

## **Populating the Future Imaginary Visualizing the Future of Indigenous Communities**

I would like to open by acknowledging that we are on Haudensonee Territory. I thank them for the opportunity to reside on their land. I hope my talk today will honour their ancestors who walked this land before us, and that my Iroquois cousins find these words illuminating.

I would also like to thank David Howes and the other organizers for inviting me to speak with you today. It is an honour to be asked to join in this sharing of good minds.

### **[ Statler and Waldorf ]**

I live mainly in a digital media, software development and Indigenous art world, so I have not before intersected with the International Visual Language Association community. Speaking out-of-discipline is both liberating—I don't have to demonstrate my expert knowledge of the field—and daunting—as chances are high that at least some of what I say will have you turning to your neighbour and saying "How obvious is that! Heinrich and Saurez covered it in 1968! And they said it better!" My best hope here is that I can stitch a thread between the relevant and the redundant.

### **[ making visible ]**

To think about visible language, it seems to me that we have to think about being visible or rendering visible. I'm Cherokee and Hawaiian, and we do much of our work in the Native community, so I think about our visibility a lot. It's 2016, and you would think that Indigenous people would be visible by now. 500 + years post contact. 150 years post Confederation. 26 years post Oka. 20 years after the tabling of the Royal Commission on Aboriginal People. 4 years out from the founding of Idle No More. 1 year on from the Truth and Reconciliation commission. And now, we find ourselves in the beginning days of the commission on Missing and Murdered Indigenous Women.

### **[ Annie Pootoogook 1 ]**

Yet...just this week, in response to the death in Ottawa of the renowned Inuit artist Annie Pootoogook, we have this from Ottawa police officer Chris Hrnchiar: "it's not a murder case...she got drunk and fell in the river and drowned who knows. Aboriginals have very short lifespans, talent or not."

### **[ Annie Pootoogook 2 ]**

Followed by his boss, Ottawa Police Chief Charles Bordelea": "I have no evidence to indicate that we have racist officers."

### [ Annie Pootoogook 3 ]

This, about an artist who was a Sobey award-winner, the highest contemporary art award in Canada. This, about an artist whose work, literally, made visible the lives of contemporary Inuit.

Rendering herself visible didn't make any of this visible to that police officer. She was just another drunk Indian. Rendering herself visible didn't make any of this visible to the police chief. "I have no evidence to indicate that we have racist officers."

What kind of bullshit is that? "I have no evidence to indicate that we have racist officers." It's like the old Richard Pryor bit: "Who ya gonna believe, me or your lying eyes?"

So this is a question to all of you visual language experts: how does one render oneself visible, when those who are looking refuse to see?

### [ Riding the Trail of Tears (Blake Huseman) ]

*Riding the Trail of Tears* is a surrealistic scifi novel about the Tsalagi (Saul-a-gee) Removal Exodus Point Park., or TREPP. TREPP is virtual reality ride where visitors relive the brutal Cherokee Removal that took place in the winter of 1838-1839, when my ancestors were forced to march 2200 miles with the loss of thousands of lives. "Riding the Trail of Tears", goes the fictional tourist trap's publicity material, "is not supposed to be easy. It is very competitive and riddled with virtual violence. But it is also meant to be fun for the whole family. "

The first part of the novel is spent with a narrator who is one of the Little People of Cherokee stories—actually, she calls herself a Little Little Person. This Little Little Person is setting the scene for the reader by describing the VR experience, how it came about, and how she (and her siblings) came to live within it. She tells the reader: "*the virtual Trail of Tears...[is] my homeland. I'm probably more Indigenous than you, and the digital earth is where I'm Indigenous...I never took such a formal shape until they built their ride.*"

"I never took such a formal shape until they built their ride."

This talk is, in part, about how things take shape in and with our technology.

## [ The Stack ]

### **The Stack**

Modern computing systems work via a very narrow logic, admit only certain kinds of information as data, and can perform operations representative of only a small, impoverished subset of the operations we enact as humans every day.<sup>1</sup> These systems exist as components of the “stack”: the vertically interrelated and interdependent series of hardware configurations and software protocols that make high-level media computation and networking possible. The software stack sits on top of the hardware stack. Moving up the hardware stack is to move from circuits to micro-chips to computers to networks; moving up the software stack is to move from machine code to programming languages to protocols to systems. As you go upward, you are moving from custom solutions to generalized solutions, from specifics to abstractions. As you make this traversal from the deep structure to the surface interface, ever more of the details of the underlying configurations are hidden from you. With the increasing opacity, your ability to assert fine control over the execution of your algorithm decreases. Eventually you get to the software application or web service layer of the stack. It is at this highly abstract level that most people interact with computational systems, as they use Microsoft Word, Instagram image sharing, or Google search.

The technologists building the stack rarely acknowledge that bias infuses every layer of it, and with greater affect the farther one moves up and away from the physical constraints of the material substrate.<sup>2</sup> Software applications such as Word, for instance, can be thought of as orderly and (mostly) predictable assemblages of biases that reify the imagination of their creators into executable code.

## [ Phantasmal Media ]

These assemblages can be thought of as products of “phantasms” in the sense meant by digital media scholar and computer scientist D. Fox Harrell, in his 2013 book *Phantasmal Media*. Harrell proposes “phantasm” as a term to describe a “*particularly pervasive kind of imagination, one that encompasses cognitive phenomena, including sense of self, metaphor, social categorization, narrative, and poetic thinking.*”<sup>3</sup> He is concerned with how such phantasms become codified and reified within computer systems, how those systems perpetuate various forms of oppression, and how those systems could be built differently to better support “...cultural content, diverse world views, and social values.”<sup>4</sup>

## [ Construction of the Imaginary Indian ]

Harrel's articulation of the phantasm has provides bridge between computer science and entities such as the "Imaginary Indian". As described by art historian Marcia Crosby, historian Daniel Francis, and others, the imaginary Indian came into being in order to facilitate the settler culture's need to erase the real Indian in order to depopulate North America in the minds of its immigrant population.<sup>5</sup> Anthropologists, collectors, and artists—believing they were "salvaging" the remnants of disappearing Indigenous cultures—created a narrative that served to reify a particular profile of the Indigenous individual and his community. This profile was then homogenized to encompass all Native nations of the Americas, to the point that it became the accepted definition of The Native.<sup>6</sup> Other narratives were excluded, including those given by Indigenous people themselves. This imaginary Indian, the "noble savage" whose culture of "primitive grandeur" had been irretrievably lost, became all Indians: shaping law, politics, social interactions, and cultural evolution for both settlers and Indigenous people from Contact to the present.<sup>7</sup>

In the process, the imaginary Indian became more real, and—it would seem from the general culture's embrace of him in preference to the reality—more sympathetic than any real Indian whom settlers might accidentally meet. The imaginary Indian renders actual Indians mute and invisible. Taking our place is a prototypical Indigenous interlocutor that speaks only from a position firmly rooted in the past, on the margins of modern North American society, and of radically diminished agency.

## [ Technological Biases ]

The imaginary Indian is a phantasm in Harrel's sense, the product of a larger social imaginary that systematically misrepresents, delegitimizes, and dehumanizes the lived experience of contemporary Indigenous people. The same impoverished social imaginary that has produced the basic structure of our hardware and software systems, where camera film is biased in favor of white skin, artificial intelligences are trained such that they consider beauty to be a predominantly white trait, and virtual environments don't come with any brown skins for their avatars.

"Who ya gonna believe, me or your algorithm's eyes?"

## [ AbTeC ]

The projects that my partner, Skawennati, and I undertake as part of the Aboriginal Territories in Cyberspace—or AbTeC—research network all aim, in one way or another, to

counter this phantasm of the imaginary Indian lurking in our media content and technology. Skawennati has done the heavy lifting here, with her various solo and collaborative projects, several of which pre-date AbTeC's founding in 2006.

### **[ CyberPowWow 1997 - 2004 ]**

*CyberPowWow*, which sought to create a home for Native artists in cyberspace, as well as raise awareness in the community of how the internet could be used to knit together a transcontinental conversation about Indigenous art and activism;

### **[ Imagining Indians in the 25<sup>th</sup> Century 2001 ]**

*Imagining Indians in the 25<sup>th</sup> Century*, which follows the young Mohawk woman Katsisahawi Capozzo as she ranges over a millennium of first nations history, from 1490 to 2490.

### **[ Thanksgiving Address 2002 ]**

*Thanksgiving Address*, where I joined Skawennati to talk about what, as 21<sup>st</sup> century Indians, we were grateful for—things like TCP/IP and Photoshop and the mouse/windows interface;

### **[ TimeTraveller™ 2008 - 2013 ]**

and *TimeTraveller™*, the story of a young Mohawk man from the future called Hunter who uses a holodeck-like technology to visit events of importance to First Nations people from pre-Contact to the 22<sup>nd</sup> century.

This work is about generating new kinds of imaginary Indians, grown from our own understanding of our communities rather than the nihilistic or romantic needs of the settler population.

Within AbTeC we also look at the technological layers that make such media possible. Our goal is for Indigenous people to become increasingly involved at all layers of the stack, to infuse it with alternative imaginaries. The step after that is for Indigenous people to participate in the design of alternative stacks, ones that are better able to accommodate Indigenous epistemologies, ontologies, and fields of action.

### **[ Bending Media ]**

## Bending Media

One of the central tensions in cyberculture is the one which exists between the command-and-control foundations of the underlying technological infrastructure and the expansive, emancipatory visions of some of its early pioneers. Douglas Engelbart imagined computer systems as a means to augment human intellect, Ted Nelson championed the notion of personal computers as “liberation machines,” and Alan Kay sketched out how the technology could be used as an “intellectual amplifier” for education.<sup>8</sup> This tension has meant that cultural critiques of cyberculture have existed from its early days, though rarely as a central component of the discourse. In the last decade, though, it has become common to hear more discussion about how cyberculture continues to resist the executive participation of anybody other than the Western white male—at least in terms of who conceptualizes, designs, and implements the basic technology.

### [ Count Zero ]

William Gibson’s coined the term ‘cyberspace’ in the novel *Neuromancer*; the second book in the same trilogy, *Count Zero*, digs deeper into just, what, would populate cyberspace. Here, the Finn character is trying to describe the aliveness of cyberspace to a young cyberspace jockey-wanabe:

*“Thrones and dominions,” the Finn said obscurely. “Yeah, there’s things out there. Ghosts, voices. Why not? Oceans had mermaids, all that shit, and we had a sea of silicon, see? Sure, it’s just a tailored hallucination we all agreed to have, cyberspace, but anybody who jacks in knows, fucking knows it’s a whole universe. And every year it gets a little more crowded.”<sup>9</sup>*

Circuits, algorithms, and data are all culturally biased from the first moment—they are an expression of life, after all. As a consequence, cyberspace has never been empty. It may have been—and still substantially remains—terra incognita, but it has never been terra nullius. It is haunted by the spirits of those who constructed it and also those who continue to modify the structures down deep in its stack. These individuals possess ideologies, dreams, and biases that find expression, in large ways and small, in how the plumbing was coded into being. They partook in the social imaginary of their time, one where the command-and-control vision of computing systems battled with the emancipatory vision. Both of these visions operated within a yet larger social imaginary. This imaginary constructed the logic that justified policies and practices of great detriment to the Indigenous people of the Americas—residential schools, termination policies, land and resource theft, outright murder. Every layer of the stack springs from this same imaginary.

This is an old story. The history of Western media technologies' negative affect on Indigenous people post-Contact has been discussed in depth elsewhere.<sup>10</sup> The camera, for instance, was a technology we had not participated in developing, to which we had no access, and from which we received little or no benefit. Yet, in the hands of the European settlers, the technology shaped the way Indigenous people were seen, and thus treated, for centuries onward and thereby played a key role in creating the imaginary Indian.

However, the story does evolve, even if slowly. Indigenous people now face a different reality than our ancestors, having regained some ground against the forces of eradication and assimilation. Indigenous creators working in photography, film, and video have documented their lives and the lives of their communities, bringing an endogenous perspective to the forefront and making it increasingly difficult for non-Indigenous scholars and creators to occupy the epistemological centre of the discourse about Native life.<sup>11</sup>

Today, many Indigenous people have as much access as the settler population to the current new representational technologies. As with the later stages in the development of image- and time-based media, such access provides us with the opportunity to represent ourselves using the technology, in order to contest the representations made by the settlers.

What is potentially more important, however, is the fact that cyberspace is still in its infancy, and thus still being shaped. Tech-savvy Natives can participate in that shaping: in conceptualizing, designing, and implementing the technology as well as in using it. We can learn programming, and hardware hacking, and how to construct new digital entities imbued with the our spirit. Participating at this more fundamental level will greatly increase our ability to make the technology speak in the way we desire. We must always struggle against the deep structure on which cyberspace is built, but the nature of digital devices and networks is such that our ability to customize our cyber experience—to bend it towards our cultural context—and make the results available to the public is much greater than our ability to, for example, storm a network studio and take over the evening television broadcast.

## **Conceptualizing, Designing, and Implementing**

### **[ AbTeC Island ]**

When we began AbTeC we focused on claiming territory in cyberspace. We did this by creating and maintaining presence in cyberspace. We published scores of websites We built a headquarters in the massively shared virtual environment Second Life called AbTeC Island to use as a base of operations. We encouraged and supported other Indigenous

people in producing digital, networked media that would represent their lives and communities.

### **[ Skins Workshops - Stone Giant ]**

Our most prominent effort in this direction was the Skins Workshops on Aboriginal Storytelling and Digital Media Production (fig. 6). The science fiction writer Neal Stephenson—when considering the ways that interfaces obscure the deep structures that make possible our everyday, unthinking use of computation—made a simple observation: “if you don’t like having choices made for you, you should start making your own.”<sup>12</sup> The Skins Workshops are AbTeC’s way of making our own choices by conducting grounded research into how best to integrate traditional stories with new media. We mounted five Skins Workshops between 2008 and 2013. One focused on teaching machinima and the other four on video game design.<sup>13</sup> Each video game workshop featured two hundred hours of instruction on subjects such as Aboriginal storytelling, image editing, sound design, 3D modeling, animation, and level design for digital games and virtual environments.

### **[ Skins Workshops - Kids ]**

The video games produced by the participants have won several international awards, and received a significant amount of press coverage. The attention has served to promote the idea of technologically-savvy Indigenous people within our own communities and within the social imaginary of the settler culture. It has had the additional effect of proving to the participants how well and how powerfully they could shape the technology to speak with their voice.

The next stage of the workshops will dive deeper down the stack. We are exploring how to incorporate more instruction in game programming into the videogame workshops, as well as create workshops where programming skills are the focus. We are also exploring workshops on hardware hacking and DIY electronics, to provide participants with the ability to work at the hardware layer. We will continue to emphasize the importance of using our cultures as an inspiration for conceptualizing, designing, and implementing new media experiences while also highlighting how it is possible for Indigenous people to conceptualize, design, and implement the underlying technology. It is in so doing that we, as Indigenous people, can imagine ourselves as actors engaged in shaping the future that awaits us.

### **[ IIF Logo ]**



AbTeC is centrally concerned with how phantasms such as the imaginary Indian carry forward into the future imaginary of Indigenous and settler cultures. They restrict our participation in the creation of that future by confining us to the margins and denying our contemporaneity even as we are living it. They make it easier for settler culture to ignore those Indigenous future selves. This is why we conceived of the Initiative for Indigenous Futures. The Initiative is focused on enabling and sustaining a conversation about how we see ourselves seven generations hence—150 to 200 years in the future, science fiction territory.

Sketching visions of a future life—whether at the level of individuals, cultures, societies, or species—is rarely just about the jetpacks or the aliens or the minority reports. Jetpacks represent humanity’s technical cleverness and desire to be unshackled from gravity; aliens represent the Others of our world—be they the primitive, the outcast, or the superhuman; and the minority reports represent living in a state of anxiety about the loss of free will in the face of a technologically overwhelming hegemonic state.

We are interested in building a new set of metaphors, a new assemblage of phantasms, a new imaginary: one that will bridge between who we as Indigenous people are now and who we might be. By encouraging Indigenous people to become producers of digital, networked media, and eventually creators of digital technology, we hope to encourage our communities to embrace and engage what promises to be a highly technologized future. We need to build the capacity to participate in the construction of that future, and also validate, within our own communities, such activity as authentically Indian.

This brings us to AbTeC’s latest phase, called the Initiative for Indigenous Futures. Whereas in our earlier stage we were concerned with imagining a particularly Native occupation of cyberspace and relationship with digital media, the Initiative is focused on populating the Indigenous future imaginary with images of where we want our communities to be in seven generations.

### **[ Illustrating the Future Imaginary ]**

Since the spring of 2015 we’ve been commissioning Indigenous artists to create illustrations of what they think or want the lives of their descendants to be like. The project is called, straightforwardly enough, *Illustrating the Future Imaginary*. So far we have ten illustrations in this series, and will be commissioning several more a year for the next six years.

### [ Youth Workshops - Dechinta ]

We've also been working with Indigenous youth on illustrating their future imaginaries. Our first one of these we did at the Dechinta Centre for Research and Learning, located in Dene territory north of Yellowknife. In between moose-hide tanning and ice fishing, we led a workshop where we asked the students to imagine a character from their future.

### [ Residencies ]

The other thing we do is host Indigenous artists to come here, to Montreal, and work with us at Concordia on realizing artwork that addresses the future imaginary. I've already shown you some of the work of our first resident, Skawennati, that touches on the future. We're currently helping run the 2167 project, a collaboration with the imagineNATIVE Film + Media Festival, the Toronto International Film Festival, and media developer Pinnguaq. 2167 is a response to the celebrations that will happen here in Canada next year commemorating 150 years of Confederation. We and our partners were not interested in celebrating that milestone, as that history has not been kind to Indigenous people. Instead, we wanted to look to the future and so commissioned six artists or arts collectives to use virtual reality to imagine life on this continent 150 years from now. Over the last year, we have hosted Scott Benesiinaabandan and the arts collective Postcommodity and helped them produce an immersive VR experience that captures their vision of the future.

### [ Walking the Clouds ]

We are not the only people looking at Indigenous far futures, of course. I'll mention just two here, as I find both efforts so inspiring. Grace Dillon's groundbreaking anthology, *Walking the Clouds*, collects a number of great examples of Indigenous writers using the tropes of science fiction to reflect on where they see their communities headed. Dillon makes a convincing argument that Indigenous people have *always* been engaged in using speculative fiction to understand ourselves and our world.

### [ Polyfantastica ]

Solomon Enos' *Polyfantastica* is an epic spanning six thousand years of alternate histories and alternate futures, drawing upon and radically expanding Native Hawaiian mythology. The humans and creatures and worlds of this story open up vast new possibilities for thinking about how Native communities might evolve while acknowledging cultural continuity.

## [ Reframings ]

Doing this work over the last decade or more has brought forward to me several crucial reframings. For this last section, I want to visit some of the imagery generated by the project more slowly and use it to illuminate those reframings. For the most part, I'll let the artist her or himself describe what is going on.

### [ Reframing 1: We are post-apocalyptic ]

Science fiction is often concerned with post-apocalyptic scenarios, from nuclear wars to alien colonization to a zombie epidemic. It's often an excuse to either a) show how good white people are at McGyvering themselves out of the fucked up situations they make for themselves, or 2) lamenting the fact that they didn't listen to all the people who were saying "Wait, don't touch that button..."

But as Indigenous scholars such as Cutcha Riesling Baldy and Kim TallBear and others have pointed out, we Indians don't need science fiction to imagine the apocalypse. Our ancestors faced apocalypse—Columbus was the alien invaders of the War of the Worlds times one thousand, except we caught the colds instead of the invaders. Did I say 'cold'? Sorry, I meant we caught five hundred years of genocidal murder and rapacious theft.

We survived, though, to inhabit this post-apocalyptic landscape in which we now find ourselves. We know how to get around in a world under constant threat; we know how to move around our territories because we still know it better than all of the arrivants.

### [ Steve Sanderson - Picking Up Where We Left Off ]

depicting one of his descendants reclaiming the plains and using a mixture of the old ways and the new to chart their path in a post-apocalyptic world.

### [ Ray Caplin - Hunter of Altered Game ]

Ray writes: 16 generations into the future, where Massive corporations and industry have long since coated the planet with towering cities and factories, all of earth's industrial resources had been depleted, and the cities have been left abandoned to crumble. The density of the cities has made it difficult for nature to reclaim the earth. Toxic chemicals and radiation had soak the soil, drastically mutating most life that dwells there. In the midst of the ruins, a lone hunter preys upon the altered game. Knowledge passed down from generations has shaped him into a formidable hunter. Adapting modern tools such as his

power spear, combined with the teachings from his ancestors, allow the Mi'kmaq hunter to survive in this rugged forest of steel skeletons with poisoned skies.

### **[ Postcommodity - Each Branch Determined ]**

Each Branch Determined imagines northern New Mexico 150 years in the future and finds a series of interconnected American Indian and Xicano pueblos working collaboratively to exercise community and regional self-determination. The immersive experience guides users through landscapes and settings that are framed to exploit sci-fi conventions of an apocalyptic future. However, over time, the user discovers that what appears as apocalyptic is actually a series of managed processes intended to restore and manage land and natural resources, and community ceremonies intended to culturally and socially actuate past, present and future.

### **[ Kayla Tulugarjuk ]**

Kayla wanted to imagine a future of female Inuit empowerment, where her “little Inuit descendent are running around living a nomadic lifestyle, using the knowledge of their ancestors to survive the environmental post-apocalypse.”

### **[ We are the aliens we've been waiting for ]**

Lindsay Catherine Cornum has a great essay called “The Creation Story is a Spaceship”. In it, she writes “we are the aliens we've been waiting for...The joke's on [the colonizers], because it's us—those perpetually underestimated Brown people—who are the advanced race capable of large-scale works of technology, memorial, etc. We are the highly intelligent beings the government has tried to cover up. Indigenous peoples who have suffered genocide and dispossession for more than five hundred years are used to thinking in terms of global conspiracy, and that's because we've been in the middle of one all of this time.”

### **[ Elizabeth LaPensee - Returning to Ourselves ]**

"Returning to Ourselves" reflects our cyborg selves of the future in a spacetime when we activate interstellar travel by recognizing the depth of teachings from the past. Blood memory echoes as thought initiates form and the triangulation of breath ignites the connections of planetary trapezoids.

### **[ Scott Benesiinaabandan - Blueberry Pie Under the Martian Sky ]**

Anishnabe artist Benesiinaabandan recounts a story he was told by Cree Elder Wilfred Buck about Spider Woman. From her home at the centre of the Seven Sisters, Spider Woman wove a long thread along which the Anishnabe people travelled to Earth. Some modern interpretations of this legend say that this spider thread is a metaphor for a wormhole. Another story says that some day, a young boy will return to that place from where the Anishnabe came. *Blueberry Pie Under The Martian Sky* is a virtual reality (VR) artwork that will take place seven generations in the future, when human beings are able to travel through wormholes. It will follow that young boy as he journeys back to his people's place of origin.

### [ Wade Vaneltsi - Old Joe ]

Little Bear, with a bow that never misses and a feather pendant, both of which are passed down from generation to generation to represent and preserve the culture. Their wearer uses them to travel to the spirit realm, where he talks to the ancestors for advice, and then comes back knowing what they should do.

The twist is that the ancestors are aliens, but, since aliens don't like to be called aliens, they call themselves ancestors.

### [ Reframing 3 - we are the science fiction of our ancestors ]

#### Reframing 3

Hawaiian activist Kamuela Enos has this saying that I've come to really appreciate. "We are the science fiction of our ancestors". It dovetails nicely with something that we say to the youth with whom we work, and that is that they are the makers of tradition for their descendants.

### [ Reframing 3 - old flow ]

Putting these together upends my old way of thinking about tradition and science fiction, which is that tradition comes from our ancestors and science fiction is what we use to dream our descendants;

### [ Reframing 3 - new flow ]

the inversion allows us to appreciate just how different our lives are from those who preceded us, and focuses us on our responsibility to be active participants in the evolution

of our cultures.

### **[ Joseph Erb - Turtle Translation App]**

“The Turtle Translation App is about learning the old stories and ways with better communication. The idea is that future technology brings us back to who we are.”

### **[ Mande McDonald - Future Moos Hunter]**

Imagine a Future Moose hunter and moose hide tanner. Much of the future landscape is radioactive, with the rich living in arks suspended above the land and the poor people on the ground below. But the poor people want to stay in contact to the land because the stories say that their ancestors will only be able to find them if they stay in touch with the ground. And they have figured out how to use the radioactive moose to access their blood memory, allowing them to go backward and forward in time.

### **[ Teyowisonte Tommy Deer - Perservance]**

I thought about what the future of our community would be in terms of likelihood and in terms of how I hope it would age. The illustration is intended to be an aspiration portrayal of our future. The illustration shows the dominant colonial world growing around us, amidst the contrast of the foreground depicting a Haudenosaunee Longhouse, which is holding colonialism at bay. The Longhouse symbolizes our enduring culture and nationality and the smoke symbolizes that it continue to exist and live. The rows of purple wampum on top and on the bottom of the illustration reflects the Two Row Wampum, which represents the desired relationship of coexistence and non-interference between our peoples. The top row is falling apart, which symbolizes the colonial failure to respect this relationship.

### **[ Why should we be subject to other peoples' failure of imagination?]**

I started out asking, “how does one render oneself visible, when those who are looking refuse to see?” I want to end by asking: “Why should we be subject to other peoples' failure of imagination?” How do we reframe the image that settler society has of us? How do we reframe our own self-image?

We must actively imagine our own futures. We must insist on manifesting ourselves in the future imaginary of the broader society.

When our seventh-generation descendants explore whatever the latest incarnation of

virtual space might be, they will find the ghosts that Gibson's Finn spoke about. Those ghosts will be the remnants of the epistemologies and ideologies that built those spaces: the phantasms in operation at their birth.

We need to ensure that some of those ghosts will have been put there by Indigenous people, that the Indians haunting those spaces are us rather than some imaginary dreamed up by impoverished minds.

We need to nurture phantasms of our making, developing our skills at telling stories with these new tools while saturating the digital earth with our presence—to create silicon soil in which our descendants will wriggle their virtual toes and think “This is a good place to be Cherokee. This is a good place to be Mohawk. This is a good place for our people.”

[ Jeffrey Veregge – Bold Steps]

END

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<sup>1</sup> Douglas R. Hofstadter. Gödel, Escher, Bach: An Eternal Golden Braid. (Harmondsworth, Middlesex: Penguin Books, 1979): p. 285 – 309.

<sup>2</sup> Terry Winograd and Fernando Flores. Understanding Computers and Cognition: A New Foundation for Design. (Reading, MA : Addison-Wesley Professional, 1987): pp. 70 – 79.

<sup>3</sup> D. Fox Harrell. Phantasmal Media: An Approach to Imagination, Computation, and Expression (Cambridge, MA: The MIT Press, 2013). p. ix.

<sup>4</sup> Ibid. p. xv.

<sup>5</sup> Marcia Crosby. Ibid. pp. 267 – 290.

<sup>6</sup> Simpson, Audra. Mohawk Interruptus: Political Life Across the Borders of Settler States. (Durham, NC: Duke University Press, 2014): pp. 96 – 114.

<sup>7</sup> Paul Chaat Smith. “Home of the Brave.” C Magazine 42, Summer (1994): p. 39.

<sup>8</sup> Douglas Engelbart. “A Research Center for Augmenting the Human Intellect” (a paper presented at the Fall Joint Computer Conference, San Francisco, December 9, 1968); Theodor H. Nelson. Computer Lib/Dream Machines. Self-published. 1974; Howard Rheingold. Tools for Thought: The History and Future of Mind-Expanding Technology. (Cambridge, MA: The MIT Press, 2000).

<sup>9</sup> William Gibson. Count Zero. (New York: Ace Trade, 2006): p. 170.

<sup>10</sup> Aleiss, Angela. Making the White Man's Indian: Native Americans and Hollywood Movies. (Westport, Conn.: Praeger, 2005); Beverly R. Singer. Wiping the War Paint off the Lens: Native American Film and Video. (Minneapolis: University of Minnesota Press, 2001): pp. 14 – 22; Buscombe, Edward. “Injuns!”: Native Americans in the Movies. (London: Reaktion

Books, 2006.)

<sup>11</sup> Vine Deloria Jr. We Talk, You Listen: New Tribes, New Turf. (Lincoln: Bison Books, 2007): pp. 33 – 44.

<sup>12</sup> Neal Stephenson. In The Beginning...Was The Command Line. (New York: Avon, 1999): p. 151.

<sup>13</sup> Beth Aileen Lameman and Jason Edward Lewis. “Skins: Designing Games with First Nations Youth” In Journal of Game Design and Development Education, vol. 1, no. 1. (2011): pp. 63 – 75.