packaging it in funny ways, or taking a really important story and chopping it up in five minutes chunks so that students will watch it online and then answer multiple choice questions? […] How do you have a true or false or multiple choices about Indigenous knowledge? We had a really moving, incredibly powerful session on Indigenous missing and murdered women. It was eviscerating. What would you ask after that? What sort of multiple questions would come up after that? How is that respectful?" (personal communication, March 18, 2016).

Much of the magic or potency of the experience rested in the fact that it was streaming live and thus, for those listening remotely, felt as close to what actually sitting in the classroom would be like.

ONE STORY AT A TIME

One of the main hurdles raised throughout this thesis has been the difficulty to overcome the universalistic nature of cyberspace in favour of a more personalized experience akin to meeting with Elders and/or Knowledge Keepers. One way to address this issue can be found in video games. As Barrett (2013) notes they are inherently procedural since "they observe real-time sequences of interaction and causality" (p. 85). One has to complete a level, or an action, before being enabled to move forwards. This feature of video games can be adapted to distil Indigenous knowledge in a more piecemeal fashion.

Take the award-winning game *Never Alone (Kisuma Ingitchuna)* (CITC, 2014). When the CITC decided to create a digital game, they did so in hopes of reconnecting the local youths with their heritage, one that champions (amongst other values)

interdependence between one another, between beings of different species and between humans and the spirits. Ergo, the game itself hinges on achieving two interdependent goals: 1) the player acting as Nuna has to find the source of the blizzard that's threatening to starve her community, and 2) to simultaneously unlock a set of "cultural insights", concise and compelling videos that explain some of the traditions and beliefs that inform Iñupiat lives, and consequently, the game. When a puzzle is completed the player progresses to the next level, and an owl appears, indicating that a new clip is available. These short videos provide additional information that proves useful when advancing in the game. For example, after completing the level in which an owl-man's gifts Nuna a 'bola', the unlocked "cultural insight" video has Ronald Aniqsuaq and James Mumigan, two of the elders, reveal that the 'bola' is a contraption made of braided sinew tied down to heavy bones that is particularly useful when duck hunting. Thereafter, the 'bola' becomes a handy tool in the game used to break ice, conjure spirits or strike enemies. (CITC, 2014, cultural insight #10)

To further drive the importance of interdependence, the game requires the constant interaction between the two protagonists. Nuna, blessed with having opposable thumbs, can move objects, climb ropes, and manipulate weapons, while the arctic fox can jump higher, crawl through small spaces, and communicate with helpful spirits. Progress is impossible without calling on the gifts of both. The depth of the relationship between both heroes is also embedded in the reaction each has when they loose their companion: when Nuna slips away, the fox curls up and whimpers; when the opposite happens, Nuna falls to her knees and cries. One cannot live without the other. So much so, that if one dies, the play is reset. In short, the entire structure of *Never Alone (Kisuma Ingitchuna)* –the goals to achieve, the means by which to achieve them, and the constraints that force the use of certain means over others– is designed to drive home the intended teachings.

A similar process underpins *Skahiòn:hati* (Skins Workshop, 2012). A brief introduction sets the stage: the band, threatened by a Stone Giant, has two options: fight or flight. Skahiòn:hati, a boastful teenager believes in the former course of action, as long as the battle is waged by the best warriors, like him. The player then becomes Skahiòn:hati, taking control of his journey and faith. Thrust into the world of the young warrior, a lush landscape of mountains, plains, rivers and waterfalls, the player must first find his bearings before venturing out to defeat the enemy. Clues, such as discoloured grass that hints at an often-used path or a dog barking in the distance, guide the player, assuming he's paying enough attention. As the character passes by culturally significant objects, information about them appears in an overlay. For instance, the sight of two ancient lacrosse sticks reveals that the sport used to be "played by the Iroquois for thousands of years. Its name in Mohawk means 'little war' and it is said that the game was a way to prepare warriors for battle." Warned in the introduction of the importance of listening carefully to survive, the player, rather than dismiss fragments of knowledge such as this one as peripheral, absorbs them in hopes that they will prove useful later in the play. By making intelligence gathering an essential part of the outcome, the game creates additional incentive to collect the knowledge that is parcelled out. As the player progresses, he must take the time to pause, observe and explore his surroundings. If he goes too fast or is too confident in his own abilities, he won't be able to come up with the strategy to defeat the Stone Giant. For instance, when faced with the need to cross a lake, the player is tempted to use the logs floating in the waters, risking death when jumping from one to another. Yet, there's a less treacherous way, a foot passage, for the one who cares to survey the land. In other words, if the player acts like the brazen Skahiòn:hati, then, he, like his legendary counterpart, is bound for failure.

In *Skahiòn:hati*, as in *Never Alone (Kisuma Ingitchuna)*, the very means and rules that dictate how the player can overcome the enemy match the challenges faced

by the warrior in the tale. The plot and structures work as one to create an experience in which the teachings of the chosen tale—being humble, prepared, patient, thorough, deliberate—are felt by the player.

Virtual Aamjiwnaang

The research, interviews with Indigenous storytellers and Interactive Media practitioners, and the case studies of existing Indigenous online experiences (bar one) mentioned so far in this study, have significantly inspired the design of *Virtual Aamjiwnaang*, an online platform that aims to share stories from and about Aamjiwnaang First Nation. Located in Southern Ontario, next to Sarnia, the territory is surrounded by over 46 petrochemical plants, a cluster of industry that has given the area the distressing moniker of Chemical Valley. To this day, the extent and impacts of the air, water and ground pollution generated by the nearby manufacturing facilities are seldom recognized and the community continues to struggle to assert their most fundamental right to live in a clean and safe environment. This alarming situation caught the attention of Sarah Marie Wiebe, then my roommate working on her Ph.D. in Political Science at the University of Ottawa. Sharing some of her early findings and observations with me, she invited me to join her during one of her visits, hoping that I would take photographs to help share knowledge about ongoing injustices with a wider public audience. I did, over not one, but several visits. Our collaboration culminates this fall in the publication of *Everyday Exposure: Indigenous Mobilization and Environmental Justice in Canada's Chemical Valley* (Wiebe, 2016).

As I spent more time in Aamjiwnaang and built strong relationship with different members of the community, especially youth, I came to appreciate the value of the creative means they used to share their stories. Some wrote poems, others composed songs. Some drew, others made videos. Moved by their work, and trusting that others like me could be too, I sought to find means to include and showcase their voices, within my own photographic practice. While discussing options with them and exploring previous community-based art projects, the possibilities afforded by the Internet's reach

and scope kept coming to mind. A website can accommodate different types of media, including text, audio, images and videos. Moreover, sharing stories online means that a larger audience will have access to them. Yet, as I began thinking of what the interactive platform may look like, the disconnect between Indigenous storytelling practices, which are embodied, relational and used to communicate sacred knowledges, and cyberspace's universalist nature came to light. This realisation led me to approach this project with a Two-Eyed Seeing lens, seeking the common ground between Indigenous perspectives and Western digital media. The result can be seen in the design of the *Virtual Aamjiwnaang* prototype.

BODIES IN AAMJIWNAANG

Given the aforementioned strong ties between land, stories and Indigenous identities, sharing stories from/about Aamjiwnaang in ways that respect and honour the community's ways of knowing online requires finding a mechanism to ground the experience. Inspired by the work of the NFB on the interactive documentaries *God's Lake Narrows* and *Bear 71*, which affords the online participant a certain sense of presence, the *Virtual Aamjiwnaang* experience is rooted in a 3D rendering of the actual territory. Using photographs of the different locales and buildings, as well as referring to the spatial details available through Google Street View, one of the main corners of the reservation –the crossroad of Tashmoo Ave and Churchill Rd– was built using Unity, a software widely used for making video games, between May and August 2016.
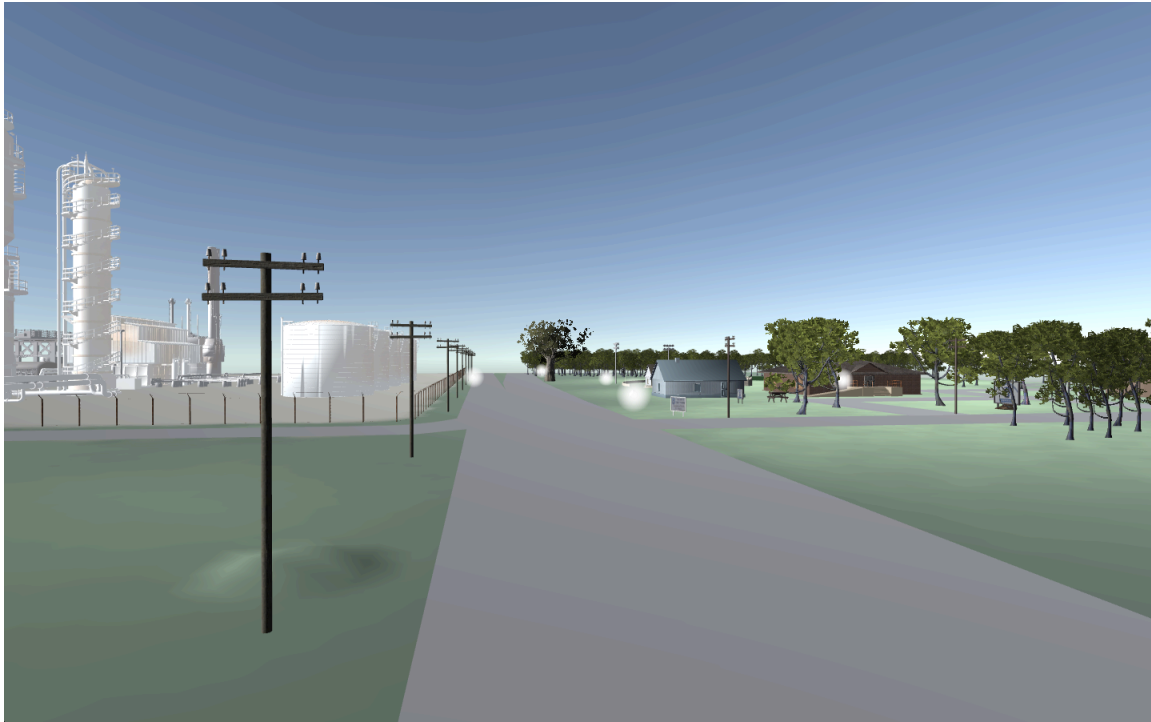
Figure 1. Screenshot of *Virtual Aamjiwnaang*, showing the corner of
Churchill Road and Tashmoo Avenue

Resorting to computer-generated imagery –as opposed as the absolute realism of Google Street View– helps deal with issues of privacy and appropriation. During an early prototyping meeting in June 2016, members of the environmental committee explained that some residents might not want that an exact rendition of their home and address be found online. This concern also holds for the places within the community that are sacred and thus should be protected. At the same time, this measure helps single out some of the locales and features of most significance, some of which might go unnoticed otherwise, such as a cottonwood tree that stands tall across from the Lanxess polymer plant.

The whole scene is intended to give a sense of scale, showcasing the size of the Aamjiwnaang territory, demonstrating the industries' proximity to living quarters and making clear that varying petrochemical industries encircle the community. The 3D

rendition of the Aamjiwnaang territory is more detailed than that of the surrounding industries, shown as colorless shapes on the edge of the frame to emphasize their looming, alien presence. Paying more attention to the features of the First Nation than the Western spaces inverts the hierarchy in mainstream mapping practices. As Hunt & Stevenson (2016) remark, "maps demarcate contested territories, represent institutionalized power and in many ways fix the term of future negotiations […] The map is a form of knowledge that has the power to dispossess" (p. 3). The appropriation of land via mapping strategies is a reality that First Nation communities know all to well, including Aamjiwnaang, who saw their land base shrink over decades. In the 1820s, treaties 27 ½ and 29 confined them to a 10,000 acres territory. By 1960, it was reduced to less than a third of its original size (3,100 acres) through various controversial surrenders (Aamjiwnaang First Nation, n.d.; Wiebe, 2016). According to a local historian, these schemes transformed Aamjiwnaang residents into "prisoners in their own home" (Plain as cited in Wiebe, 2016 p. 18). During my six years visiting the community, people often spoke of their conflicted relationship with their territory. A haven and source of pride, it is also a landscape they have come to fear. When discussing *Virtual Aamjiwnaang*, the Environmental Committee stressed that they hoped it would translate that feeling of confinement, while focusing on celebrating the land and the community. After all, had the Anishinaabek people not staked their claim to it, this green oasis would have been completely erased.

Laurence, you've travelled a long way,

296 km to be exact,
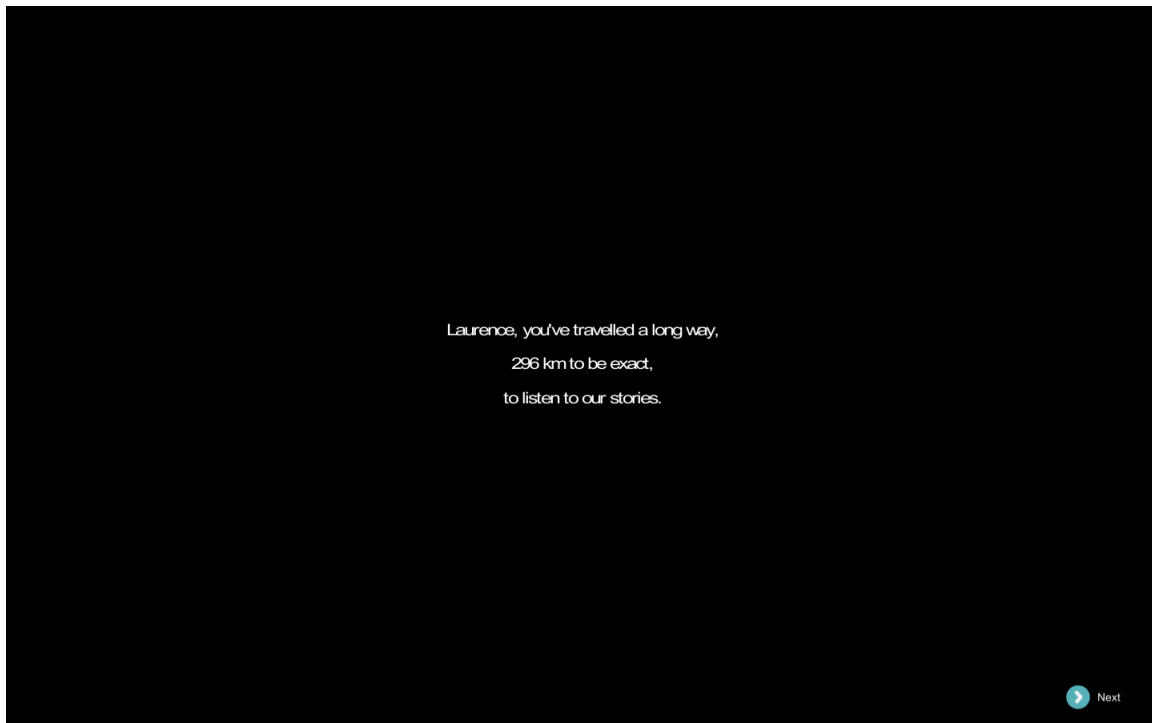
to listen to our stories.

Next

Figure 2. Screenshot of the *Virtual Aamjiwnaang* introduction

To further ground online visitor, the introduction, using a similar technique as *God's Lake Narrows* –comparing the netizen's IP address to that of Aamjiwnaang– reminds one of where they stand in relation to the community. This situating act fulfills several roles. First, it respects local Indigenous protocols that ask that visitors introduce themselves not only by name, but also according to where they are from (Wiebe, 2016, p. 25). Secondly, as discussed in relation to *God's Lake Narrows*, it contributes to establishing what Barrett (2013) refers to as "distributed physical presence". I'm at once in my home in Toronto and three hundred kilometers away, entering Aamjiwnaang. Once inside, the netizens become 'visitors' free to explore these new surroundings as if they were to physically travel to this part of the country. They can walk down Tashmoo Avenue, towards the heart of the community; approach the band office; stroll around the perimeter; or meander in the bush. As they tour the space, virtual visitors encounter 'hotspots', locales where stories are grounded. In other words, it is only when arriving to

the digital translation of real places of significance, that stories associated with them can be accessed. For instance, going back to the proud cottonwood tree mentioned earlier, it is once "standing" next to it in *Virtual Aamjiwnaang*, that the netizen can hear Elder Mike Plain recite a poem celebrating its resilience. Much like in *Bear 71,* virtual movements create an embodied experience.

THE AAMJIWNAANG CONNECTION

Throughout this thesis, I have raised how difficult it is for digital platforms to replicate the relationships that inform oral storytelling practices. Short of devising a FaceTime, Google Hangout or Skype like system, where the digital audience can converse with a member of the Aamjiwnaang community –which, though it would be great, is unsustainable–, a few strategies can be deployed to give the impression that ties are being formed. For starters, on top of automatically calculating the physical distance between the virtual visitor and Aamjiwnaang, the introduction asks netizens to input their name. This information will then be used to identify them and address them throughout the play. Such simple stratagem, common within video games, goes a long way in creating what feels like a more personalized experience (Klimmt, Roth,C., Vermeulen, Vorderer & Roth, F.S., 2012)

Figure 3. Screenshot from *Virtual Aamjiwnaang*, showing the marker
indicating the presence of a story.

Furthermore, rather than propose a linear story, *Virtual Aamjiwnaang* allows the

virtual visitor to wander at will, moving towards the 3D-rendered features that spark their

interest. Valtonita (2016) makes the case for non-linear and unpredictable formats by

reminding us that otherwise the netizen is reduced to being a passive observer and that

linear approaches to communication tend to be top-down and prescriptive;

characteristics that do not align with Indigenous ways of knowing. This said, to mitigate

the opposite danger of leaving the online user feeling lost, or overwhelmed by the

possibilities, and to gently direct his attention, locales containing stories are highlighted

with a glowing marker that can be seen from afield. Once within the vicinity, the virtual

visitor can click on the element and the story appears in overlay. These do not emanate

from a single narrator. If they wish, any member of the community can upload stories in

a variety of formats. They may decide to share their knowledge or experience through a

single or series of photographs; written words; audio recordings of poems being recited,

songs being performed, tales being shared; video and 360 video footage; etc. The choice of medium, as of the content, is up to the storyteller. And, in all cases, the digital display is designed to maximize attention. The *Virtual Aamjiwnaang* world freezes behind the overlay, enabling the visitor to spend as much time as they desire on the story. Photographs appear one by one, filling the frame, to allow the viewer to examine the details and consider their symbolism. When audio recording play, the screen shows the audio spectrum, enabling the listener to focus on the words being spoken, while visualizing the tone, rhythm and pace.
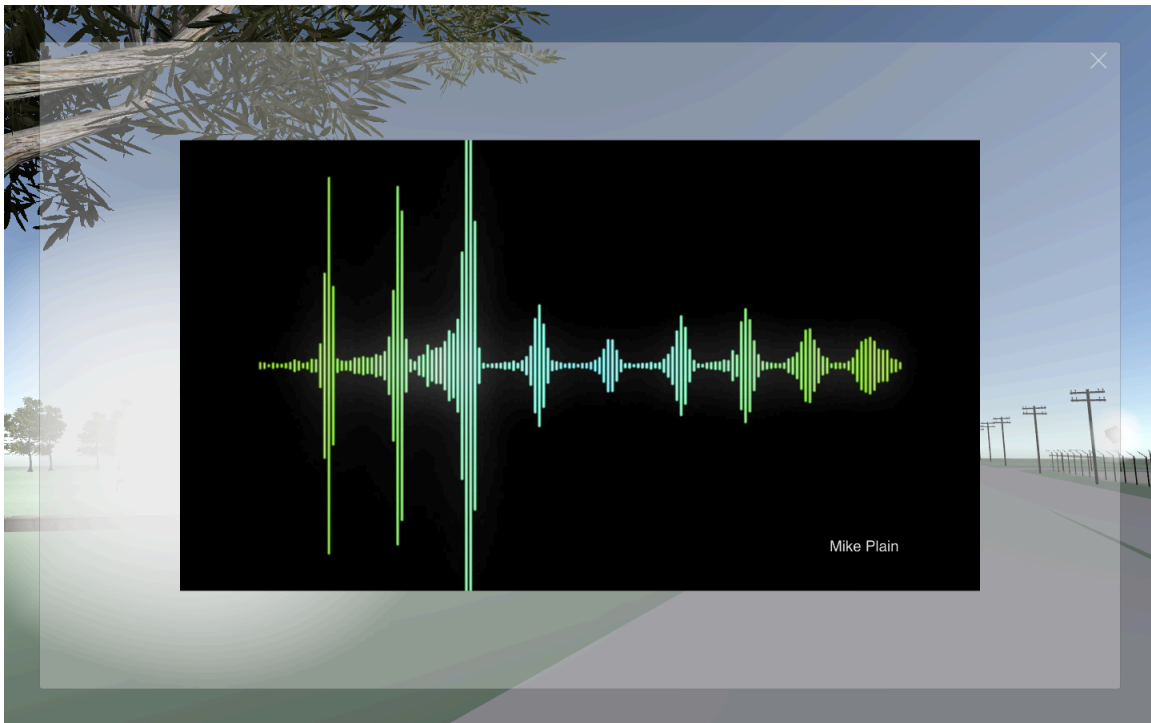

Figure 4. Screenshot of *Virtual Aamjiwnaang*, showing an audio interaction:
a poem written and recited by Elder Mike Plain.

A frequent shortcoming of interactive documentaries is their static nature. They are created at once, and the narrative remains the same for years to come. For instance, Scott Benesiinaabandan took the photos shown in *God's Lake Narrows* in the winter of

2010. They remain the representation of that community six years later, even though the homes and their inhabitants have most likely changed over the past few years. This runs the risks of fossilizing a community, a danger Smith, Burke & Ward (2000) warn against. Speaking about mainstream media, they note that: "the creation of influential images of what constitutes 'authentic' Indigeneity can constrain Indigenous people in real and material ways, limiting their social, economic and political capacities" (p. 9). The same could be said about stories shared on digital platforms. Since Indigenous ways of knowing emphasize the fluid and relational nature of knowledge, we should be careful to avoid presenting information and stories as Truths and fixing them for posterity by posting them online. To mitigate this danger, *Virtual Aamjiwnaang*, offers community members the ability to upload stories on an on-going basis. Once they've recorded the story, no matter the chosen format, they upload it on a dedicated platform and are asked to tag where the story belongs within the land. It is then retrieved and prepared for publication. For example, if Elder Mike Plain decides to share another poem, he can record it, upload it and tag its location. Given that it is an audio file, an audio spectrum visualization is generated. The story is then added to *Virtual Aamjiwnaang* according to its tagged location. Before the story is made public, the storyteller is asked to view and approve the final version, thus ensuring that there is no misappropriation or misunderstanding happening during the publication process.

Giving both the storytellers and the audience as much agency as possible, respectively in what they choose to share and what they decide to listen to, means that both have the ability to shape the *Virtual Aamjiwnaang* experience. Visitors might notice that they appreciate a certain storyteller and seek out their stories over others. Certain netizens may gravitate towards a certain story genre, such as historical accounts, traditional tales, personal anecdotes or more creative expressions. And vice-versa. Seeing that a certain story, or type of story, has a lot of traction might influence what the

storyteller(s) decide to share in the future and how. This feedback loop between the storyteller(s) and their audience contributes to creating a bond between the two.

STORIES: A PATH INTO AAMJIWNAANG

The digital publishing procedure described above not only serves to foster a relationship between the Aamjiwnaang storytellers and their virtual audience, but it also helps create an environment that aligns with the 'sacred' nature of Indigenous knowledges. On the one hand, by deciding whether or not to share their stories and how, Aamjiwnaang residents remain stewards of their knowledge. Extra tags will help contributors specify conditions under which stories may be accessed. Some may remain private, their author simply wanting to store his knowledge somewhere to retrieve later on or to share it with only a selected few. Others may only be viewed once a certain amount of time has been spent within *Virtual Aamjiwnaang* or after listening to another given story; a process that is akin to what I've experienced actually visiting the Anishinabek community. For instance, it may be that in order to view footage from the powwow, the visitor must have first read the short history of the reserve and its people. Allowing for such progressive storytelling, while not assigning a linear specific path, keeps with Indigenous ways of imparting knowledge. It is neither prescriptive, nor universally accessible. However, it presents more technical challenges than a linear interactive documentary such as *God's Lake Narrows* or linear video game like *Never Alone (Kisuma Ingitchuna)*, since the user may wander unpredictably.

Valtonita (2016), concerned with devising a system for different cultural institutions to share their knowledge, proposes a framework through which information moves through three different layers that proves useful for *Virtual Aamjiwnaang*. In the first, data points are stored. In the second, data points can be retrieved and combined to form stories. And, in the third the stories are presented to the audience according to

structures defined by the authors. This system can be adapted for *Virtual Aamjiwnaang*.

The stories uploaded by Aamjiwnaang community members are first saved in a 'storage'

layer. In order to make this technically and economically viable, the various media (text,

images, video) and computer graphics associated with the stories are hosted within the

cloud. These stories are then tagged, classified, and connected using graph database

infrastructure within the second 'composition' layer. Here, the story is assigned its

location, conditions for viewing (if any) and plotted in relations to the other stories

populating *Virtual Aamjiwnaang*. Finally, once the stories have gone through these two

layers, they are ready to be shared and displayed on the online platform. Netizens can

then employ every day, low-priced computing devices, such as tablets, computers and

smartphones, to interface with the stories much like they would with a standard game

app.

ONGOING COLLABORATIVE JOURNEY
        Going forward with *Virtual Aamjiwnaang* demands that the technical and digital

capabilities of Aamjiwnaang community members be addressed. Not everyone has

access to the Internet, the tools required to record stories, or the skills to do so. For the

My Word digital storytelling project in Rigolet, Labrador, an entire digital multimedia

center was built, complete with electronic and digital resources as well as trained local

facilitators that can engage the participants and assist with the technology. This

profoundly benefited the Inuit community: "By investing in physical resources, which

would remain within the community for community use, the project was able to create a

mobile digital media center and to set-up the foundations for a lasting technological

impact" (Cunsolo Willox, Harper & Edge, 2013, p. 138). A similar approach would be

advised in going forward with *Virtual Aamjiwnaang*. Training selected individuals within

the community to gather and record stories, and providing them with the means to do so,

would be a way to reciprocate the gifts the community has given me over the past six years. This would also ensure that they maintain sovereignty over the content and make the idea of publishing stories on an on-going basis more realistic and sustainable. In the same vein, some community members could also be shown how to operate the digital framework itself. This would entail showing them the basics of Unity, cloud services, and electronic database systems.

Nevertheless, before going forward with such plans, the most immediate task is for me to go back to Aamjiwnaang and show the current prototype to Elders and the Environmental Committee to collect their thoughts and suggestions. *Virtual Aamjiwnaang* is an on-going collaborative journey, one in which both the community and I have embarked on together, agreeing, as the Two-Eyed Seeing approach recommends, to share the skills and knowledges we each hold.

Conclusion: Collaborative encampments in virtual space

Despite cyberspace's current configuration as a place that promotes universalism and individualism, Loft (2014) encourages Indigenous people to see the Internet as a "cosmological territory" that "is not proprietary and, like the earth, the galaxy and the universe is a space and place of inquiry, interaction, and life." (p. 175). Staking a claim in the digital realm means approaching it as a landscape that can be explored and inhabited according to Indigenous ways of knowing if one so wishes. L'Hirondelle (2014) compares Indigenous presence in cyperspace to "setting up camp –making this virtual and technologically mediated domain our own" (p. 152). Such encampments, as detailed in this thesis, concern themselves with 1) grounding the stories in a particular locale; 2) providing the digital viewer with a sense of presence and felt experience; 3) fostering relations between the virtual listener and the storytellers, between the different storytellers and Knowledge Keepers, between the many listeners, and between all of these people, the stories and the place these originate from; and 4) affording Indigenous community continued sovereignty and ownership of their stories and ways of knowing. Previous encampments such as *God's Lake Narrows*, *Never Alone (Kisuma Ingitchuna)*, *Skahiòn:hati, My Word*, *MIKM2701* and the non-Indigenous, but still relevant, *Bear 71*, offer strategies for adapting the Internet's *modus operandi* to Indigenous storytelling practices. These include: 1) rendering physical territories in digital format; 2) personifying interactive experiences by providing both the storyteller(s) and visitor(s) varying degree of agency over their digital journey; and 3) using game play systems to distil information progressively.

When conceptualizing and designing *Virtual Aamjiwnaang*, I drew lessons from these projects. Netizens are situated thanks to the 3D rendition of the actual reserve as

well as the automated calculation of their actual location in comparison to that of Aamjiwnaang. Moreover, virtual visitors control their movement through the space, deciding how much time to spend in one area and what is of most interest to them. This mirrors the real-life experience of visiting a given site. Stories, authored by community members on an ongoing basis, in a format of their choosing and shared according to the conditions they set, are strewn throughout the space, positioned according to the actual place where they originated. Some may be accessible right away, while others might require the visitor to spend a certain amount within *Virtual Aamjiwnaang*, thus emulating the progressive nature of knowledge-sharing.

Community members were involved throughout the process, offering their opinions and advice, sharing their stories and voicing their desires and concerns. They share Lewis' (2014) outlook, who, well aware of cyberspace's duplicitous potential, warns that: "the Western world is busy constructing the structures and systems within which we find ourselves increasingly enmeshed. […] designers and developers of media technology choose what counts as knowledge, what sorts of operations we can perform on that knowledge, and how that knowledge becomes manifest in the world" (p. 61). In order to ensure that the future includes Indigenous perspectives, First Nations, Inuit and Métis people have to be part of its development. In this context, Lewis (2013) also states that Indigenous people need to put out: "ideas of ourselves as a thriving people in the near and not so near future. 100, 500, 1000 years hence. Because if we don't imagine ourselves getting there, who will? And if we're not part of that future imaginary, why bother with us in the present? We need to be active. Not still" (p. 6). *Virtual Aamjiwnaang* hopes to be one such encampment; a place where Indigenous and non-Indigenous people can visit remotely, explore, feel connected with and learn, with their hearts, as much as their mind.

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