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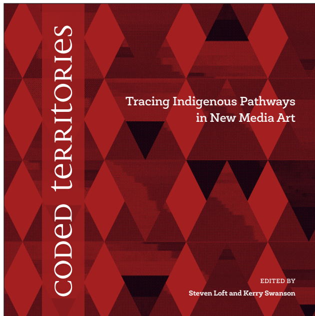

CODED TERRITORIES: TRACING INDIGENOUS PATHWAYS IN NEW MEDIA ART

Edited by Steven Loft and Kerry Swanson

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Tracing Indigenous Pathways in New Media Art

EDITED BY

Steven Loft and Kerry Swanson

coded territories

Coded Territories

Tracing Indigenous Pathways in New Media Art

STEVEN LOFT, ARCHER PECHAWIS, JACKSON 2BEARS, JASON EDWARD LEWIS, STEVEN FOSTER, CANDICE HOPKINS, AND CHERYL L'HIRONDELLE

EDITED BY STEVEN LOFT AND KERRY SWANSON

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foreword

BY JASON RYLE

Adaptation and artistic response to new technologies is embedded in Indigenous realities. From glass beads to hard drives, Indigenous ingenuity has utilized contemporary tools for artistic means for centuries.

The imagineNATIVE Film + Media Arts Festival, along with our partners, the Ryerson Image Centre and Vtape, is pleased to present *Coded Territories: Tracing Indigenous Pathways in New Media Art*. This volume represents an important document in the critical discourse surrounding Indigenous new media arts from the perspectives of those at the creative front: Indigenous artists themselves.

Coded Territories has been a long time coming. The idea for a series of publications based on the media showcased at the imagineNATIVE Film + Media Arts Festival – film/video, radio, and new media – was a dream first discussed many years ago. Thankfully, it was made a reality by my colleagues involved in this publication. It is our intention that *Coded Territories* be the first of at least three volumes that critically examine the artistic fields of new media, film/video, and radio from the perspectives of Indigenous artists, curators, leaders, and scholars from Canada and around the world.

Indigenous artists working in new media (and aliases: digital art, electronic art, etc.) are among the forerunners of this art form in Canada and internationally. There has, however, been too little critical discourse, academic or otherwise – and much less published – about their work from their diverse world views. *Coded Territories* takes a significant step forward in filling this void.

This publication has been made possible by the generous support and shared vision of our partners, the Ryerson Image Centre and Vtape, with valuable support from the Canada Council for the Arts and the Ontario Arts Council. I would also like to thank

and acknowledge the shared commitment, wisdom, and talents of Doina Popescu, Steven Loft, Lisa Steele, and Kerry Swanson.

imagineNATIVE's commitment to presenting diverse and contemporary works by Indigenous artists remains firm. *Coded Territories* is a milestone in our history and one that I hope will spark new ideas, passionate discussions, and endless inspiration.

Jason Ryle
Executive Director
imagineNATIVE Film + Media Arts Festival

CODED TERRITORIES COMMISSIONED BY

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imagineNATIVE & Ryerson Image Centre acknowledge the following funders who supported the development of this project's content:

The Howard and Carole Tanenbaum
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The Paul J. Ruhnke
Memorial Fund

foreword

BY DOINA POPESCU

The Ryerson Image Centre is proud to be partnering with the imagineNATIVE Film + Media Arts Festival and Vtape in the publication of *Coded Territories: Tracing Indigenous Pathways in New Media Art*.

Aboriginal curator Steven Loft, co-editor of this volume of critical writing, is a Trudeau Fellow and was recently Visiting Trudeau Fellow at Ryerson University and Scholar in Residence at the Ryerson Image Centre. I am delighted that we have been in a position to support his research into Aboriginal art history and his many curatorial projects focusing on contemporary Aboriginal art practices. Ryerson University, which is also home to the prestigious Centre for Indigenous Governance and the seat of a very active Aboriginal Education Council, has made a significant commitment to transdisciplinary Indigenous learning and scholarship.

Coded Territories: Tracing Indigenous Pathways in New Media Art is an important anthology that offers the reader fresh insights into contemporary Indigenous art historical scholarship and the ongoing examination of Aboriginal cultural specificity and self-definition within the contexts of contemporary art practices, highly complex socio-political histories, and differing world views. We are invited to share in the construction of an art history that is re-examining its own imperatives and historical roots. The inclusion of the Aboriginal voice in art historical discourse and the necessity to find bridges between differing critical practices is becoming ever more evident. This anthology takes us on an exciting step forward on this essential path.

Doina Popescu
Founding Director
Ryerson Image Centre

for iktomi

Come into my office," Iktomi[1] said, "I want to hear more about your project." Coyote had warned me about this one. "This one," he said, "will tell you fantastic things. They are, to be sure, all true, and he will weave them in his web, and you will be seduced and mesmerized . . . and if you don't watch out, you will go on fabulous adventures to realms of light and energy and spirit."

On September 26, 2006, our good friend Ahasiw Maskegon-Iskwew passed on.

Ahasiw Maskegon-Iskwew. Agitator, activist, artist . . . writer, curator, thinker. Words that describe, but never really catch the spirit of the man until we add one other: Aboriginal. His thinking, his way of being, his artmaking, was always informed and animated by his "Indigeneity," by Aboriginal philosophies, and by customary knowledge and thought. Far from being dogmatic, his was an Indigeneity of intellectual and cosmological manifestation. With the rise of the inclusion of Aboriginal artists in institutional arts programming in the past twenty years, there has been increased dialogue around the nature and political/cultural imperative of Aboriginal arts presentation and discourse. Ahasiw was on the front lines of these struggles throughout his career — not just as a thinker and writer, but by actively mobilizing ideas of Aboriginal cultural sovereignty and self-determination through his tireless policy and theoretical work. Maskegon-Iskwew's influence on organizations such as the Canada Council for the Arts, Pitt Gallery, Circle Vision Arts Corporation, Aboriginal Film and Video Art Alliance, and Urban Shaman: Contemporary Aboriginal Art is a testament to his leadership role in bringing Aboriginal media and new media to the fore.

He believed that Indigenous media art production constituted a very different kind of media ecology than "Western" practitioners and theorists hold. Through his artwork, critical thought, and tireless advocacy, he furthered our understanding of, and engagement with, the concepts of "transformation and shifting states of being"[2] that are central to Indigenous thought and ways of knowing. His was an epistemology of animism rooted in Aboriginal philosophies *and* technological imperatives. For him, the works of Aboriginal media and new media artists "explore and bear witness to the contemporary relevance of the histories of Indigenous oral cultures and profound connections to their widely varying lands. They also reveal the creative drive that is at the heart of Indigenous survival. The cultures of animist peoples require a continual sensitivity to, and negotiation with, the cultures of all of the beings and forces of their interconnected worlds."[3]

In his seminal work *Drumbeats to Drumbytes*, he wrote, "Indigenous digital artists around the world are deeply engaged with, and provide important contributions to, interdisciplinary and cross-community dialogues about cultural self-determination."[4] And, in his introduction to the groundbreaking *Storm Spirits* virtual exhibition series, he wrote, "the ancient process of successfully adapting to their worlds' shifting threats and opportunities — innovating the application of best practices to suit complex and shifting flows — from a position of equality and autonomy within them, is the macro and micro cosmos of contemporary Indigenous cultures: a truly networked way of being."[5] This philosophy of art and culture is perhaps even more cogent and salient today than when he wrote it.

In all his work, Ahasiw engaged a spiritual as well as cultural Indigenous philosophy and deeply woven aesthetic sensibility. He was a warm, loving, generous soul, one of the foremost thinkers and practitioners of Aboriginal new media art, and a true friend to all who knew him. He had a profound impact on Aboriginal art in this country and his influence is still being felt today. This book is lovingly dedicated to his memory.

Rest in peace, Ahasiw. May your continued journeys take you places to commune with the ancients and be one with your ancestors.

> "I've been the mirror reflecting other's selves . . . I am Iktomi."[6]

NOTES

1 In Lakota mythology, Iktomi is a spider-trickster spirit. There is a prophecy that stated Iktomi would spread his web over the land. Today, this has been interpreted by some contemporary Indigenous people to mean the telephone network, and then the Internet and World Wide Web. Iktomi has been considered by the Lakota from time immemorial to be the patron of new technology; from his invention of language, he gave to the people today's modern inventions, such as the computer. *Editor's note*: And that's why, for me, Ahasiw will always embody the spirit of Iktomi.

2 "Talk Indian to Me," part 2, http://www.reg.trlabs.ca/artists/ahasiw/cree1.htm.

3 http://www.conundrumonline.org/Issue_1/drumbytes.pdf.

4 Ibid.

5 Editorial, *Drumbeats to Drumbytes: The Emergence of Networked Indigenous Art Practice*. http://www.conundrumonline.org/Issue_1/drumbytes2.htm.

6 From John Trudell's song "Iktomi," off the *Madness and Moremes* album.

INTRODUCTION

STEVEN LOFT

Decolonizing the "Web"

As I began thinking about this book, I looked to a number of theoretical formulations of media "ecology." I was looking for a starting point, a way of entering into a new dialogue around media that responded to Indigenous ways of thought.

I came across an article written by the highly respected media theorist, scientist Robert K. Logan, titled "The Biological Foundation of Media Ecology."[1] In it, he posits a biological model of media ecology, reordering the technology-based systems we have from an organic position. The model is based on the work that he and Marshall McLuhan developed together. His abstract reads as follows:

> Media ecology is shown to embrace not only the study of media but also the study of language, culture and technology and the interaction of these four domains. It is demonstrated that language, culture, technology and media behave like living organisms in that they are emergent phenomena and that they evolve, propagate their organization and interact with each other in a media ecosystem. This model allows us to explore the biological dimension of media ecology, which, it is claimed, has been hitherto ignored. It is shown that both biological and media ecosystems may be considered as media in themselves and that an ecosystem is both the medium and the message.[2]

My intent here is not to refute Logan's hypothesis (in fact, I find it very interesting and constructive), but to offer a differing structure

of media theory more in keeping with an Indigenous media "cosmology" — a model of media ecology based in the epistemologies, histories, traditions, communication systems, art, and culture of the Aboriginal people of Turtle Island.[3] "Media cosmology" embraces an Indigenous view of media and its attendant processes that incorporates language, culture, technology, land, spirituality, and histories encompassed in the teachings of the four directions. The phrase "all my relations" is often used to explain the interaction of all things within an evolving, ever-changing social, cultural, technological, aesthetic, political, and environmental intellectual framework (what I would refer to as the cosmological dynamic) and can certainly be applied to the landscape of media. Cosmological intellectual ecosystems exist as media, as message, and as a form of knowledge transferral. They are epistemological environments wherein notions of nationhood are interspersed with, connected to, and integrated with a larger sense of the plurality of life.

By eschewing "Western" conceptions of media ecology, we posit a unique new media landscape not predicated on Western foundational thought but rooted in our own world views. These theories do not supersede or repudiate those of Western thought but can be seen as distinct and in many ways complementary to other discourses. But the differences are important and they point to a fundamentally dichotomous view of Indigenous thought and association with that of "Western thought." For Indigenous people the "media landscape" becomes just that: a landscape, replete with life and spirit, inclusive of beings, thought, prophecy, and the underlying connectedness of all things – a space that mirrors, memorializes, and points to the structure of Indigenous thought.

This does, however, imply a differing contextual environment in which the work must be viewed. Language, as cultural signifier, evolves and changes, constantly redefining a culture's existence. Likewise, new media production by Aboriginal artists is transformative and transformational: a shapeshifter. It is an act of proprietary self-definition and cultural self-determination.

In many ways, the work of Aboriginal new media artists can be seen as the outgrowth of a distinctly Aboriginal visual and oral culture. It represents an aesthetic of nexus based on a storytelling (knowledge transference) tradition, as well as the ongoing participation of Aboriginal artists in visual and media arts culture. Thus, articulation of Aboriginal artistic production becomes a locus for contesting dominant modes of presentation and discourse.

The writers chosen for this book are some of the pre-eminent scholars, writers, artists, and thinkers in Aboriginal art and aesthetics in Canada. Their insights into the nature and practice of an Indigenous new media constitute a new narrative of art historical discourse, imagining and realizing the landscape of "Coded Territories." Their contributions, as well as those of the artists and practitioners they write about, move us forward in ways we might never have thought possible.

Steven Loft
Co-Editor

NOTES

1 Robert K. Logan, "The Biological Foundation of Media Ecology." *Explorations Media Ecology* 6 (2007): 19–34, www.physics.utoronto.ca/people/homepages/logan/BioMedEcol.pdf (accessed January 3, 2012).
2 Ibid., 19.
3 Turtle Island is a term used by several Northeastern Woodland Native American tribes, especially the Haudenosaunee or Iroquois Confederacy, for the continent of North America.

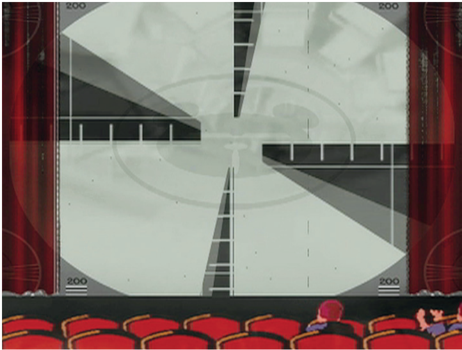
JACKSON 2BEARS

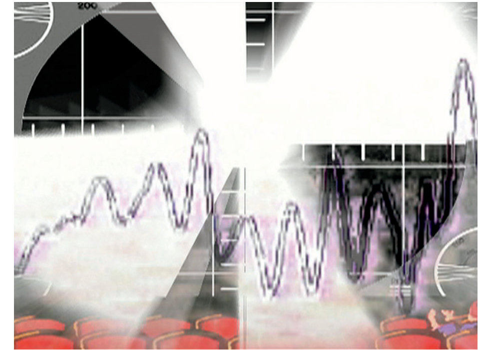
I endeavor to see through material manifestations to the essence and spirit of the world . . . to the mysterious magic that is the living spirit/spectre of technology.

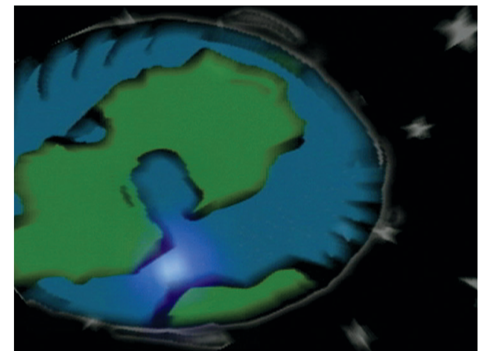
Jackson 2bears is a Kanien'kehaka (Mohawk) multimedia artist and cultural theorist. He has exhibited his works in solo and group exhibitions across Canada, most recently at the Banff Centre (Banff, AB), Vancouver Art Gallery (Vancouver, BC), PAVED Arts (Saskatoon, SK), Art Gallery of Greater Victoria (Victoria, BC), ImagineNative Film + Media Arts Festival (Toronto, ON), EMedia (Calgary, AB), Latitude 53 (Edmonton, AB), and Urban Shaman (Winnipeg, MB).

He has also exhibited his work in media arts festivals and group exhibitions internationally, most recently at Futur en Seine Festival (Paris, France), Beyond (Belfast, Ireland), South Film Festival (Southend-on-Sea, UK), and Digital Art Weeks (Zurich, Switzerland). 2bears is currently a member of Beat Nation [Live], a First Nations artist collective that combines hip hop, live music, and digital technology as a way to celebrate the spirit of contemporary Indigenous culture. He is also a co-founding member of Noxious Sector, a communal forum dedicated to the exploration of interdisciplinary artistic practice and creative expression.

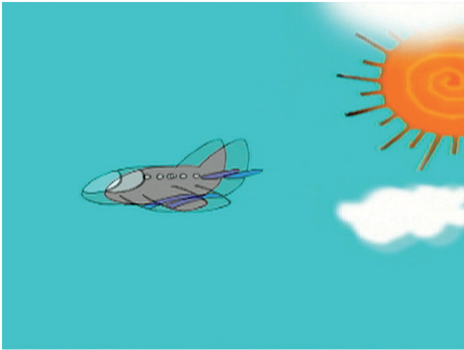
2bears' writings have appeared in *CTheory* and in numerous catalogues and exhibition monographs. In 2012, 2bears completed his PhD in interdisciplinary studies at the University of Victoria, Victoria, BC. He is currently adjunct professor in digital media arts and technology, and a research associate at the Pacific Centre for Technology and Culture at the University of Victoria.







Video stills from “10 Little Indians [remix],” 2004. Courtesy Jackson 2bears.



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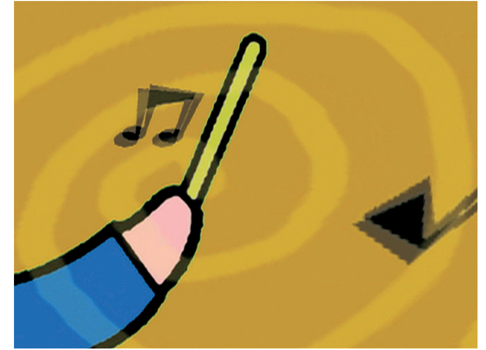

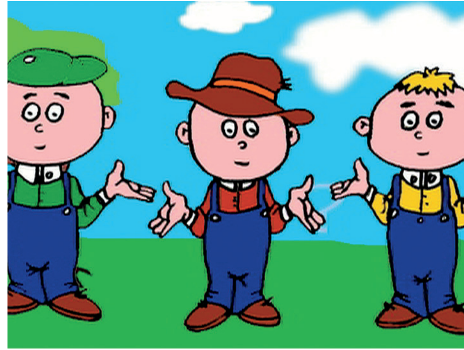

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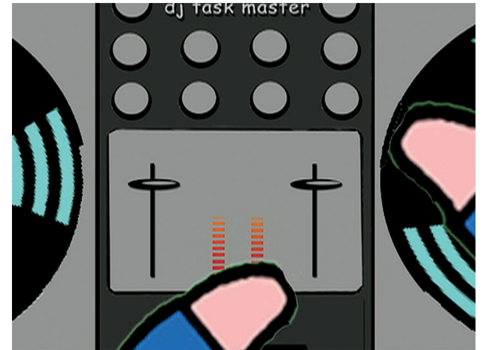
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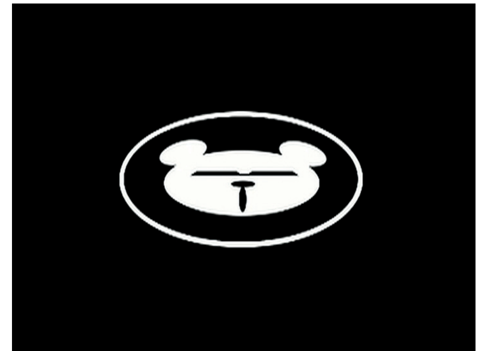

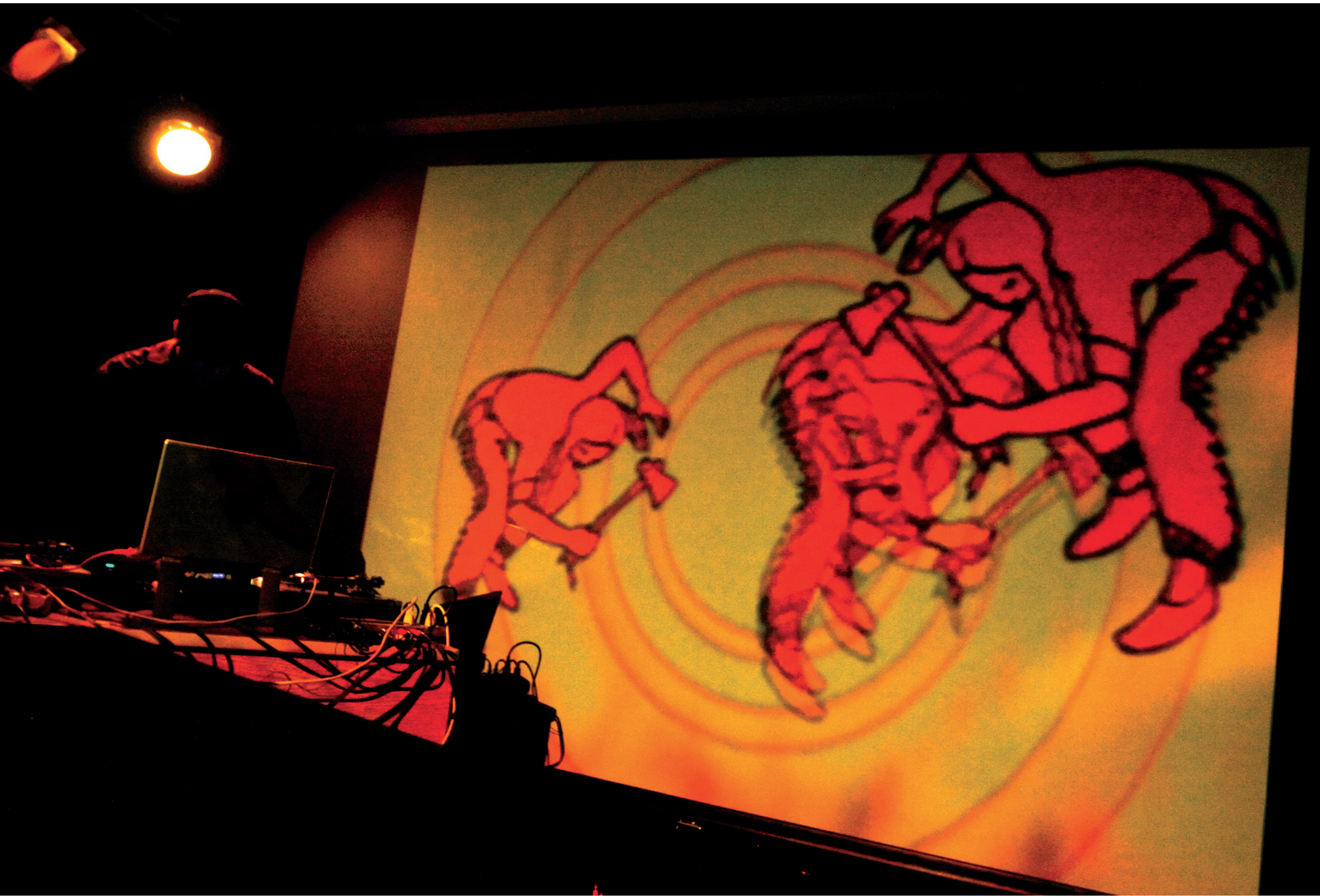

1 My Post-Indian Technological Autobiography

JACKSON 2BEARS

It's February 2003, and I'm diggin' through a dusty stack of vinyl at the local Salvation Army somewhere on the West coast of Turtle Island.

I go hunting for records at these kinds of places anytime I can, always searching for something different and unique that I can sample and remix into my live DJ sets.

I zero in on the 25-cent bin — usually the best place to find that obscure sonic material that I'm searching for — and quickly pore through the warped and mangled copies of Willie Nelson, Rita McNeil, and Barbra Streisand records.

I pass over one of the many discarded "children's" records in the bin, only to then skip back, caught by a strange and uncanny sensation.

I pause and fixate on a worn and water-damaged record cover that reads *Mother Goose's Happy Time Records*, spelled out in a playful hand-drawn font.

I turn the record cover over, scroll down through the track listing, and then read song number eight: "Ten Little Indians."

I make the purchase and quickly return home. Once there I remove the vinyl from the jacket, cue up to song eight, and nervously

wait through the distorted pops and clicks of sonic artifacts before the music finally begins . . .

> One little, two little, three little Indians
> Four little, five little, six little Indians
> Seven little, eight little, nine little Indians
> Ten little Indian boys.

I am abruptly catapulted through a wretched and divine portal . . . something like slipstreaming through a sweat lodge that one was entirely unprepared for.

My mind drifts . . . and suddenly I find myself back in my old grade three classroom, awkward and self-conscious, surrounded by the cacophonous chatter of a group of unsettled children exploding with uncontrolled anxiousness about this afternoon's activities.

This is "Indian week" for us at Brantford Elementary, and our classroom is vulgarly decorated with all the usual aesthetic manifestations of colonial mythology, a virtual dog's breakfast of "Indian" paraphernalia: teepees, totem poles, headdresses, and tiny figurines arranged in cheap diorama scenes that depict the heroism of brave European frontiersmen warding off the Natives and conquering the untamed wilderness of the "New World."

Being the only "Indian" in my class, I am ceremoniously granted the great privilege of holding the talking stick made from toilet paper rolls and donning the "sacred headdress" fashioned from faded construction paper and gnarled plastic feathers.

Ms. Garland aggressively slaps her metre stick across the chalkboard, motions for everyone to be seated, and the room falls silent.

I am invited to stand and move to the front of the classroom. Our teacher flicks the power switch on the old GE Wildcat suitcase turntable, and precariously directs the needle to track number eight.

Through her expressive gestural motions she indicates to the class that it is time for a singalong, one where I will lead the group

through a series of demeaning actions to the tune of Mother Goose's "Ten Little Indians":

> Ten little, nine little, eight little Indians
> Seven little, six little, five little Indians
> Four little, three little, two little Indians
> One little Indian boy.

SACRED TECHNOLOGIES OF FUTURES PAST

I have no idea if the following is true . . . but Grandfather used to say that when our people saw rifles for the first time, they called them *iron tomahawks* and marvelled at the mysterious magic that this new technology possessed: the ability to call upon the spirit of *He-no the Thunderer*.

I believe that as *Onkwehonwe* (Indigenous peoples),[1] we have always had a way to understand technology that is uniquely our own; I find that we tend to look beyond material manifestations straight through to the spirit, and therein try to discover the *essence* of something based on — as Grandfather would say — what our hearts, minds, and spirits tell us.

Leroy Little Bear once wrote that the Indigenous experience of life involved a belief in the "sacredness, livingness and the soul of the world . . . all things being animate, space/place, renewal, and all things being imbued with spirit."[2] For us this applies, not only to obviously living things like animals and plants, but equally to seemingly inanimate things like mountains, rivers, and human-made artifacts — such is the way we often understand technology, as something alive and filled with spirit, something with which we are interconnected in what Little Bear called a "circle of relations," and something that is a part of a universe of "*active* entities with which people engage."[3]

But at the same time, if technology is said to be animate, alive, and filled with spirit, then is it not possible — as in our stories of

tricksters, transformers, and He-no the Thunderer — that some of these spirits might have less than benevolent intentions? That is, if we are to envision (new) media technologies as being inhabited by spirits, then might we not also endeavour to speculate about those spirits who are seemingly determined to *spectralize* — those apparitions, *revenants*, and ghosts whose *will* it is to haunt the lives of the living?

I describe the day I found that record at the Salvation Army as a life-changing experience, as something of a magical encounter that caused me to re-confront some memories of a long-forgotten past.

Since then, listening to Mother Goose's version of "Ten Little Indians" has produced similar visceral responses in me, and I have come to believe that there is indeed something mystical about this recording, something almost *hauntological* and spectral that is etched into the grooves of the record.

I do not believe that this is so far-fetched; in fact, many cultures throughout the history of the world have held similar beliefs in that certain material substrates had the ability to capture, contain, and/or are otherwise imbued with an essence or *trace* of spirit entities.

My *Kanien'kehaka* (Mohawk) ancestors, for instance, believed in what Indigenous philosopher Gregory Cajete called *ensoulment*,[4] or what psychoanalytic theorist Carl Jung referred to as *mystical participation* or *animism* — something that for him had to do with "shared ontological realties" in cases where a "psychic significance" is applied to elements of/in the 'natural' or 'objective' world.[5]

Jung once speculated that rapid technological advance in his time was responsible for a dangerous "turning in" or "splitting" of the conscious and unconscious realms of the human psyche — dangerous because if these realms became disassociated, the people were ill-fated to fall to the mercy of the "psychic underworld." In response to this, Jung chose to meditate on pre-modern cultures, which for him maintained what he called a "psychic balance" despite comparable technological advancements in their time. The reason for this, he argued, was that Indigenous peoples always

nurtured a spiritual connection with their technologies, whereas in Western culture, technology had become an abstract and inhuman concept devoid of any "psychic significance" because the people had come to ignore the spiritual (animate) essence of technicity.[6] Leroy Little Bear described it this way:

> The Native paradigm is comprised of and includes ideas of constant motion and flux, existence consisting of energy waves, interrelationships, all things being animate. . . . If human beings are animate and have spirit, then "all my relations" must also be animate and have spirit.[7]

For many Indigenous tribes, our ritual masks, for instance, were seen as particularly potent material manifestations of different spirits; for us, these masks were taken to be numinous, and we used them in different ceremonies and curing rituals in which they acted as a conduit to the spirit world.

My *Haudenosaunee* (Iroquois) ancestors had many different types of masks, perhaps the most important of these being the False Faces. These masks were only worn by those of the Society of Faces, initiation into which only came after an individual had a profound dream of the False Face spirits. Following this dream, it was said that the individual would go by him/herself into the wilderness and therein discover a tree they felt particularly attracted to. They would then carve their mask into the bark of the tree and, when it was completed, allow for a gestation period during which the mask (face) would absorb energy from the spirit world. Following this, the mask would be detached from the tree, and the carver would have completed his/her initiation into the False Face Society, thereafter serving his/her community in curing rituals and dream-guessing ceremonies.

Though every mask was different, each shared the common characteristic of a broken and crooked nose that resembled the one we call Flint, or the Great World Rim Dweller.[8] Grandfather would

say that we believed these masks were imbued with the spiritual essence of Flint and so people took great care of them, making regular offerings of tobacco and corn mush. To my ancestors, these masks were considered to be *living* entities, animate artifacts, and *sacred technologies* that we used to access the spirit world for the purpose of healing and to ask for guidance.

. . .

Carl Jung wrote that spiritual/religious belief based in an animistic world view was something found in all (what he called) primitive or pre-modern societies; nearly all spiritual or religious traditions, he contended, had different sacred artifacts, relics, religious objects, or shrines that contain, house, or are otherwise imbued with spiritual and/or supernatural properties.

Interestingly, these same beliefs have been variously applied to modern technologies. For instance, there is a long history of different individuals or groups that have speculated about the ability of different electronic media devices to communicate with the spirit world and/or capture *traces* left by ghosts and spectres. For example, take the arcane and controversial practice of spirit photography, invented by William H. Mumler in the 1860s. Through a combination of specialized techniques Mumler claimed he was able to capture disincarnate souls on film, arguing therein that it was possible to communicate with the dead through the (then) modern technology of photography — something that for him also provided concrete proof of the existence of the afterlife.

Into the twentieth century the practice of spirit photography remained popular, with notable proponents including Arthur Conan Doyle and William Crookes. Today the "ghost hunting" community, who use a variety of traditional film and digital cameras to capture and document paranormal activity, has taken up the practice of spirit photography. (Other technologies often utilized by ghost hunters include EMF meters, digital/analog thermometers,

digital video cameras, thermographic or infrared devices, and audio recorders, all of which are used by the modern paranormal investigator to confirm or disprove the existence of ghosts.)

There is also EVP (electronic voice phenomenon), wherein it is believed that paranormal activity (the voices of the dead) can be captured on modern electronic devices. Originating from within the spiritualism movement of the 1840s, the idea that spirits could be captured on different recording technologies became so popular that even Thomas Edison (the inventor of the phonograph, among other things) was asked about it in an interview with *Scientific American*. When questioned if electronic media could communicate with the spirits, he replied that, yes, "a sensitive recording device would provide a better chance of spirit communication than the table tipping and ouija boards mediums employed at the time."[9]

In the mid- to late nineteenth century, many different electronic devices were made specifically for the purpose of communicating with the spirit world. Notable among these devices were the Spiritcom, invented by William O'Neil, and the Franks Box (or Ghost Box), invented by Frank Sumption. All of these devices fall into a category called Instrumental Trans-Communication (ITC), a term coined by Ernst Senkowski to refer to a wide range of electronic devices — televisions, fax machines, telephones, etc. — that are said to have the ability to enable communication with the (un)dead.

Perhaps some of us will remember a controversial issue raised mainly by Christian groups in the 1980s and 1990s that alleged certain musicians were intentionally embedding hidden satanic messages into their recordings. Their claim was that through a method known as *backmasking* — a technique wherein sound is recorded backwards on a track meant to be played forwards — recording artists were imprinting subconscious messages thought to be demonic in nature. The allegations led to a number of proposed anti-backmasking legislation, and in the process artists such as the Beatles, Led Zeppelin, Ozzy Osbourne, and Pink Floyd (to name only a few) were accused of co-operating with the "church of Satan" in their use of these recoding techniques. These were all claims

motivated by deep religious beliefs, some that at times went so far as to say these recordings could conjure the spirit of the devil. This, in turn, prompted a number of record-burning events that took the form of ritualized spiritual exorcisms.

POST-INDIAN NARRATIVES OF TRANSFORMATION AND CONJURATION

My goal in all of this is not to judge the beliefs of certain religious groups, nor is it my intention to critically evaluate the methods or findings of select scientists and/or paranormal researchers. Rather, my intent is to propose a speculative theorization, or better, a *spectral* theorization that is rooted in our traditions as Onkwehonwe.

What I am writing here is a *remix theory*, one that says if we consider technology as something alive and filled with spirit (as something that for us that has a "psychic significance," and something with which we are interconnected in a "circle of relations"), then these technologies can equally possess spirits that manifest themselves in the form of ghosts and phantasms — *spectral apparitions whose will, it seems, is to haunt the lives of the living.*

As with our False Face masks, it is a theory in which spirits and spectres imprint their *essences* in different material (technological) substrates, traverse and pass through electronic circuits, and embed themselves in phonographic recordings and other susceptible mediums. It is a theory in which our new media technologies take on a different meaning in this return to what Cajete and Jung called *participation mystique*. That is, it is a theory not purely based on "scientific/rational" (Western) thinking, but one, as Cajete might say, that sees through objective reality to the spiritual essence of technology, and therein discovers what I would call the *dark side* of technicity: the spectral, phantomological, and hauntological traces of ghosts in our machines.

At a personal level, at least, it is a theory that could account for the strange, uncanny, and visceral sensations I get while listening to Mother Goose's version of "Ten Little Indians" — an experience

that perhaps has less to do with triggering visions and traumatic memories, and more to do with the *hauntological*[10] conjuration and invocation of spectral and ghostly presences.

THE HAUNTOLOGY OF "TEN LITTLE INDIANS"

An innocent piece of music meant to help children learn to count or an insidious and deeply racist song representative of the general perception of Native peoples as generic and stereotypical archetypes?

A songwriter by the name of Septimus Winner wrote "Ten Little Indians" in 1868 for the popular North American minstrel shows, adapting the melody from the Irish folk tune "Michael Finnegan." Initially titled "Ten Little Injuns," the song originally featured lyrics that were much more gruesome and elaborately offensive, generally following — at least in my estimation — the narrative of the *Vanishing Indian* who was tragically consumed by his/her "savage" and "primitive" ways, fatefully disappearing from the landscape as a consequence of what the settlers called *Manifest Destiny*.

Over the decades, the "Ten Little Indians" song diffused throughout North American culture and has been adapted many times over. For instance, Frank Green almost immediately took it in 1869 and rewrote it as "Ten Little Niggers," after which it became a popular tune performed at black-face minstrel shows.[11] A version of the song was also included in Agatha Christie's novel *And Then There Were None*, which read in part: "Ten little Indian boys went out to dine; one choked his little self and then there were nine."[12] Even the Yardbirds did a cover of the tune, as did Walt Disney, who featured the ten little Indian characters as special guests in the 1933 film *Old King Cole*.[13]

Indigenous philosopher Gerald Vizenor once wrote: "The simulation of the Indian is absence of real natives — the contrivance of the other in the course of dominance."[14]

Winner's "Ten Little Indians" is something that for Vizenor would fall under the sign of *manifest manners* — those occidental

simulations of colonial mythology sustained in the lexicons of the "literature of dominance."[15] Here, the "Indian" is embraced only because this is a performance of simulation and disappearance — *and then there were none* — something that plays out here within the violent theatre of colonial mythology, wherein the "real" is overwritten and erased. This is the flipside of the story (the B-side), where our people become haunted and spectralized by our simulated (colonial) Others.

What I want to invoke here is the hauntological legacy of "Ten Little Indians": those animate shadows, ghosts, and spectres active in the colonial vocabularies of manifest manners; those spirits that not only haunt what Vizenor called the literature of dominance but also spectralize us from the great beyond through our modern technologies and electronic mediums.

SPECTRAL CATHARSIS: REWRITING (COLONIAL) NARRATIVES, REMIXING CULTURE

After that day at the Salvation Army store, I started to hunt for other versions of the "Ten Little Indians" tune, eventually collecting nearly twenty different recordings of the track on vinyl, cassette, and in digital formats. I began integrating the music into my live DJ sets, layering it with hip hop and jungle/drum 'n' bass tracks. Admittedly, I initially meant this as a joke, but eventually my remixes of this song became a popular staple in my repertoire. In a way, it was a therapeutic process that made me feel as if I was reclaiming something for myself in my reappropriation of this music and the cultural stereotypes it evoked.

Sometimes, however, I felt wary about re-performing this music, as though somehow I might be perpetuating these stereotypes in some manner. But I resolved that what I was doing was deconstructing these mythologies and that mine was an expression of creative resistance, which came in the form of a cultural critique. For me, remixing this song was a performative gesture in which *presence* replaced *absence*; where the *disappearance* of the "Indian" in the

lyrics would be subverted by the *(re)appearance* of an Indigenous subjectivity that stood against the manifest manners of colonial mythmaking and the hauntological legacy of this music.

To my surprise, performing these remixes took on a social dimension.

After some of my gigs, other First Nations people would come up to me and reflect on what the music had evoked in them, telling me their stories and sharing their experiences. Some of these involved shocking tales of discrimination, racism, prejudice, and violent schoolyard bullying . . . all set to this jaunty little children's tune — like me, others had something of a ghostly experience when (re)hearing this music, too.

Eventually, for me these performances became about what the psychoanalytic philosopher Frantz Fanon called *collective catharsis* — that instance in which a ritual act is performed in such a way as to enable a release, a cleansing or purging of negative emotions for a community.[16] I came to think that what I was doing was performing a sacrificial ritual, one in which the "Ten Little Indians" music was offered as an object of what Fanon called *sacrificial dedication* in a ceremonial act of purification enacted on the behalf of a collectivity.

Sometime later, I began integrating visuals into my DJ shows — I already saw my performances as a form of storytelling, and so adding live video to the mix was just another way of enhancing the narrative.

Building on some existing technology, I created a new multimedia performance interface where I could remix and manipulate digital audio/video files in synchronization using traditional vinyl, two Technics 1200 turntables, and a DJ mixer with MIDI control.

I started by making some crude animations that I could perform alongside my "Ten Little Indians" remixes; but what I really wanted was to create a twenty-minute live cinema work, which meant I needed more source material.

As with my "Ten Little Indians" remixes, I began to think there must be other sources that I could sample and appropriate into my

artworks. I quickly found there was an almost limitless source to be found in old western films, cowboy and Indian movies, documentaries, and television programs. All of a sudden, it seemed everywhere I looked I could find stereotypical "Indians" savagely chasing wagon convoys, slinging their bows and arrows, performing rain dances, and praying to the spirits — "How, me big chief!"; "Me kill white man!"; "We go on war path!"

As with my remix of "Ten Little Indians," I began sampling different media fragments and layering them together with hip hop breaks — scratching, looping, and cutting them together to create live audio/video montages. What I wanted was to perform a live audio/video narrative that would speak of resistance; to tell a live cinema story that would shore up against all the occidental simulations of our people in the mediascape and the colonial appropriations, constructions, and misrepresentations of First Nations identity. I wanted to create artworks in which I could publicly re-perform these injustices, and at the same time deconstruct and mash up these virulent simulations of our peoples that had been sustained within the lexicon of various media archives.

. . .

I remain perpetually thankful for all of Grandfather's stories, especially those of the iron tomahawks and He-no the Thunderer. As a tribute to him, I took the name *Iron Tomahawks* as the title of a new series of live cinema/scratch video performance artworks.

With this performance series, I wanted to create a new media work that was about what Indigenous philosopher Gerald Vizenor called a post-Indian narrative of *survivance*: "that sensation of a new tribal presence in the very ruins of [the] representations of invented Indians."[17] I wanted to make a work that stood against what he called the "colonized *Indian* Other"[18] and show the ways in which our people had been displaced, disappeared, and eclipsed by infectious codes of colonial mythmaking. Against these fictions of the "Indian," I wanted to stage a mythopoetic insurrection about our

re-appearance as a vital, living, and continuing people — a kind of artistic counter-protest that would hover over the simulated and aestheticized by-products of what Vizenor called the manifest manners of domination. If these colonial fictions were, as Vizenor wrote, about the simulation of the tribal real, then I wanted *Iron Tomahawks* to be about "post-Indian conversions [presented in] new stories of survivance over dominance."[19]

• • •

After one of my first performances of *Iron Tomahawks*, Archer Pechawis (an Indigenous new media artist, writer, and curator) said that watching me perform was like looking upon someone possessed — like watching someone caught in the throes of enacting some crazy techno-ritual to "call the spirits."

I answered (likely even less eloquently than this) that for me it was about a kind of cathartic release — that I felt haunted by these images of the "Indian" (the noble savage, the bloodthirsty warrior, the squaw, and the Indian princess) and that for me what I was "calling" (convoking, incanting, conjuring) were no ordinary spirits, but those *spirit-simulations* that ghost our presence(s) as Onkwehonwe, those apparitions and spectres that have haunted our people for so many generations.

I said that, to me, these spirits are our spectral Others, those collectivities of phantoms and revenants that compose a hauntology that even today spectralizes everywhere, all across Turtle Island. It was my intent, I said, to conjure these ghostly apparitions such that they might be publicly exorcised.

• • •

French post-structuralist thinker Jacques Derrida first coined the term *hauntology* in his *Specters of Marx*; it is a homophone of the word *ontology* and a portmanteau of *haunt* and *ology*. It could be

said that this theorization is for Derrida a way to re-envision history such that it is unhinged from an essentialist temporal order and therein becomes some "Thing" that co-exists with the *living present*.[20] For Derrida, what he calls the living present is something inhabited by the *ghosts of history*, those spirits and spectres to which we are the heirs and of which we are haunted. Derrida's hauntology therein disturbs the usual conceptual "borders" of the lived present (that which separates now from the past and future) and all else that would seemingly be opposed to it (non-presence and the non-living) such that *our* lived present is something susceptible to being haunted by what he calls a *spectral effect* — the movement of sprits "outside of time" wherein they traverse a liminal zone that defies the usual logic of temporality or (linear) chronology.

The ghosts of history therein are said to be *alive* in the present, and (re)appear to the living as apparitions that have been conjured, incanted, or convoked. As Little Bear said, the whole world is "alive and filled with spirit," and as Cajete wrote, our lived existence is interconnected with "*active* entities with which people engage."[21] To this we might add, as Derrida always maintained, there is a distinct difference between a spirit and a spectre in that the latter comes back (revenant) with ill wishes and insidious intentions to haunt the living. In the case of such a haunting, he warns it is best not to ignore the *ghosts of history*, for, as he says, turning your back on the ghost only produces more spectres, or an "accumulation of ghostly layers."[22] What is needed, Derrida argued, is a confrontation; the course of action when one is being haunted by an evil-doing apparition, he says, should be to "do what is necessary: speak to specters."[23]

According to Derrida, what this means in no uncertain terms is that one must commit oneself in a performative fashion to the conjuration and invocation of the spectres *of* which one (or a culture) is possessed or haunted.[24] He adds, though, that these acts of conjuration must be guided towards a certain end and become not only

about the convocation of spirits such that they might (re)appear, but also about a kind of "magical exorcism that [in]tends to expulse the evil spirit."[25] It is a performative act that for Derrida has to do with the dispossession, exorcism, or "conjuring away" of a spectre. It is a conjuration that signifies death to the spectre, wherein the ghost is "convoked to be revoked."[26] Here, conjuration for Derrida becomes a direct and intentional attempt to destroy a ghostly foe, a "malignant, demonized, diabolized force, most often an evil doing spirit, a specter, a kind of ghost who comes back or who still risks coming back post mortem."[27]

Vizenor wrote: "When you believe in witchcraft you also believe that you can get rid of the evil spirit. The task is to find a power greater than that of the witch; it may be a totemic animal, a psychic, a medicine man, a ceremony. "[28]

I tend think about my "Ten Little Indians" and *Iron Tomahawks* remix artworks in this context: as a performative gesture that is intended to signal death to spectres — as a public ritual or ceremonial act that seeks to destroy a common spectral adversary, a collective hauntology, a "malignant, demonized, diabolized force."[29]

Following these perspectives given by Derrida and Vizenor, I see my works as a conversation with spirits and spectres, one that takes place through electronic mediums and new media technologies — they are *spectral conjurations* wherein these ghosts of history are forced to (re)appear so that they might face up to their haunting of the living.

THERE IS SOMETHING OF A CIRCULAR LOGIC AT PLAY IN ALL THIS

Derrida wrote that the conjuration of any ghost always, necessarily, results in what he calls a moment of *paradoxical phantomality* — that instance in which time is put out of joint at the moment when the ghost reappears on stage to (re)perform its own death.

Conjuration, he says, is therefore always about the disruption of the "temporality of time," for a ghost only appears in the dislocated time of the present/non-present moment. Such it is, I think, with the *remix*, which has been envisioned here as a new media *performance conjuration* — with the backwards and forwards *scratch!* . . . *scratch!* . . . *scratch!* . . . that becomes about the conjuration and exorcism of spectral narratives and the animate shadows that haunt our mediascape; a recombinant act that involves the slicing, cutting, and deconstruction of virulent colonial mythologies.

In this sense, I see *Iron Tomahawks* as what Vizenor called a "Trickster story in translation and conversion" — a new, remixed, post-Indian narrative that emerges from within the very ruins of *tribal* simulations in a way that absolves these "simulations with stories of cultural conversions and native modernity."[30]

THANK YOU, GRANDFATHER, FOR ALL YOUR STORIES

Because of you, I endeavour to see through material manifestations to the essence and spirit of the world — to the mysterious magic that is the living spirit/spectre of technology.

Like you, I wish to speak to the people, and to "all my relations," and tell new stories that can confront new situations we face as Onkwehonwe in our media-saturated world.

For my part, I have chosen to speak through these new media technologies, but in a way that respects the "sacredness, livingness and the soul of the world."[31]

Someday, like you, I hope to become a warrior for our people, and with my artworks channel the spirit of He-no the Thunderer, but this time in order to enact an instance of collective (spectral) catharsis and create for our people a ceremonial space of dance, worship, prayer, and healing.

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NOTES

1. Onkwehonwe, a Kanien'kehaka (Mohawk) word meaning "original people."
2. Leroy Little Bear, "Foreword," in *Native Science: Natural Laws of Interdependence*, ed. Gregory Cajete (Santa Fe, NM: Clear Light, 2003), x.
3. Cajete, *Native Science*, 27.
4. Ibid., 186.
5. Carl Jung, *Man and His Symbols* (New York: Dell, 1964), 84.
6. Ibid.
7. Little Bear, "Foreword," x.
8. Anthony F. C. Wallace, *The Death and Rebirth of the Seneca* (New York: Alfred A. Knopf, 1973), 78–93.
9. Thomas Edison, quoted in Robert Todd Carroll, *The Skeptic's Dictionary: A Collection of Strange Beliefs, Amusing Deceptions and Dangerous Delusions* (Hoboken, NJ: John Wiley & Sons, 2003), 119.
10. Jacques Derrida, *Specters of Marx* (New York: Routledge, 1994), 9, 63, 202.

11 P. V. Bohlman and O. Holzapfel, *The Folk Songs of Ashkenaz* (Middleton, WI: A-R Editions, 2001), 34.

12 Agatha Christie, *And Then There Were None* (New York: Dodd & Mead, 1939), or see http://en.wikipedia.org/wiki/And_Then_There_Were_None.

13 "Ten Little Indians," Wikipedia, http://en.wikipedia.org/wiki/Ten_Little_Indians (accessed May 4, 2012).

14 Gerald Vizenor, *Manifest Manners: Narratives on Postindian Survivance* (Lincoln: University of Nebraska Press, 1999), vii.

15 Ibid., vii–xxi.

16 Frantz Fanon, *Black Skin, White Masks* (New York: Grove, 1967), 80.

17 Vizenor, *Manifest Manners*, 3.

18 Ibid., 4.

19 Ibid.

20 Derrida, *Specters of Marx*, 3.

21 Cajete, *Native Science*, 27.

22 Derrida, *Specters of Marx*, 159.

23 Ibid., 11.

24 Ibid., 62.

25 Ibid., 58.

26 Ibid., 124.

27 Ibid., 58.

28 Vizenor, *Manifest Manners*, 46.

29 Derrida, *Specters of Marx*, 58.

30 Vizenor, *Manifest Manners*, x.

31 Little Bear, "Foreword," x.

Beautiful Future
NEXT EXIT

ARCHER PECHAWIS

If we are to survive as a species, there must be a paradigmatic shift in our approach to life itself, one that encompasses Indigenous modes of thought and experiential reality.

Performance artist, new media artist, filmmaker, writer, curator, and educator Archer Pechawis was born in Alert Bay, British Columbia, in 1963. He has been a practising artist since 1984, with particular interest in the intersection of Plains Cree culture and digital technology, often merging “traditional” objects such as hand drums with “forward engineered” devices such as Mac PowerBooks. His work has been exhibited across Canada and in Paris, France, and featured in publications such as *Fuse* Magazine and *Canadian Theatre Review*. Archer has been the recipient of many Canada Council and British Columbia Arts awards and won the Best New Media Award at the imagineNATIVE Film + Media Arts Festival in 2007 and Best Experimental Short at the imagineNATIVE Film + Media Arts Festival in 2009.

Archer also works extensively with Native youth as part of his art practice, teaching performance and digital media for the Indigenous Media Arts Group and in the public school system. Of Cree and European ancestry, he is a member of Mistawasis First Nation, Saskatchewan.

'"Horse", a digital drum performance by Archer Pechawis, Winnipeg Art Gallery April 14, 2011.' Videographer Scott Benesiinaabandan.

'"Memory_V2", a digital drum performance by Archer Pechawis, A Space Gallery Toronto, September 17, 2010.'
Photographer Wanda Nanibush.

'Archer Pechawis, with traditional Plains Cree hand tool. Note cross-cultural Haida markings by artist Corey Bulpitt.' Original photograph by Adam Steel, Photoshopped by Archer Pechawis.

'Poster image for "Our Beautiful Future", a performance by Archer Pechawis, Toronto Free Gallery July 2, 2012.' Image created in Photoshop by Archer Pechawis.

2 Indigenism: Aboriginal World View as Global Protocol

ARCHER PECHAWIS

PEYAK (ONE)

Imagine a gathering of our common African ancestors 400,000 years ago. This gathering has been occurring every evening for a number of days now, but the novelty is wearing off and interest is waning. The best and brightest of our venerated ancestors has made a claim that he will make fire, but so far he has failed.

But here is the moment: the dry grass he has collected this evening has ignited, a flame has leapt up. Everyone has a look of slack-jawed astonishment, save our intrepid proto-scientist, whose face is illuminated with joyous vindication.

Now freeze this moment in time, examine it carefully, and anchor your consciousness to it: this is precisely where we are in regards to post-millennial technology. Because we use Google and Facebook, we imagine ourselves the intellectual heirs of our Promethean relative. In reality, we are his astounded contemporaries, barely better able to grasp the implications of new technologies than our incredulous ancestors were half a million years ago.

My art practice hybridizes traditional First Nations culture and digital technology. In 2001, I wrote "Talking to My Horse, Whistling the Garry Owen" for a performance piece called *Horse*, in

which the Horse Nation comes heroically to the aid of the Cheyenne on the morning of November 27, 1868, during an attack on their encampment by Lieutenant Colonel George Armstrong Custer. Having rescued the people from massacre at great cost to his nation, the leader of the Horses offers a prophetic warning to his erstwhile master:

> See how it is today. We, the Horse People, have suffered greatly for you. Many are dead. Hear me now, and know this thing.
>
> Just as you are amazed by the events of this day, you will forget. Despite the sacrifice we have made for you today, you will forget. And surely as the sun will rise the time will come when you abandon us, the Horse People, for machines of your own making. And just as you abandon us for these machines, you will abandon your own selves for them. You will come to believe that these machines are your relations, and you will alter yourselves to be like them, thinking this will make you stronger. You will change your own minds so you may speak with them and they to you. On this day you will forever lose your relation to us, and to all the animal people.
>
> Hear me now, and beware. Never will your machines show you loyalty, nor love. Never will they come to your aid in time of need as the Horse People have done today. I would like for you to remember these words, but you will forget. It is the nature of your kind.[1]

It is easy to slip into a dystopian funk when considering the far-reaching effects of our development as a technological species. But what if our anthropocentric myopia is supplanted by a spiritual growth that catches up with and supersedes our technical prowess, a future in which the best values of traditional societies come to the fore, and a balance of spiritual and technological equality becomes the dominant paradigm? Since writing *Horse* I have come to believe that it is not a warning against the adoption of technology per

se, but rather an admonition to First Nations to retain our traditional world view in the face of technological adaptation, so we may offer a solution to humanity. Ward Churchill states:

> [I]ndigenism offers an antidote, a vision of how things might be that is based in how things have been since time immemorial, and how things must be once again if the human species, and perhaps the planet itself, is to survive much longer. Predicated on a synthesis of the wisdom attained over thousands of years by indigenous, landbased peoples around the globe — the Fourth World or, as Winona LaDuke puts it, "The Host World upon which the first, second and third worlds all sit at the present time" — indigenism stands in diametrical opposition to the totality of what might be termed "Eurocentric business as usual."[2]

NÎSO (TWO)

I'm learning Cree. Tuesday and Thursday evenings I fire up a Java program that creates an online virtual classroom and for two hours a lovely *kohkom*[3] named Margaret guides a disparate group of students through the gorgeous intricacies of our language and traditions. This scenario is one of the many I had hoped for when I first began to ponder computer technology and its implications for traditional culture back in the 1990s, but in the last decade I realized that a much more interesting question, with far more profound consequences, could be posed by asking instead, *What happens when we approach the visioning, creation, and application of modern technology from an entirely Indigenist world view?*

I am not speaking of grafting Aboriginal protocols onto existing methodologies. I am looking to a future in which Indigenism *is* the protocol, an all-encompassing embrace of creation: the realms of earth, sky, water, plant, animal, human, spirit, and, most importantly, a profound humility with regards to our position as humans within that constellation.

My own understanding of this world view is far from perfect: I was raised without the Cree language and the multiverse it unfolds and was not exposed to traditional concepts until the age of fourteen, when my mother first took me to a sweat lodge ceremony. Since that time, my life has been one of seeking a deeper understanding, not only of my place in the world as a Cree man but also as a person of Native and European descent, and how I may harmonize two wholly disparate cultures and world views, of which I am a product.

Given these parameters, it is logical that I began to make work examining the intersection of digital technology and traditional Plains Cree culture; as a younger man, I thought they were the most dissimilar aspects of my dual heritage. In 1994, I had a vision of a performance that would not only reconcile but also celebrate the "two solitudes" of my being. I would wire a traditional hand drum to a digital audio sampler, which would allow me to incorporate sound bites into powwow songs. Inspired equally by the corybantic fury of punk, the blunt race politics of hip hop and my own post-Oka[4] rage, I wanted to emulate the roaring-but-danceable audio collage polemics of Public Enemy, but do so in a way that was inimitably Aboriginal.

To create this artwork, I took tobacco to two elders in my community, Bill Lightbown and the now deceased Harriet Nahannee (1935—2007), and videotaped their responses to my questions concerning technology and traditional First Nations culture, spirituality, and philosophy. The insights and wisdom they shared with me have come to shape my understanding of traditional values as much as the time I have spent in the sweat lodge. Bill and Harriet taught me to embrace technology as a perfectly compatible aspect of an Indigenist world view. Harriet also taught me that my vision of the electronic drum might not have come from me at all.

> We are our ancestors. When you were born, you were born with your ancestors' soul. Traditional people listen to that ancestor . . .

. . . you can ask your ancestor for guidance, and it just pops into your head, you're getting it from them! You may think, "Oh yeah, I have a great idea," but it isn't! You're receiving it from your ancestors.[5]

These interviews formed the basis of the performance *Memory* (1997), my first investigation into what "traditional" means in contemporary First Nations culture. The work featured a hand drum wired to a sampler via MIDI which enabled me to drop various audio samples into the mix while I sang neo-traditional songs of my own composition. The primary samples used were from audiocassettes of my deceased grandfather, Thomas John Pechawis, drumming and singing, and the interviews with Bill Lightbown and Harriet Nahanee speaking to the issue of "what is traditional." Other samples included Jimi Hendrix, Soundgarden, The O'Jays, and The Fugees.

This performance investigates the notion of what constitutes "traditional" Native drumming and singing through the use of a hand drum into which I have incorporated trigger pads that activate a digital sampler when struck. Simply put, if I drop a Motorhead sample into a round dance tune, is it still traditional? Cum on, feel the noize, heya heya ho . . .[6]

But at the time I didn't understand what I had created. Despite what the elders had told me, I didn't think my creation was "a real drum." Contrary to my stated aim in making the work, I had an internalized divide between what I considered "traditional" and the technological processes that constituted so much of my everyday life and artmaking practice. In part, I did not understand these things because I had not sought out the teachings on the use of drums in ceremonial contexts. I had not sought this knowledge because I did not understand that my performance was, in fact, a ceremony.

The protocols that govern the ceremonial use of drums are as specific as the protocols that govern traffic on the Internet. Since that first performance, I've been taught *a drum is a direct line to the spirit world*. Before any cultural work is done, one must *sing in the spirits*, a literal process of inviting the spirits to participate. At the conclusion of the work, the spirits are then *sung out*, or invited to return to their realm. This exchange with the spirit world is not a metaphor, but rather a fundamental aspect of ceremonial practice.

This practical application of interdimensional communication takes on new meanings when paired with digital technologies in a secular, performative setting. After my first digital drum performance, I realized that what I needed was a drum that played video samples to allow people to see the elders talking, not just hear them. While I was building this new device, Harriet passed away. After waiting an appropriate amount of time, I approached her family and asked for their permission to continue using her voice and image. With their blessing, I used her footage in a second version of the drum performance, *Memory_V2*, in 2010.

But something had changed. Because I was playing video samples of a deceased person, I was now invoking Harriet from the spirit world with my drum. By replicating the metaphysical functionality of a traditional drum, I had built a device that enabled an audience to experience communication with another realm in the secular context of a performance. I had converted a spiritual medium into a digital one.[7] As Ahasiw Maskegon-Iskwew writes:

> Indigenous digital artists around the world are deeply engaged with, and provide important contributions to interdisciplinary and cross-community dialogues about cultural self-determination. Their works explore and bear witness to the contemporary relevance of the histories of Indigenous oral cultures and profound connections to their widely varying lands. They also reveal the creative drive that is at the heart of Indigenous survival. The cultures of animist peoples require a continual sensitivity to, and

> negotiation with, the cultures of all of the beings and forces of their interconnected worlds. The ancient process of successfully adapting to their worlds' shifting threats and opportunities — innovating the application of best practices to suit complex and shifting flows — from a position of equality and autonomy within them, is the macro and micro cosmos of contemporary Indigenous cultures: a truly networked way of being.[8]

NISTO (THREE)

In my artistic/spiritual journey, I have had to find space for my belief in both the Western scientific method and the Cree world view. This has been easier than I thought it would be: by definition my Creator is omnipotent, which gives him a lot of flexibility. My Creator is an evolutionist who loves non-anthropocentric, non-terrestrial viewpoints. As my traditional spiritual grounding and technical fluency deepen, the space between these two disciplines diminishes. More and more they become dialects of the same mother tongue.

Dr. Leroy Little Bear, in his lecture "Native Science and Western Science: Possibilities for a Powerful Collaboration," tells a story about the Higgs boson, the so-called "God particle":

> We talked to an elder about it and explained it to him. It took him a while to understand what these physicists were trying to do. But once he had a good idea of it he came back and said, "That's easy. The Higgs particle is what we call spirit."[9]

It really is that simple.

The hypothetical Higgs boson particle is a cornerstone of the Standard Model of particle physics, which for decades has dominated our understanding of the cosmos and helped explain how three of the four fundamental forces of nature work. Theoretically responsible for converting mass to energy and vice versa,[10] the

Higgs boson inspired scientists with enough faith in its actuality to raise 7.5 billion Euros for the CERN Large Hadron Collider in Switzerland largely to prove, or disprove, its existence.[11] The Higgs boson was dubbed the "God particle," a term physicists loathe, in Leon Lederman and Dick Teresi's 1993 book *The God Particle: If the Universe Is the Answer, What Is the Question?*[12] Inaccurate or not, the urge to confer a spiritual dimension to a scientific quest seems to be in our DNA. This urge can be seen in the work of many Aboriginal new media art practitioners.

Another weakness of the Standard Model is that it cannot incorporate gravity as described by Einstein's theory of relativity. An attempt to harmonize general relativity led to the development of Superstring Theory, which postulates ten dimensions, or an extra six to the readily observable dimensions of length, width, depth, and duration. If we reconsider these six "extra" dimensions as potential realms of spirit, we begin to see the space of reconciliation put forth by Dr. Little Bear:

> If those physicists would learn Blackfoot, or Navajo, we would be able to talk. English, because of its structure, can't explain certain things, [and] therefore [has] a reliance on a foreign language, [math, which] does not happen in Navajo. In other words the language is rich enough that it can explain those seeming paradoxes. That's where I see the collaboration taking place, that's where I see partnerships occurring in science.[13]

These partnerships are already taking place. The locus of these ventures is a growing network of First Nations artists who are adapting the tools of the moment to their respective cultures to create new artworks in unexpected media. Artists have always been the vanguard of social change. In harnessing the power of science and technology in service of traditional culture, Aboriginal new media artists are blazing new trails of possibility.

NEWO (FOUR)

Our technological journey began nearly half a million years ago. Realigning humanity with spirit may take that long as well. A transition from the dominant paradigm will not be miraculously simple, or easy. But clearly, if we are to survive as a species, there must be a paradigmatic shift in our approach to life itself, one that encompasses Indigenous modes of thought and experiential reality: an earth-centred philosophy that brings technological advancement in line with human, animal, and ecological concerns and ethical parameters. Perhaps the near or total destruction of the human-habitable ecosphere is a necessary step in our development. Or perhaps what will save us from ourselves *is* ourselves through understanding the world in a different way.

> It will be for a new generation of non-Native peoples who sat as children, youth and young adults and heard and learned our languages along with their own, who remember and recite our ancestors' stories along with all the others, whose worldview is shaped by these things — these will be the ones who will be true allies and partners with our children in a real and resounding cultural renaissance.[14]

Seminal science fiction author and inventor Sir Arthur C. Clarke famously opined that "[a]ny sufficiently advanced technology is indistinguishable from magic."[15] A meme currently being promulgated on the Net posits that "Any Sufficiently Advanced Civilization is Indistinguishable from Nature."[16] This proposed solution to the Fermi paradox[17] reasons that we cannot locate extraterrestrial life because we are looking for the electromagnetic signature we assume an advanced civilization would produce. It goes on to theorize that advanced civilizations would create, live in, and be sustained by technologies that would be indistinguishable from the natural processes of their environment, at least to a species as primitive as our own.

Imagine our civilization in which the "sufficiently advanced technology" *is* magic: the "extra" dimensions postulated by Superstring Theory are acknowledged as alternate realms of spirit, and the technological basis of the culture is predicated not only on this acknowledgment but also in an ongoing communication with those domains and on the limitless power available to us from those dimensions, through our own ancestral relations.

A whole-hearted embrace of Indigenism would provide us with a stable platform to create a world of self-sustaining technologies, a made-yet-living topography whose existence we would currently miss from orbit, let alone through the lens or antennae of telescopes peering across interstellar space. Within this future dreaming, we can imagine bioscience granting us unlimited powers of transformation over our bodies, to trade corporeal physicality for re-embodiment within a planetary network, to share a planet-body with our fellow trans-humans.

> The old songs are loud, pounding and powerful again, heating the blood of the young — dancing fires across their dreams. Around them softly, in quiet pleasure, gray heads nod with embered remembrance — all circling together in time with the sun. Now our sneak-up dance is working, provoking the slow awakening of non-Native peoples to the richness, complexity and depth of our ways of seeing and shaping the world. The families of our allies are growing, their children are being taught, the feasting and sharing together with honour has begun — preparing for the renaissance when you will talk Indian to me.[18]

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1 Archer Pechawis, "Talking to My Horse, Whistling the Garry Owen," text accompanying performance piece "Horse," 2001. http://apxo.net/writing/talking-to-my-horse.html (accessed May 4, 2012).
2 Ward Churchill, "I Am Indigenist: Notes on the Ideology of the Fourth World," in *Acts of Rebellion: The Ward Churchill Reader* (New York: Routledge, 2003), 275–99.
3 Kohkom means "grandmother" in informal Cree.
4 The Oka Crisis was a land dispute between a group of Mohawk people and the town of Oka, Quebec, Canada, that began on July 11, 1990, and lasted until September 26, 1990. One person died as a result. The dispute was the first well-publicized violent conflict between First Nations and the Canadian government in the late twentieth century.

5 Tsibeotl, aka Harriet Nahannee, interview by Archer Pechawis, December 1996.
6 Archer Pechawis, “Artist Statement,” from “Memory,” performance art piece, 2007.
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8 Ahasiw Maskegon-Iskwew, “Drumbeats to Drumbytes: Globalizing Networked Aboriginal Art,” in *Transference, Tradition, Technology: Native New Media Exploring Visual and Digital Culture*, ed. Dana Claxton and Steven Loft (Banff: Walter Phillips Gallery, 2005), 3.
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11 “Large Hadron Collider,” *Wikipedia*, http://en.wikipedia.org/wiki/Large_Hadron_Collider (accessed May 2, 2012).
12 Leon Lederman and Dick Teresi, *The God Particle: If the Universe Is the Answer, What Is the Question?* (Boston: Houghton Mifflin, 1993).
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14 Âhasiw Maskêgon-Iskwêw, “Talk Indian to Me #1,” *Ghostkeeper*, Grunt Magazine Archives (2005), http://ghostkeeper.gruntarchives.org/publication-mix-magazine-talk-indian-to-me-1.html (accessed May 4, 2012).
15 Arthur C. Clarke, “Hazards of Prophecy: The Failure of Imagination,” in *Profiles of the Future: An Enquiry into the Limits of the Possible*, rev. ed. (New York: Harper & Row, 1973), 21.
16 There is some controversy on the Internet as to whom the credit for this idea should go. See http://www.playananda.com/writing/exotic-civilizations-a-possible-answer-to-fermis-paradox/; http://www.nextnature.net/2012/02/any-sufficiently-advanced-civilization-is-indistinguishable-from-nature/; and http://www.kschroeder.com/weblog/archive/2011/11/30/the-deepening-paradox.
17 The Fermi paradox (Fermi’s paradox or Fermi-paradox) is the apparent contradiction between high estimates of the probability of the existence of extraterrestrial civilizations and the lack of evidence for, or contact with, such civilizations. http://en.wikipedia.org/wiki/Fermi_paradox (accessed March 2012).
18 Maskêgon-Iskwêw, “Talk Indian to Me #1.”

Jason Edward Lewis

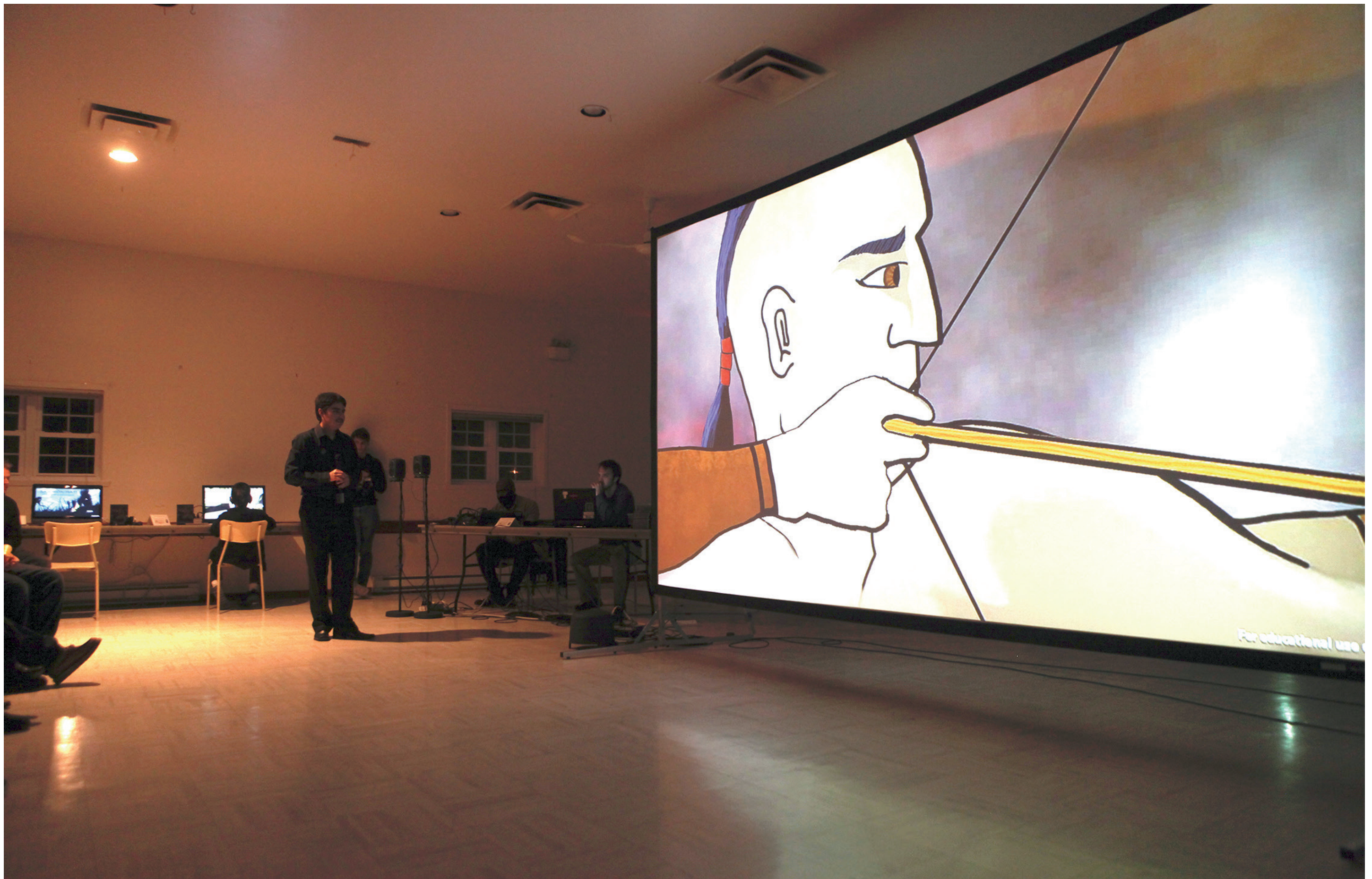
I am interested in the material qualities of the digital, how that materiality instrumentalizes a particular (narrow) world-view, and what we as Native people can do to subvert, revert, and convert that materiality to better reflect our ways of being.

Jason Edward Lewis is a digital media artist, poet, and software designer. He founded Obx Laboratory for Experimental Media (www.obxlabs.net), where he directs research/creation projects devising new means of creating and reading digital texts, developing systems for creative use of mobile technology, and using virtual environments to assist Aboriginal communities in preserving, interpreting, and communicating cultural histories. Lewis is committed to developing intriguing new forms of expression by working on conceptual, creative, and technical levels simultaneously. His creative work has been featured at the Ars Electronica Center, ISEA, SIGGRAPH, Urban Screens, and Mobilefest, among other venues; his writing about new media has been presented at conferences, festivals, and exhibitions on four continents; and he has won awards from the Electronic Literature Organization (ELO), Ars Electronica, and the imagineNATIVE Film + Media Arts Festival. He is currently an associate professor of computation arts at Concordia University in Montreal.

TimeTraveller Episode 1 Hunter, production still showing Hunter outside of his apartment in the year 2112. Creator: Skawennati Fragnito.

TimeTraveller Episode 2 Dakotas Raise Weapons, production still showing Sioux warriors confronting a settler in 1862. Creator: Skawennati Fragnito.

(left) Skins 1.0 – Clay model of the Otsi-Rise of the Kanien'keha-ka Legends videogame level. Photo credit: Jason Edward Lewis; (right) Skins 1.0 – Otsi-! Rise of the Kanien'keha-ka Legends videogame poster. Creator: Aboriginal Territories in Cyberspace.



Skins 3. 0 – Launch of Skahiòn:hati: | Rise of the Kanien'kehá:ka Legends, the video game made in the 2012 workshop.
Photo credit: Scott Benesiinabaandan

Skins 3.0 – Skahiòn:hati: vs. the Stone Giant, from Skahiòn:hati: | Rise of the Kanien'kehá:ka Legends videogame.

3 A Better Dance and Better Prayers: Systems, Structures, and the Future Imaginary in Aboriginal New Media

JASON EDWARD LEWIS

BEGINNINGS AND ENDINGS

He taught her that all dreams reach down to a common sea, and he showed her the way in which hers were different and the same. "You alone sail the old sea and the new," he said.—*William Gibson*

Gibson wrote the science fiction novel *Mona Lisa Overdrive* in 1988, when the new sea of cyberspace was so new that most of the world did not even realize it was forming. In *Neuromancer*, the first book of the Sprawl trilogy, Gibson coined the term "cyberspace," and then, over the course of the three books, proceeded to envision a number of other technologies that we now take as commonplace. *Mona Lisa Overdrive* is the third book, and the one in which Gibson proposes that any true artificial intelligence would be much more than a linear extension of man. It would be of another order than humanity entirely, fundamentally unknowable and ineffable, and the only way we might understand such an entity would be through metaphor. The humans in the book struggle to come up with terms for describing their interactions with it; the artificial intelligence,

in turn, employs the equivalent of the burning bush to act as an intermediary between itself and its creators.

Twenty-five years later, the idea of sailing "the old sea and the new" serves as a lens through which we can consider Aboriginal peoples' relationship to, and agency in, the vast archipelago of websites, social media services, shared virtual environments, corporate data stores, and multiplayer video games we call cyberspace. We strive to keep the old dreams of our ancestors with us but must make our way through this new dream. The new dream has been conjured into being by the settler culture, yet we also partake of it. The new dream is made manifest in myriad ways, and what follows is a discussion of but one of them.

THE IMPORTANCE OF A FUTURE IMAGINARY

How did Fontaine
get the apology?
He told a story
and then he said,
come, follow me.
—*Wab Kinew*[1]

Aboriginal communities have many ways of talking about the past. We retell the stories of our ancestors, we celebrate the heritage of our people, and we argue with everybody — ourselves, academics, settler culture in general — about our history. We do all of this, often, which is necessary and good. What we do not do much is talk about our future. We make plans to keep everybody alive for the next few years, and we strive to stay mindful of the seventh generation, but we do not tend to spend much time imagining what our communities will be like in one hundred, five hundred, or a thousand years.

The title of the essay comes from "After the Dance," a short story by Cree scholar Richard Hill. It is set in a post–Ghost Dance future,

where the Thunder has cleansed the white people from Turtle Island. The story's main character, Two Bears, is talking about the cleansing with his adopted son — the last remaining white person — saved from the apocalypse by Two Bears himself:

> I'm very sad about your Auntie and those girls. And I'm also sad about the other white children I did not meet and could not save. When I think about it long and hard like today, I am even sorry for some of the white men. The anger of the Thunder on behalf of the people had been very great. But that's only part of it. I have to be honest. It was our own anger too. When it went into motion that initial power was so strong there was no pulling it back. I'm not sorry the way things are now, but I wish things could have worked out some other way. I wish we could have come up with a better dance and better prayers.[2]

This passage articulates a dilemma faced by almost any Aboriginal person caught between the desire to see our cultures ascendant once more and the reality of finding ourselves profoundly embedded within a larger multicultural society. We rue the day the colonists arrived and began methodically destroying our ancestors and our ways of life. We wonder "what if . . .?" Some of us dream of vengeance and yearn for the Thunder. Some of us dream of a Native-only utopia, somehow somewhere out of time and out of place. Some of us retreat to the land of the lotus-eaters and seek merely to forget that which has become part of us.

Yet we are also the spouses of white people, the sons and daughters of mixed-ethnicity parents, the parents of hybrid children, the friends of non-Natives. Pursuing dreams of a Ghost Dance to their extreme conclusions means erasing essential parts of ourselves — and those we love and who loved and nurtured and supported us — from existence. This is madness. Mad in its recapitulation of the siren song of purity, mad in its impracticality, and mad in its consequences. To imagine a different future, a future that does not

require us to countenance committing genocide ourselves — whether by commission or omission — we had best get to imagining what Two Bears' better dance and better prayers might have been.

I tell a story in what follows. The story is a reflection on how we might sail the sea of cyberspace as a means of dreaming forth a future; it is also a discussion of how Aboriginal Territories in Cyberspace (AbTeC), the research/creation project that I co-direct, can be used as an example of how future imaginaries of our choosing may be developed and supported. The AbTeC effort is a material argument for the fundamental importance — culturally and intellectually — of striving to consciously imagine ourselves in and into the far future.

Come, follow me.

PRESENT IN THE FUTURE

> We are what we imagine. Our very existence consists in our imagination of ourselves. Our best destiny is to imagine, at least, completely, who and what, and that we are. The greatest tragedy that can befall us is to go unimagined.
> —*N. Scott Momaday*[3]

For five hundred years, Aboriginal people have shared a past with the settler culture, we share the present, and most likely we will share a future. That culture is busy dreaming of the future, imagining what it might look like through science fiction, and building it with science fact. Yet Indigenous people rarely appear in those imaginaries.

Our absence from the future imaginaries of the settler culture should worry us. Absence implies non-existence, or, at the very least, non-importance. A people that are absent in the future need not be consulted in the present about how that future comes about. A culture that is assumed not to be important one hundred years from now can be discounted now, for what are the consequences?

Anishinaabe scholar Grace Dillon, in her introduction to *Walking the Clouds: An Anthology of Indigenous Science Fiction*, articulates the need for Native people to use science fiction as a means of making themselves visible in the future. We should do this as a way of positioning ourselves in a genre associated almost exclusively with "the increasing significance of the future to Western techno-cultural consciousness."[4]

The texts collected by Dillon show that Indigenous people have indeed been involved with science fiction for some time. Except for almost singular characters such as Chakotay in television's *Star Trek: The Next Generation* — and mystic earth-people stereotyping such as that seen in the movie *Avatar* — few if any of those engagements with the genre have created a lasting impression on the popular consciousness. Yet it is there — in the collective dreams about where technology will take us — that are found basic assumptions about who we will be when we get there.

Momaday imagines his people through poetry, the contributors to Dillon's anthology through science fiction. It is worth considering how we who work in new media might do the same, but in an even more material sense by engaging deeply with the technologies that are giving form to the future.

ABORIGINAL TERRITORIES IN CYBERSPACE

> So, Owisokon, at the very beginning . . . of the Skins process . . . she was asking these questions: what is this project, what are you going to do, what are you going to be teaching them? Finally, she says, "and what do yous want anyway? Why are yous doing this?" And because it was Owisokon, who I have known for many years, I felt free enough to say, "well, we want to change the world."
> —*Skawennati Fragnito*[5]

Mohawk artist Skawennati Fragnito and I (Cherokee/Hawaiian/Samoan) formed Aboriginal Territories in Cyberspace (AbTeC) as a vehicle for staking out Aboriginally determined territories within

cyberspace. AbTeC grew out of CyberPowWow, the pioneering online art gallery and chat space co-created by Fragnito, as well as our common experiences as Aboriginal artists working within new media.[6]

In 2005, we published what, in hindsight, is the AbTeC manifesto.[7] We laid out a vision for Aboriginal engagement with new media that had three main goals:

1. the creation of original artwork that addresses the future of Native people on this continent;
2. educating Aboriginal youth in new media production, emphasizing the integration of Aboriginal stories and storytelling techniques into the process;
3. developing a trajectory whereby young Aboriginal people can move from new media consumption to media production to technology development, and bring that production and development activity back to the reserve.

Our discussions around these issues set the ground for pulling together a group of artists, academics, community activists, and technologists to discuss research and creation strategies.[8] The group met in a series of workshops in 2006 and 2007 to strategize different methods for attaining AbTeC's goals. One major consequence of these initial discussions and experiments was the Skins Workshops on Aboriginal Storytelling and Video Game Design. The other was the *TimeTraveller™* machinima project. I will return to them in a moment.

STRUCTURES AND SYSTEMS I

It is not so odd, then, at this stage of late capitalism in the project called Western culture, that cyberspace is "under construction." It has in fact been under construction for at least the past two thousand years in Western cultures. – *Loretta Todd*[9]

We may wish to resist the "Western techno-cultural consciousness" (Dillon, above) in favour of maintaining our own Indigenous consciousness. Yet the fact will remain that the Western world view is busy constructing the structures and systems within which we find ourselves increasingly enmeshed. These structures and systems will shape the future of the majority culture, and by subsumption through even the most mundane actions such as paying a bill or making a phone call, they will shape our Indigenous cultures.

Critical technology studies have long made the point that technology designers and developers design much more than mere functionality. Rather, they design the epistemological protocols through which culture operates. As computer scientist Terry Winograd and philosopher Fernando Flores wrote in *Computers and Cognition*:

> All new technologies develop within the background of a tacit understanding of human nature and human work. The use of technology in turn leads to fundamental changes in what we do, and ultimately what it is to be human. We encounter the deep questions of design when we recognize that in designing tools we are designing ways of being.[10]

Through countless design decisions large — "What counts as valid input data?" or "Who counts as a 'friend'?" — and small — "Do we have the avatars default to a white skin color or brown?" or "Does the user have to opt-in or opt-out?" — 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. The fact that they are often doing so without being conscious or deliberative about how they are re-enacting a matrix of fundamental assumptions about human nature and human work in no way lessens the impact of those decisions.

The great mid-twentieth-century effort to create artificial intelligence — in which Winograd was one of the pioneers — foundered on a number of obstacles, with one of the greatest being the demands that binary systems place on how the data on which they operate must be structured.[11] D. Fox Harrel, one of the present-day generations of computer scientists trying to tease out the socio-political-cultural consequences of cognition for computation, observes that "a world of binaries is concrete and actionable. Humans have a need to classify, yet when it comes to identity politics binary and discrete classification reinforce systems of social oppression."[12] Furthermore, he writes:

> Computing technologies such as games, social networking sites, and virtual environments often reproduce forms of social stigma encountered in everyday real life, as well as introducing new forms of stigma. When users represent themselves via avatars, characters, and profiles, norms for behavior and group affiliations are established that may introduce prejudices, stereotypes, and associated social ills found in the real world.[13]

The explosive growth of social media in the Facebook era means that many of us — youth, aunties, and elders alike — are enmeshed in a virtual network of personal relationships that interpenetrate our material world relationships like a pixellated shadow. In a world where 800 million people use Facebook weekly, how Facebook chooses to encode those relationships via the computational protocols it inscribes to mediate those relationships becomes an important cultural question.[14] The structures and systems that instantiate that virtual network reify particular notions about what it means to be a social actor, what sorts of relationships one has, and how one communicates with one's friends. No matter how one might choose to define Indigeneity, it is a safe bet that a designer working within an Indigenous world view would define some of

those notions differently than a peer working solely from within a Western frame of reference.

By engaging in the conversation that is shaping new media systems and structures, Native people can claim an agency in how that shaping carries forward. And, by acting as agents, not only can we help to expand the epistemological assumptions upon which those systems and structures are based but we can stake out our own territory in a common future.

Skins, Storytellers, and Flying Heads

What inspired me to base the [Skins workshop] game on the stories of the Flying Head is . . . that I didn't really see any games out there that had our culture in it.—*Tehoniehtáthe Delisle*[15]

The Skins Workshop on Aboriginal Storytelling and Video Game Design was born out of a conversation in 2003 between AbTeC co-founder Fragnito and Celia Pearce (at that time the assistant director) of the Games, Culture & Technology Lab at the University of California, Irvine. The two were attending the Skinning Our Tools: Designing for Context and Culture symposium at the Banff New Media Institute, which examined how cultural factors shape our technology and how we might imagine alternatives to the technological infrastructure we have based on Western modes of instrumental thought.[16]

The two found common ground between Fragnito's history of creating and sustaining Aboriginally determined spaces in an ever-more ubiquitous network culture and Pearce's engagement with developing alternative modes for the design and production of virtual world and video games.[17] Their conversation together focused on how one might encourage the creation of more and better representations of Native characters in digital media, with a particular concern for video games.

Representations of Indigenous characters in video games are rare, and, in the few instances where such characters appear, are based on stereotypical caricatures flowing from deep ignorance about both the history and present reality of Indigenous people.[18] The video game industry seems intent on going down the same road as Hollywood, promoting to the popular consciousness the notion that all Indians dress like they're from the Plains, speak in broken English, and live like they did in the 1800s. Such misrepresentations parallel those that many minority cultures experience in media designed by and for the majority culture. Pearce's research and production activities around gender issues in video games and virtual environments suggested a template AbTeC might follow in addressing how Aboriginal people could assert influence — if not downright take control over — the way the industry handles characters based on our cultures and history.

The Skins Workshops integrate Aboriginal stories and storytelling techniques into the video game production process. The project is designed to encourage First Nations youth to be producers of media, not just consumers of it. We want participants to experiment with ways they and their communities might leverage digital media as a tool for preserving and advancing culture and languages, and for projecting a self-determined image out into a mediasphere awash in stereotypical portrayals of Native characters.

To date, we have completed three major Skins workshops, either over the course of an entire academic year or as intensive workshops. The participants in all three workshops come from the Kahnawake Mohawk Territory, Fragnito's home community. The workshops completed to date resulted in the production of two video game prototypes, *Otsi:! Rise of the Kanien'keha:ka Legends* and *The Adventure of Skahion:ati: Legend of the Stone Giants*.[19]

The *Otsi:!* narrative centres on an Iroquois hunter on a mission to stop the Flying Head, a monster terrorizing the territory in which he lives. The participants designed an entire multilevel game that took players from the Flying Head's origin story through to his

confrontation with the hunter. In each level the player would meet a creature or creatures from a different Kahnawake legend, such as the Tree People, the Monkey Dog, and the Hoof Lady. Given time constraints, they decided to focus production on the final level. That level begins with an elder recounting how the Flying Head was born out of a village's refusal to listen to its elders; the hunter then has to fight his way through a horde of Tree People to get back to his own village. There, he must defeat the Flying Head in order to save his people.

The Adventure of Skahion:ati: Legend of the Stone Giants relates the story of an arrogant young man who is known for his boasting. The village elder wants to teach Skahion:ati: a lesson in humility, and so the elder sends him to fight the Stone Giant responsible for making all of the fish in the river disappear. Aware that he cannot win a contest of strength, Skahion:ati: goads the Stone Giant into chasing him back and forth across a river. At one point, he drops his axe, which the Stone Giant picks up and licks to test for sharpness. Skahion:ati: is elated at this, as the elder had hinted to him that the saliva of a Stone Giant makes weapons invincible. The Stone Giant tosses the axe aside and sees that it splits a boulder in two. Skahion:ati: then recovers the axe, and the Stone Giant realizes that if the axe can split a boulder then maybe this little guy can actually harm him with it. The giant asks for mercy, and Skahion:ati: promises not to harm him if he will go away and leave his village alone.

Both Otsi: and Skahion:ati: are characters that appear in legends told within the Kahnawake community. Typically, Otsi: is seen as representative of the dire consequences that result from not listening to the elders in the community, while Skahion:ati: plays something of a trickster role, constantly getting himself — and his people — into deep trouble only to conjure up a way out through some combination of cleverness and craziness. Like many such stories, they serve to illustrate the values of the community and provide a structure for understanding and interacting with the world. The Skins participants held extensive discussions about

exactly what stories were both appropriate and amenable to remediating into a game form. This led them to recasting the Flying Head and Stone Giant as "bosses," the powerful enemies that wait at that end of a game level; using the convention of "hints" to assist the player in discovering hidden abilities or weapons; and transforming items of lore into material objects in the landscape.

The curriculum we developed for the Skins Workshops focused on three modules: 1) Aboriginal storytelling, 2) design, and 3) development.[20] While workshops dealing with design and development are plentiful, our workshops distinguished themselves through the first element, that of Aboriginal storytelling. This element incorporated two components, one of which is the telling of stories by community members and the other a critical level where we discuss Aboriginal storytelling techniques and the role these stories play in the community.

Our goal with the storytelling module is to immerse students in the rhythms, texture, and performance of the stories while simultaneously showing them how those stories are structured. An understanding of that structure is central to the ability to transform it, to remediate it from an oral form into a playable form. This, in turn, lays the groundwork for embracing networked technology as potential sites of cultural expression. It is important that participants learn that the storytelling techniques in their community lie on a continuum with those of digital media, and that they do not lie on either side of some insurmountable cultural or epistemological divide.

STRUCTURES AND SYSTEMS II

"Maybe you can run that one by me again," Bobby said, around a mouthful of rice and eggs. "I thought you already said it's not a religion."

Beauvoir removed his eyeglass frames and sighted down one of the earpieces. "That wasn't what I said. I said you didn't have to worry about it, is all, whether it's a religion or not. It's just a structure. Let's you an' me discuss some things that are happening, otherwise we might not have words for it, concepts.. . . If you want, we're concerned with systems."—*William Gibson*

Cree/French Métis artist and critic Ahasiw Maskegon-Iskwew wrote about how language can help us make a connection between the known, the unknown, and the unknowable:

> In Cree Language, Nehiyawewin, metaphor and metonymy are not simply pointers to similarity. They describe the threshold of transformation and shifting states of being.... In Cree culture, language and any creative act of communication are reflections of our awareness that, despite its depth, we have a meagre, perhaps minuscule and certainly contingent understanding of the complex net of forces and beings that surround, shape and extend beyond human knowing.[21]

We can read Gibson, imagining the emergence of a self-aware entity in cyberspace, as operating in the same mode as Maskegon-Iskwew as he grapples with the necessity of metaphor in illustrating the "complex net of forces and beings" that surround us. In Gibson's world of the near-future, the first flickers of artificial consciousness would be "beyond human knowing." The artificial intelligence forming in the matrix is of such complexity as to be beyond the grasp of thought patterns limited to logical rationalism; it understands the epistemological challenge its existence poses and so reaches deep into the human dreaming to root around until it finds forms that could serve as boundary objects between it and human intelligence. Gibson's artificial intelligence uses Haitian voodoo avatars as its form templates, and thus a group of Haitian characters, already steeped in the necessary cultural knowledge, are best able to communicate with it.

If we take Maskegon-Iskwew's use of metaphor to bridge the supernatural and the natural and extend it with Gibson's use of a culturally specific system of knowing as a metaphor for interfacing between the human and the artificial, we find a way to traverse a terrain stretching from the spirit to the human to the machine worlds. Consider, in the same vein, Na-Cho Nyak Dun storyteller Louise Profeit-Leblanc, in her essay "Stories Have Their Way with

Us." Reflecting on a story told by Old Jenny, an elder in her village, Profeit-Leblanc writes:

> It would have been interesting had Jenny been able to see, today, what satellite communications have done for the world, and how things have changed since the Internet was introduced. I am not certain that this would have intrigued her — it might simply have been interpreted as a tool for aiding travel in unknown environments.[22]

In other words, Native people have been employing such systems and structures for millennia; there is no reason why we cannot grasp the structures and systems of cyberspace just as well, and make them our own.

We might explore going even further down this conceptual path. As Cheryl L'Hirondelle articulated in early discussions for this book, to use the Unix traceroute utility to map the path of a message packet through the Internet is to reanimate layers of the network that reach back to the first peoples of this continent. One can imagine the spirits of our ancestors inhabiting those networks, whispering to each far below the error correction and noise suppression, continuing their commerce with one another, speaking forward into the future — the spirits in the tree and the stone and the stream becoming the ghosts in the machine.

GO AHEAD, CALL IT A VISION QUEST

A little visiting with my ancestors, a little recon with my role models . . .—*Hunter*

TimeTraveller™ is the major artistic project undertaken by Aboriginal Territories in Cyberspace. Created, written, and directed by Fragnito, it is the story of Hunter, a young Mohawk man in the twenty-second century, lost and adrift in a high-tech society that has cut him off from his ancestors. He uses an emerging tech-

nology called TimeTraveller™ to revisit events of importance to the First Nations people of Turtle Island. As he travels through his past, Hunter participates in historical events in order to better understand how he can best integrate his heritage with his hypermodern life and build a personally meaningful vision of the future.

We share some of the past with Hunter — the past that exists prior to this moment. We get to experience that past first-hand, through the eyes of the Native people involved rather than through the eyes of the colonists. This provides an alternative reading of historical events that compensates somewhat for the biases of conqueror history.

But a portion of Hunter's past, which runs from this moment to his present in 2112, is our future. This allows Fragnito to trace out the development of a future where the Native community, aided by the highest birth rate on the continent, has reasserted itself as the majority culture. The consequences of this change are many, and Fragnito explores several of the more interesting ones, but it is also important to note that the return to Native majority happens through procreation rather than through the destruction wrought in Hill's "After the Dance."

Fragnito thoroughly researches the events, location, eras, and individuals represented in each *TimeTraveller™* episode — Mohawks in Kahnawake and elsewhere, other nations in the Haudenosaunee Confederacy, the Aztecs, the Dakota Sioux, the American Indian Movement, and so on. Over ten episodes, Hunter crisscrosses Turtle Island, visiting events such as an Aztec festival in pre-contact Tenochtitlan in 1490, the Minnesota Massacre in 1862, the occupation of Alcatraz in 1969, the Oka Crisis in 1990, and the Manitouahbee Intergalactic Pow Wow of 2112. Fragnito uses the history as a launch point both for reimagining the historical accounts from a Native viewpoint and for tracing lines forward from the actual present into a fantastical future. In so doing, Fragnito is creating a new mythology and an original set of stories to illustrate the values of an imagined future Native culture.

The content of the series engages science fiction; so does the form. Hunter's story is told via machinima, a medium that began emerging in the early 2000s. Machinima relies on real-time engines from video games and virtual worlds to create cinematic computer animations that are captured to video. The artist then takes the output from these processes and creates the artwork, which can be as varied as linear video clips, recorded game sessions, or live performances. Its emergence is as an offshoot of the explosive growth of digital gaming and virtual environments.[23] Fragnito believes the metaverse — the post-Gibsonian virtual space imagined by Neal Stephenson in his novel *Snow Crash* — is a fast-approaching reality. She uses Second Life for making her machinima in large part because she sees the massively multiplayer online virtual environment as embodying an early version of the Stephenson's metaverse.

Machinima is also an approach that materialized an ethos of, as Métis/Tlingit curator Candice Hopkins has written, "making things our own."[24] Machinima repurposes commercial technology to allow gamers to turn the characters, settings, and props of their favourite games into ingredients for stories of the gamers' own choosing. Such repurposing resonates with Fragnito's long-standing interest in how modern technology can be repurposed by Native people to tell our stories. Second Life's low-res textures and low-polygon count characters and objects also create a sense of future-retro, a visual feel that serves as subtextual commentary on the relationship between actual and imagined futures.

NEW GRAMMARS, NEW CONVERSATIONS, NEW TECHNOLOGIES

My gifts are meagre and stingy little things.—*Ahasiw Maskegon-Iskwew*

In this essay, I have sought to motivate a deep engagement by Native people in both the media and technologies of cyberspace.

We live in a complex world where the stories we tell ourselves and others are both metaphor and material, and by involving ourselves in the structures and systems that construct cyberspace we have an opportunity to bring our magic into the matrix. The Aboriginal Territories in Cyberspace effort is but one possible path forward to such a goal, one that centralizes our traditions in our own artwork and promotes the participation of a wide range of Native creators in shaping the construction efforts.

Much more work needs to be done. AbTeC itself has not started on the third goal mapped out in our manifesto, "whereby young Aboriginal people . . . move from new media technology consumption to production to development, and bring that production and development activity back to the reserve." The Skins Workshops focus on creative production, but an understanding of and participation in technology development will be necessary before we can really hope to help shape the future of cyberspace in its fundamental, ontologically consequential foundations. That work should be done as much as possible from within the community, to keep it grounded in the stories — the metaphors, the systems, and the structures — of the community.

Both the Skins and *TimeTraveller™* projects are still using tools developed by and for non-Native cultures. What happens when we seriously approach the problem of designing and building computational paradigms based on different epistemological structures — Mohawk or Cherokee, for example? Would such systems even be recognizable as "computational"? What happens when we expand the Skins' focus on Aboriginal narrative and representation to include ideas about Aboriginal gameplay, mechanics, and structure? The critical success of efforts such as *Braid*[25] and *Passages*,[26] with their innovative and unexpected approaches to time and teleology, suggest that the grammar for video games remains up for grabs. What is true in the video game domain is true for digital media in general. The more designers — Native *and* non-Native — push on that grammar, the more likely we are to end up with tools that are

better able to accommodate substantially new systems and structures for computationally based approaches to communicating our stories.

ENDINGS AND BEGINNINGS

The best way to predict the future is to invent it.—*Alan C. Kay*

We cannot predict the future through sheer mental effort. Yet we do know that a great building project is underway, and, as Kay observes, the only way to predict where it is going is to participate directly in it. I have argued elsewhere for Native people to grasp the unprecedented opportunities that digital networked media have for telling our stories our way and, in the process, ameliorate the pernicious effects of five hundred years of being objectified by Western media technologies. Now it is time to look forward, to continue that work by teaching ourselves not only how to use these technologies but also how to *make* these technologies. We have the opportunity and the obligation to involve ourselves intimately in the shaping of the structures and systems in which we will be living for the next five hundred years. We can and should sail the old sea and the new. In so doing, we Aboriginal new media creators can contribute to developing a better dance, and better prayers.

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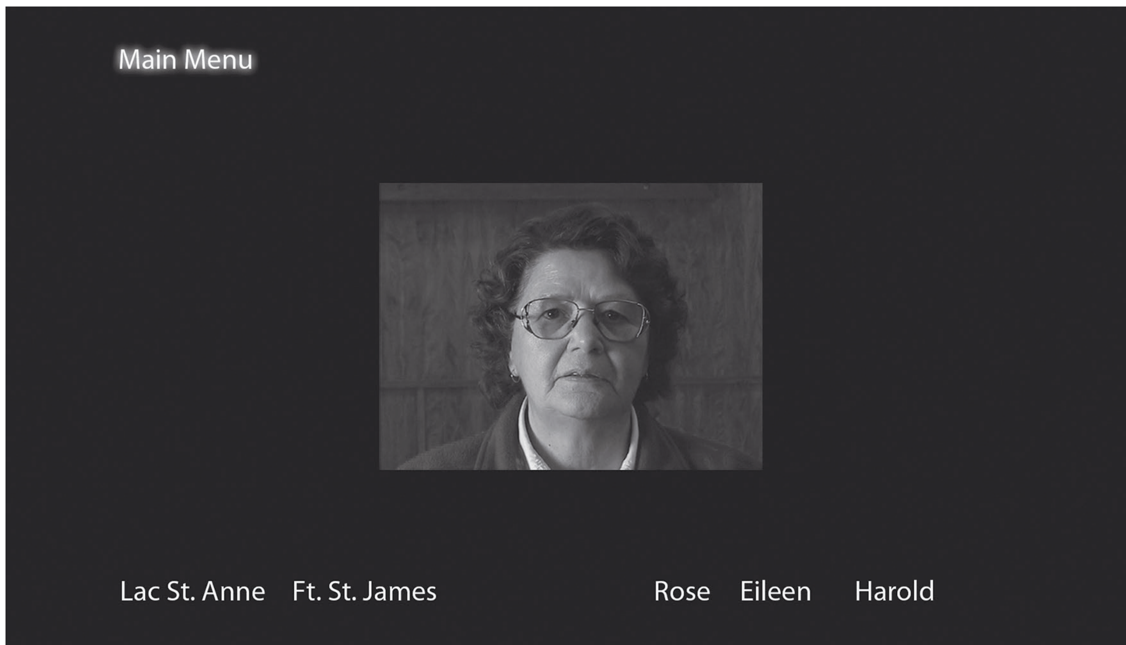
Stephen Foster

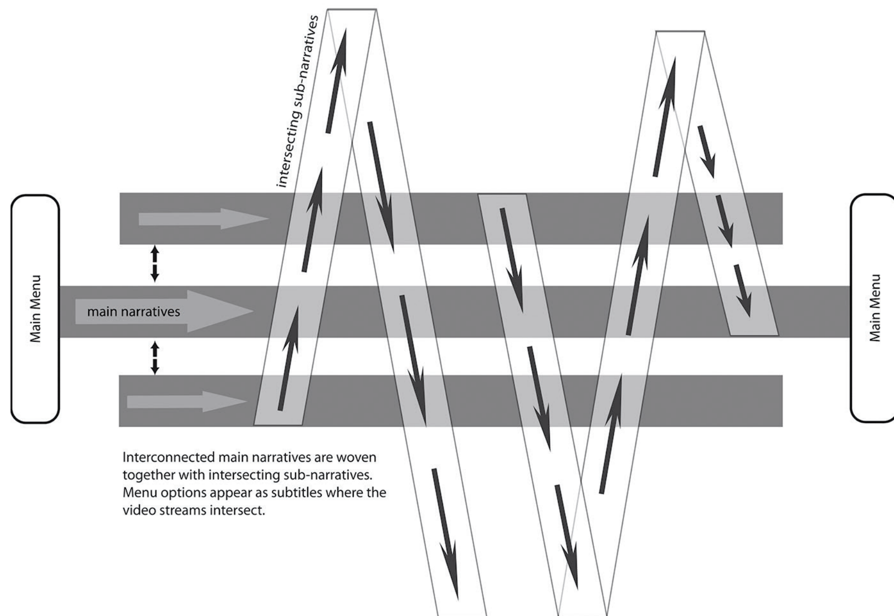
Documentary filmmaking/video making is approaching a crossroads; we are on the cusp of a radical shift in form and practice. Not only are technologies and art forms converging but the advent of new web-based mobile platforms with multi-layered interactive approaches, including augmented reality, allow for more flexible and intuitive delivery of content. This will have a huge impact on how Indigenous peoples are represented in media and how Indigenous media artists represent our cultures to the world.

Stephen Foster is a video and electronic media artist of mixed Haida and European background. His work deals with issues of Indigenous representation in popular culture through personal narrative and documentary. Foster works mainly with video and photo installation using interactive technologies. He has exhibited both internationally and nationally and has lectured publicly on interactive documentary, community-based research, and Canadian contemporary Indigenous art. Stephen is currently an associate professor in the Creative Studies Department at the University of British Columbia, Okanagan Campus, where he instructs courses dedicated to video production, digital media, and visual theory.

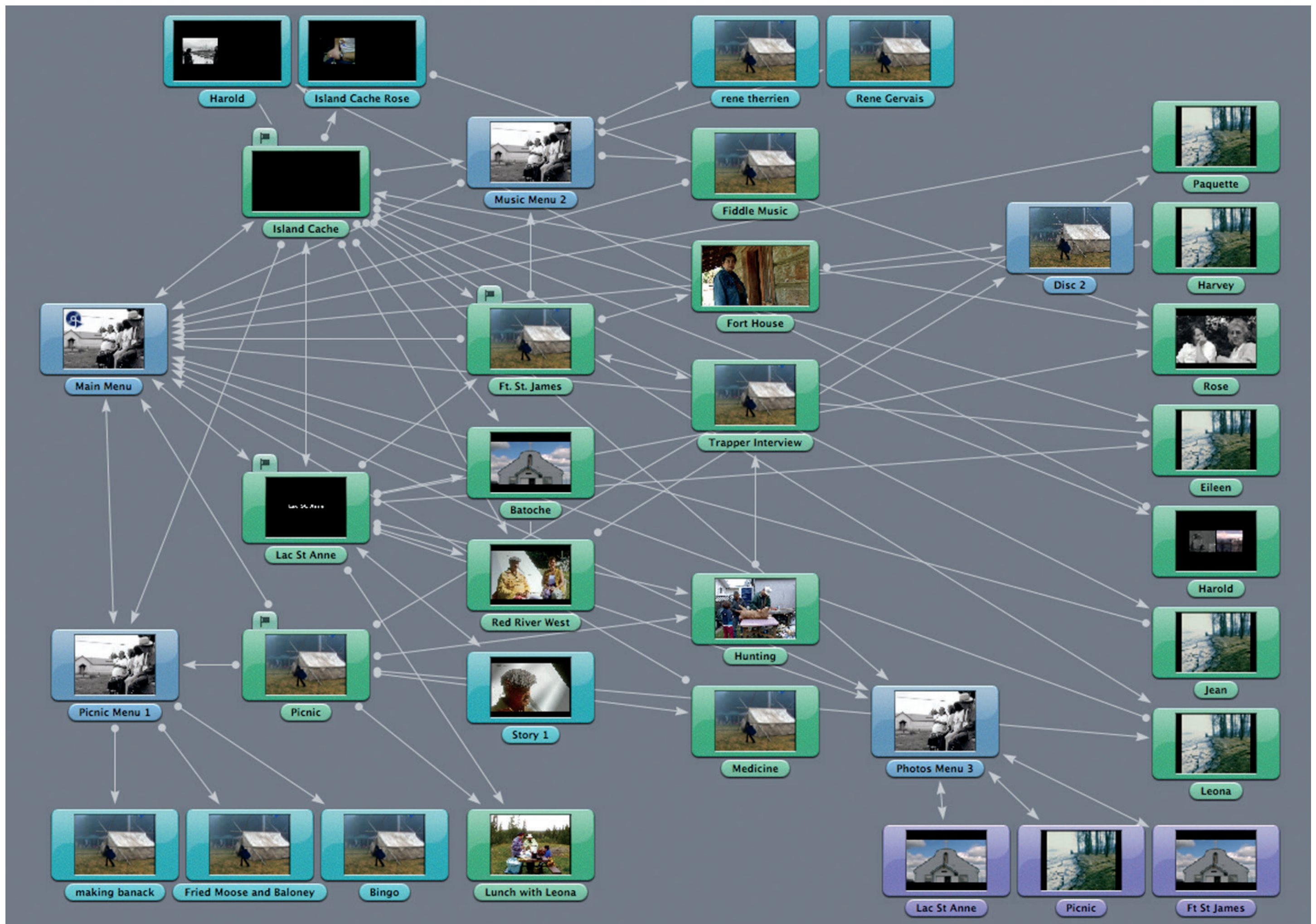
Multipanel sequence from Island Cache interview. PGME Documentary Project 2010.

(left) *The Ballad of Crowfoot* ©1968 National Film Board of Canada. All rights reserved; (right) *Kanehsatake* ©1973 National Film Board of Canada. All rights reserved.





(above) Onscreen menu imbedded in subtitle tracks. PGME Documentary Project 2010; (right) Schematic of DVD interactive design. PGME Documentary Project 2010.



Index map from interactive DVD. PGME Documentary Project 2010.

God's Lake Narrows ©1968 National Film Board of Canada. All rights reserved. Photo credit: Scott Benesiinaabandan.

Multi-screen Installation view of PGME Documentary Project 2010. Yukon Arts Centre, Old Fire Hall Gallery, Whitehorse.

Artist Statement

4 Documentative: Inclusivity and the Ethics of Interactive Documentary in an Indigenous and Participatory Context

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A few years ago, I presented an interactive documentary project before an international conference on documentary. There were documentary video- and filmmakers, as well as academics from around the world, all focused on issues concerning the making and study of documentary from a disciplinary perspective. I presented a project: a fragmented and non-linear interactive narrative revolving around a group of Métis elders living in Prince George, British Columbia. My project was designed using DVD interactive technology and is presented as a multichannel video installation. After I presented my work, one of the more established documentary makers in the audience made a rather bold observation that ignited considerable debate. She stated, quite categorically, "Your project, while *documentative*, is not documentary." Before I could even start to formulate a response, the floor erupted into open debate on the nature and defining principles that constitute documentary as an art form.

At the heart of her comment is the notion that narrative is a defining element in the construction of a documentary. At the time, this caught me somewhat off-guard as I was coming to documentary as process rather than from a position of artistic discipline. My

interests in documentary follow a path outlined by community participatory processes. However, her statement clearly privileges the notion of individualized authorship and the deliberate structuring of documentary along conventional notions of linear narrative. For her it is the artful telling of stories as part of a non-fiction tradition of cinema. The fact that it is a linear and fixed narrative structure is the very essence of the documentary.

Over the last few years, interactive documentary has gained considerable traction and separated itself into a sub-genre of documentary itself. Not surprisingly, a leader in this area has been the National Film Board of Canada (NFB). Several projects are presented on the National Film Board website and are of varying degrees of interactive sophistication. The NFB itself has begun to heavily promote its web documentaries and committed considerable resources to develop the genre. Notable works include *Territories* by Tristan Fortin Le Breton, *God's Lake Narrows* by Kevin Lee Burton and Alicia Smith, and *Out My Window* and *Highrise* by Katerina Cizek, as well as *This Land* by Dianne Whelan and Jeremy Mendes. For the most part, these interactive web documentaries sit outside what normally would be called activist or participatory documentary. However, their interactive structures lend themselves to community-based participatory process and multi-vocal perspectives.

REPRESENTING COMMUNITY

Documentary filmmaking/video making is in the process of transformation; we are experiencing a radical shift in form and practice. Not only are technologies and art forms converging but the advent of new web-based mobile platforms with multilayered interactive approaches, including augmented reality, allow for more flexible and intuitive delivery of content. Video content has been adapted for blogs, directed to wireless mobile devices, and embedded with interactive content, transforming the traditional modes of delivery

for documentary. As Evans and Foster note in an essay on the Prince George Project, "Innovations in aesthetic form and broadcast capacity allow documentary to reach new audiences in new ways, diversifying the level of audience engagement and participation, blurring lines (Atanarajuat[1]) between subjectivity, authorship and audience, and potentiating the development of participatory and community-based documentary methodologies."[2] The capabilities of new technologies to create opportunities for documentary as an art form to re-evaluate its aesthetic conventions and utilize more experimental approaches to narrative opens the door to other cultural approaches to narrative structures and inclusivity.

Ethnographic film and video, like ethnography itself, has come under critical scrutiny for its assumption of authority. Working in an interdisciplinary and participatory frame, in which no one agenda has priority over another, necessarily means that research objectives and artistic goals are multiple. This is not problematic as long as the various goals do not conflict. In practice, this means that there are ongoing processes of negotiation about what and how research gets done, and what sorts of research products result. It is important to note that such negotiations are specific to the actors involved, and that the development of respectful relationships requires reciprocity — an appreciation of the mutual benefits possible. In the Prince George Métis Elders Documentary Project, the elders acknowledged the needs of the academic researchers to produce academic products (like this paper), the academics recognized and acted on the directions of the elders about what sorts of activities would be the focuses of videotaping, and both elders and academics agreed on the need to provide the space for many voices in the material presented to a public audience.

Evans and Foster write, "Participatory research (e.g., Freire 1970[3]; Fals-Borda 1987[4]; Hall 1984, 1989[5]) requires that researchers must be willing to share control, authorship and power. However, a successful participatory relationship must consider that community and researcher interests may at times diverge without conflicting.

Key here is the understanding that in a participatory relationship neither the researchers nor their interests disappear as distinct entities; researchers do not simply enact the collective desires of the communities in which they work, but rather negotiate and accommodate a number of concurrent interests both within the community and between the community and the researchers involved."[6]

PRINCE GEORGE MÉTIS ELDERS DOCUMENTARY PROJECT

In the case of the Prince George Métis Elders Documentary Project, the Prince George Métis Elders Society directly sought to create a video to document the lives and knowledge of Elders in the Métis community in Prince George, BC. The project was a creative endeavour based on collaboration between artist (Foster), social scientist (Evans), and the elders with the goal of creating a new form of interactive documentary that could build community through the process of documenting Métis culture. We undertook extensive collaborative work with the elders and developed interactive technologies (interactive DVD) that would be useful to community but also represent the community to others through a multichannel video gallery installation.

Outlining the methodology, Evans and Foster write, "From the onset of the project we set out to use a modified Participatory Action Research (PAR) model that blended notions of social science methodology with artistic and aesthetic concerns. The goal was a hybrid form of community-based research that respected not only content but also form and presentation. The video was shot and edited by an artist professional (myself), but the community provided direction on what should be recorded and when. The resulting interactive DVD expanded the notion of documentary filmmaking in both process and form."[7]

The form of an interactive multichannel video art installation further extends the multivocal aesthetics of the process and creates unique synergies through the simultaneous presentation of image

and interviews. As active participants, viewers can shape content and construct individualized narratives extending the traditional notion of PAR to include the end-user (audience) in the formation and contextualization of content. Using a multilayered, non-linear narrative approach provides opportunity to explore divergent narrative content while also including a wider range of interviews. This strategy is also important for the community as it creates the capacity for all individuals to participate more fully in the project.

Aesthetic considerations were also important to the project. The video editing and shooting styles have more in common with experimental filmmaking than mainstream documentary production. Works such as Trinh T. Minh-ha's *Naked Spaces*[8] influenced a deliberate approach that balances art and the useful documentation of the Prince George Métis community. In the film *Naked Spaces*, Minh-ha utilizes formal camera techniques reminiscent of early cinéma-vérité techniques that evoke a sense of rawness and direct relationship with the subject matter. Her techniques disrupt the viewer's engagement with the film but also provide a more complex and responsive representation of the community she is documenting. This is in opposition to more traditional camera techniques in documentary that emphasize a transparent approach to the medium. Prioritizing aesthetic expression over the communication of content can be alienating to the community in a participatory project. The community needed to be comfortable with the manner in which they were being represented.

Since completing the project, we have presented it in a variety of contexts, including individual screenings and theatre-style screenings, but we have also exhibited the project in art galleries as a multimonitor video installation. While the project can be played on an individual player and controlled by a single individual, it has far greater impact when presented as a multimonitor video installation with multiple audience members controlling differing screens. The simultaneity of different screens playing different elements creates unique and intriguing juxtapositions and vignettes of con-

tent and image. This fragmentation in concert with the non-linear narrative structure reflects the complexity of the contemporary Métis diaspora while creating a deeper and more intuitive understanding of the local community, its history, and dynamics. The multiple screens extend the metaphor created by the interactivity and increase the level of complexity. The interactivity embedded in the video elements engages the viewer/audience in a dialogue with the video imagery and content that is beyond passive reaction. As the viewer/audience navigates through material, via mouse on screen or remote control, they build their own connections and construct their own narratives. Interviews can play off and inform one another as they combine with imagery of surrounding locations and historical information, giving a broader context to the representation of individuals and community.

CINÉMA-VÉRITÉ, CHALLENGE FOR CHANGE, AND THE INDIAN FILM CREW

During the mid-twentieth century, documentary practice shifted in part due to simultaneous shifts in ethnographic research. The Challenge for Change (CFC) program was a National Film Board (NFB) of Canada initiative that ran from 1967 to 1980. The first documentary to embody what would become a new approach to activist documentary was the film *The Things I Cannot Change* (Tanya Ballantyne, 1967). Although not strictly part of the program, it is often cited "as a key component of the program's legacy[;] the film was completed as a pilot project and broadcast on CBC prior to the formal launch of CFC."[9]

In general, the project was focussed on empowering communities by providing training and facilitation for film and then later video production. While it was originally not concerned with production training, later efforts addressed the issues of democratizing access to media representation and media production. What came to be known as the *Fogo Process* was overtly committed to

community participation in the filmmaking process but did not enlist the participants in the production process itself. Although it promoted decisively activist outcomes, the goals of the Challenge for Change program had much in common with those of participatory action research. As a result, the CFC had a tremendous impact on this methodological approach to documentary. The Fogo Process has obtained almost mythical stature as a leading influence on participatory documentary.[10]

In the early days of the National Film Board's Challenge for Change project, cinematographers were working with a then relatively new aesthetic approach to film known as *Direct Cinema*. This stylistic approach would later be exported to France and then imported to the United States, where it would become known as *cinéma-vérité*. The Challenge for Change project and the work of early Direct Cinema enthusiasts had a profound effect on the early work of renowned French filmmaker Jean Roché, who adopted the direct camera techniques and community participatory-based processes for his groundbreaking work with African communities.

Colin Low's Fogo Island Project, with its twenty-eight short films, used what he called *vertical documentaries*. Low's vertical documentaries function as stand-alone films and are not dependent on each other but connected by subject matter and the objective of the overall project. The narrative structure of each film is often truncated or fragmented, allowing for a more open-ended structure. The overall effect of the entire project is a non-linear narrative structure that disrupts conventional documentary narrative arcs. The films are often constructed using few edits or even single takes. The use of Direct Cinema camera techniques positioned the camera and the filmmaker in the film and made the audience aware of the filming process and the act of documenting. The techniques have a cumulative effect that engages the viewer very directly with the subject matter and disrupts conventional passive film or documentary viewing. The project utilized a process that was specifically designed to provoke social change by facilitating dialogue

between the Fogo Islanders and decision makers in Ottawa. The Fogo Islanders are interviewed individually and in groups regarding social and economic issues facing the community. In addition, community and cultural events are documented and there is a general sense of responsiveness and sensitivity on the part of the filmmakers. The films were then shown to individuals in Ottawa making key decisions regarding the relocation of the community, who in turn were documented responding to what they saw. In this way, the films became a conduit for communication between the community and government, forming a metanarrative structure. The intertextual links made between documentaries reveals a complex multilayered portrait of the community and, through the filmmaking process, solutions to the issues facing the island community are developed. This is the important legacy of the Fogo Process. The use of documentary filmmaking as a way to focus and facilitate discussion to directly engage complex social, political, and economic issues facing communities was the foundation for the Challenge for Change project. The Fogo Process is a foundation for Participatory Action Research, and its process would be reproduced and exported around the world, becoming a major influence on social science methodology.

In 1968, the NFB, as part of the Challenge for Change project, established the Indian Film Crew. Its first production, *These Are My People*[11] (1969), by Roy Daniels, Willie Dunn, Michael Mitchell, and Barbara Wilson, with Noel StarBlanket as editor, was a short documentary on the culture and religion of the longhouse. The film uses many of the techniques of Direct Cinema, including hand-held camera, group and individual interviews, and no use of archival images or voice-over. While not following the exact process developed for the Fogo project, this project is unique, as it does follow the general principles of Participatory Action Research in that the main premise for the NFB in creating the Indian Film Crew was to have "Indians" make film about "Indianness." "There was a strong feeling among the filmmakers at the NFB that the Board had been

making too many films 'about' the 'Indian,' all from the white man's viewpoint. What would be the difference if Indians started making films themselves?"[12]

The Ballad of Crowfoot[13] is another important early work by the Indian Film Crew, which is based on the song by William Dunn (Micmac) and uses archival and contemporary media clippings as sources. The documentary has more in common with music videos than with traditional NFB-style documentary but retains a strong political edge and generates a somewhat radical message by revealing the continuity in the political struggle of Aboriginal peoples through the film. This work is a musical tribute to the famous chief but identifies key political and military conflicts that impact contemporary late 1960s politics and underlie the social issues facing Aboriginal peoples even today.

At the beginning of the 1990s, there was resurgence in cinéma-vérité stylistic approaches to documentary as well as the notion of the filmmaker as an active agent in the documentary process. Alanis Obomsawin, in her documentary *Kanehsatake: 270 Years of Resistance*,[14] uses many of these same techniques and includes the filmmaker as indirect subject matter in documentary. She deliberately draws attention to the presence of the camera with hand-held shots and the use of grittier, low-quality video footage. Her approach is more journalistic, in the sense that she is seeking to document an event, but the viewer is always aware of the filmmaker's presence. She positions herself within the subject of the documentary and in relationship to the issues as they unfold in the documentary. The cinéma-vérité techniques also contribute to a quality of directness and intimacy that could only be achieved by her close engagement with the individuals involved. The documentary was controversial at the time and provoked criticism for a perceived lack of objectivity. Her stylistic approach contradicted convention, not only in relationship to form but also in relationship to subject matter. Obomsawin's well-developed documentary aesthetic reveals the contradictions inherent in the traditions of

objectivity and detachment and presents us with some interesting ethical issues.

Obomsawin, in her documentary work surrounding the Oka crisis, anticipates the notion of "embedded" filmmaker, creating an opportunity for a unique personalized perspective that can give insights into complicated events. This concept would later be superficially appropriated by the U.S. military and distorted as a means to control information while providing what would appear to be a direct interpretation of events. Gil Cardinal writes that the Oka Crisis of 1990 played a role in the establishment of Studio One: "The events which shook Canada through the summer of 1990 highlight the need for better communication between the non-aboriginal and aboriginal communities of this country, and among the First Nations themselves."[15] In 1996, the NFB launched the Aboriginal Filmmaking Program at Studio One in Edmonton with the idea of training Aboriginal filmmakers in order to better engage the Aboriginal community in creating and controlling their own representation. Graydon McCrea, executive producer of the NFB's North West Centre at the time, states, "Non-Native people have documented what they perceived to be the mystery and romance of North America's Indian, Inuit and Métis people since the earliest days of filmmaking . . . it is no longer acceptable for Native people to be portrayed as only others see them — they must be portrayed as they see themselves."[16]

While CFC had demonstrable short-term successes, the sustainability of these outcomes for the long term is open to question. As the program developed, it sought to extricate the artist/director from the process and position them in a coordinator/facilitator role. Inevitably, this made the project useful only to those involved in the project and undermined its ability to engage outside audiences with the issues of marginalized communities. Technical expertise was disseminated through the projects of the program, especially in projects like *VTR St-Jacques*[17] and *VTR Rosedale*,[18] which did lead to some capacity-building within communities. Lack of access to a

wider audience became a crucial issue, as avenues for mainstream broadcast distribution for the project productions never fully materialized. These later works and assumptions about democratization of the medium became central goals of CFC and resulted in idealizing the process for its own sake. This is also true in Participatory Action Research, as it would develop into an academic research methodology. More recently, these assumptions have reemerged with similar new media initiatives. The democratization of media access through the Internet raises hopes of creating a level playing field for marginalized communities and independent artists. There is an underlying utopian idealism present in both PAR and CFC projects that is an easy target for criticism. As Byron and Gagliardi write, "The 'digital divide' is as much about human capital and experience as it is access to equipment."[19]

The opportunities for marginalized people to speak to others (let alone themselves) through video have been extremely limited. As David MacDougall notes, "From the point of view of minority communities, television, videos, and films are seen as 'theirs'/non-local rather than 'ours'/local."[20] The development of Indigenous media is an important turn in recent years, including the Aboriginal Peoples' Television Network, which is part of what Faye Ginsberg refers to as "a welcome proliferation of organizations, networks, and individuals working to make minority voices and the voices of their communities heard."[21]

In the film project *Navajo Film Themselves*,[22] Navajo participants chose who and what would be filmed. Sol Worth and John Adair write in their seminal text about the project, "This represented ethnographic film's earliest steps in the direction of research that respected the 'native' as expert. Individual members of a Navajo community were instructed in the use of portable film equipment and then given the opportunity to make films pursuing their own interests and inclinations."[23] The Navajo film project evoked many of the same principles found in the CFC projects. However, Worth and Adair note that "as an early example of indigenous self-

representation through film, it had uneven results especially in terms of product, and the bedrock assumptions of the researchers were those of objectivist ethnographic thinking."[24] From a contemporary perspective, the CFC project failed to consider other, more complicated social and economic factors influencing outcomes. In relationship to Indigenous communities and issues, there was a failure to consider the larger impacts of a systemic colonial history, as well as any lasting relevance to the community. Nonetheless, the projects did recognize that representation was culturally specific. Although there was little overt reflexivity regarding their process and the formal evaluation of outcomes, there was in some instances real social change. In the case of Fogo Island, the community was not moved and subsequent economic development projects did meet with some success, contributing to the establishment of CFC's legacy.

ETHICS AND INTERACTIVITY

In the Prince George Métis Elders Documentary Project, we utilized stylistic conventions consistent with cinéma-vérité, as well as interdisciplinary and hybrid participatory processes, working between margins of community, social science, and art. We used an aesthetic of simultaneity with multiple perspectives and stylistic juxtapositions. The use of fragmented narrative structures similar to the Fogo films of Colin Low allowed us to develop an interactive structure composed of a series of short documentaries arranged in streams. These streams were then interlinked with shared scenes, which created an opportunity for user interaction. As we (Evans and Foster) wrote in an essay about the project, "The conventional figure for structuring interactivity is that of a visual 'tree'; options or choices are provided to the user/viewer to follow narrative paths that diverge from the initial starting point, for example, as in 'choose your own story' style games. Instead of this, we took a more open approach by anchoring elements or issues facing the

community in thematic linear narratives that could then be woven together."[25]

The navigation interface is designed to be intuitive and transparent, allowing a viewer with limited technical experience to navigate easily or choose not to engage in the interactive elements at all. The overall structure creates a series of interrelated modular documentaries that inform one another in subtle ways: "This fragmented approach not only offers some interesting aesthetic opportunities, but it is also practical; it allows for greater inclusivity and functions metaphorically echoing the Métis community's dispersed but still cohesive nature."[26] In this sense, the embedded interactivity reflects Indigenous community values and incorporates notions of inclusivity that can be seen as being influenced by Indigenous protocols.

The linear narrative format of conventional documentary, even in more experimental forms, forces the exclusion of voices through constraints imposed by commercial dissemination formats. This interactive structure allows for the inclusion of content from a variety of perspectives, which may even be contradictory to one another.[27] Traditional documentary structures constantly struggle with interview content, often cutting valuable and insightful interviews. Our process allowed for the inclusion of material in alternative non-linear threads that were free to stray from main narrative elements. Although this approach may have caused some fragmentation and disrupted narrative cohesion, it provided keen insights into the nature of the community and the issues facing it.[28]

This improved capacity for inclusiveness can be an important ethical consideration when working with Indigenous communities. While working on participatory projects, it is important to honour the personal input of all individuals that volunteer and actively participate in the project. "Without the interactive structure and the capacity to include alternate streams these individuals and their valuable input might not find expression in a documentary project"[29] Including interactivity as a strategy for inclusivity

in community-based participatory projects coincides with community values and makes it much easier to negotiate the often complex terrain of inter-community politics. In addition, the use of metanarrative processes also allows the individuals involved in documentary projects to comment on past interviews, providing further context and in that sense taking control over their own representation. In addition, it can also provide opportunity to include new information inspired by comments of other individuals. Recording responses to current material while already in production engenders an atmosphere of collaboration, transparency, and trust mirrored in traditional Indigenous cultural protocols that provide opportunity for extended dialogue and broader community participation. This process could easily be extended in web-based projects, where one could incorporate the ability for individual comment. With new web 2.0 capabilities, one could construct a cultural documentary database whereby the project participants continue to comment, update, and upload material. While this may be technically challenging for some, it could extend the participatory nature and continue to be openly inclusive. Material generated from this kind of input extends the participatory process to audience, which could be the community or individuals outside the community. This creates interesting ethical issues around cultural material and necessitates a participatory process for making decisions about content creation in relation to a documentary project. An interactive structure also allows the audience to make ongoing choices, shaping the viewing experience. Interactivity actively engages the viewer/audience in a dialogue with the content, demanding more than passive viewing. As the viewer/audience navigates through material, they build their own connections and construct their own narratives, creating a unique documentary experience.

God's Lake Narrows[30] by Kevin Lee Burton and Alicia Smith utilizes unique programming to obtain information about the viewer's location to situate the viewer in relationship to his/her own community and other Indigenous communities nearby to the viewer.

This is a novel approach that includes the viewer/audience directly in his/her documentary. While the project incorporates a more linear approach to its interactivity, it does engender an intimate quality through the use of voice-over and personal connection to the subject matter. Burton is embedded in the community, not unlike Obomsawin, and this gives him access and the trust of his subjects in what is essentially a community-based project. Because of his long-standing relationship with the community, he has access to intimate spaces and individuals that would not likely be possible with a community outsider. This relationship allows him to create an intimate and more fully rounded portrait of the community from an insider's perspective. It also allows for greater inclusivity, even though the narration essentially is a first-person POV of the community. Burton and Smith generate an interface that allows the viewer multiple paths to view the material, although the viewer is initiated to the project through what appears to be a slide-show with stills and a combination of audio and text that create a dialogue between viewer and the author, as well as the community. The inclusion of the viewer directly in the project is immediately gripping and encourages the exploration of the site and a desire for more interactivity. This project is relatively short and confined to a structure that is more direct and intuitive in nature. However, it is a compelling use of interactive documentary in relationship to a community-based project. Further, the strategic use of interactivity symbolically reflects the multifaceted nature of the community, making a responsive documentary that is cognizant of its representation. The work embraces traditional documentary video strategies such as voice-over, text, and stills, yet at the same time disrupts that tradition by complicating the documentary through the use of interactive techniques.

Simultaneity is another strength of an interactive approach to documentary. The use of conflicting or parallel images, interviews, and text can provide opportunities to expand narrative and create a multivocal representation when working with communities.

It is a technique that can embrace contradiction without diminishing an overall argument or position. It also provides a viewer/user an opportunity to combine different elements in unique ways, reinforcing content through the juxtaposition of differing materials. Sharing power and authorship in relationship to participants and incorporating the end user/audience with the interactivity can enhance the community-responsive elements of a given project. The sensitivity to place and person are important elements as they shape the final product, providing an ethical approach as well as an aesthetic approach to interactivity. In many traditional Indigenous narrative structures, there is a notion of simultaneity reflected in the description of characters and beings. Characters are fluid and capable of transforming, but they are also capable of occupying multiple states at once. The story itself can shift based on context and the intention of the narrator with the purpose of emphasizing certain meaning or interpretations. In this sense, interactive technologies with potential for simultaneous and multiple variations can take advantage of non-Western narrative forms and incorporate their strategies into their structure, strengthening a documentary approach.

While the original critique was an honest response from someone heavily invested in a long tradition of conventional narrative documentary, it was also indicative of a perspective positioned within an established documentary discourse. It is a perspective that is also invested in marginalizing participatory and activist documentary practice and discourse. These discourses challenge preconceptions of authorship and privilege collaboration at the community level. They threaten the industry-supported and industry-accepted documentary form while also confronting the expectations of subject matter. The adoption of Indigenous ethics and protocols into activist and participatory documentary practice, although not new, threatens the dominant discourse and questions the foundation of documentary form. Aboriginal ethics and protocols have a place in modern documentary and interactive media, especially when

concerned with issues of inclusivity and representation. While interactive documentaries can exhibit a fragmented structure that lacks cohesion, the interactive structure does allow for narrative threads through short vignettes and intertextual links. This is preferable to a linear authoritative narrative based on exclusion, which does not respect and honour the contributions of its participants. The use of new media technologies opens up the narrative construction of documentary to the possibility of ongoing community participation via a hyperlinked database of audio, visual, and textual materials through which people may extend the narrative, making new stories. Simultaneity also provides a means to complicate a story and provide an opportunity for multivocal representation. In this sense, we can modify the forms of documentary to be more inclusive, embedding Indigenous aesthetics and protocols into its structure. The objective is to find a way to represent Indigenous community with tools that are consistent with an Indigenous perspective and in sync with the ethics and objectives of the community, while extending those values to the audience.

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26 Ibid.

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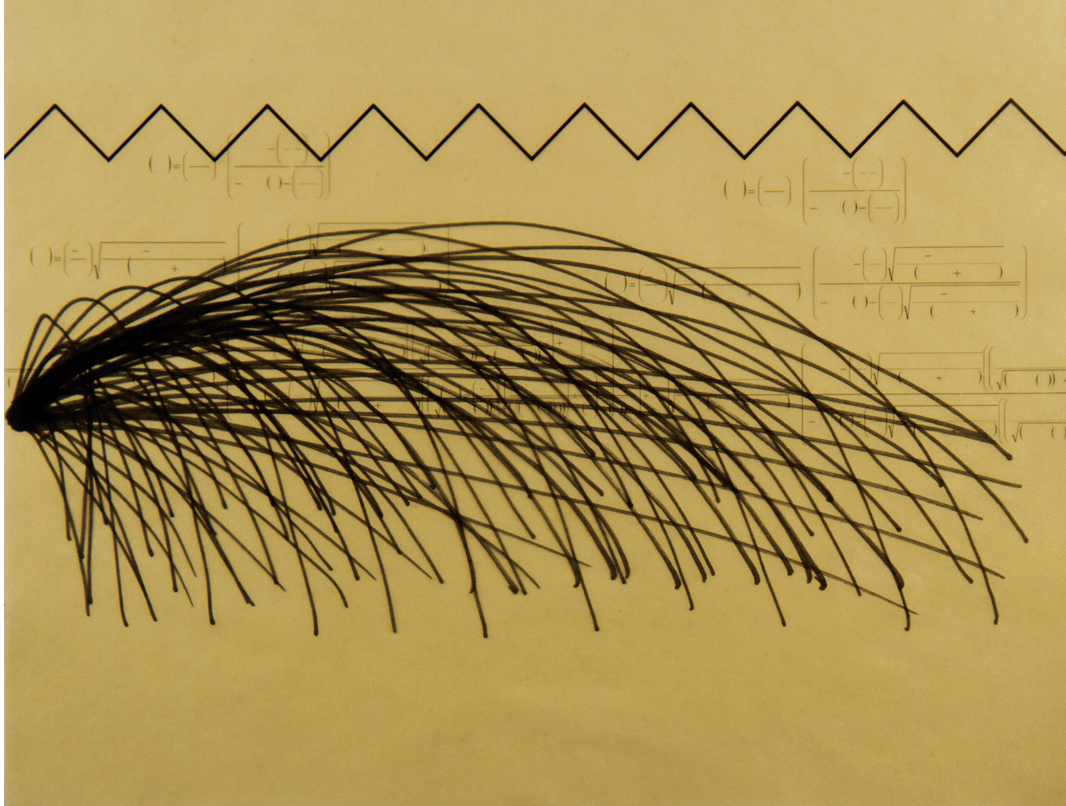
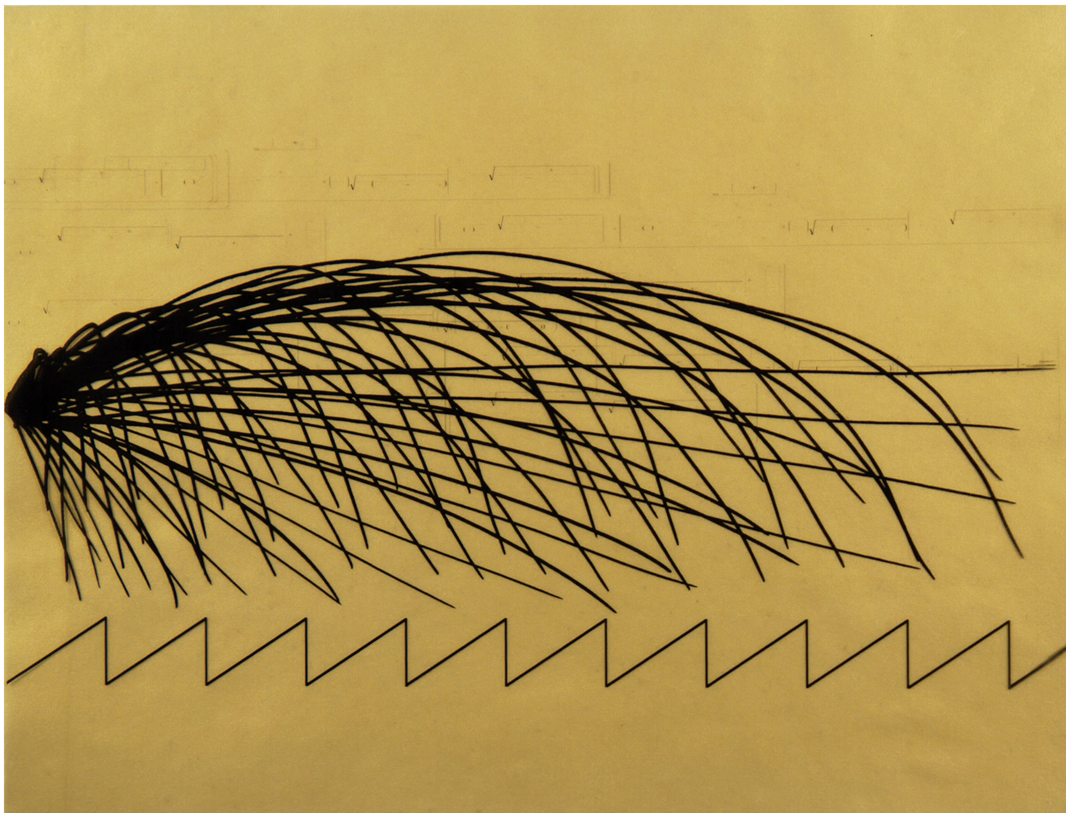
Candice Hopkins

The work of Indigenous artists serves as one means of countering the historical amnesia that characterizes the Americas, an active forgetting of the blood that has been spilled generations ago on the very ground beneath our feet.

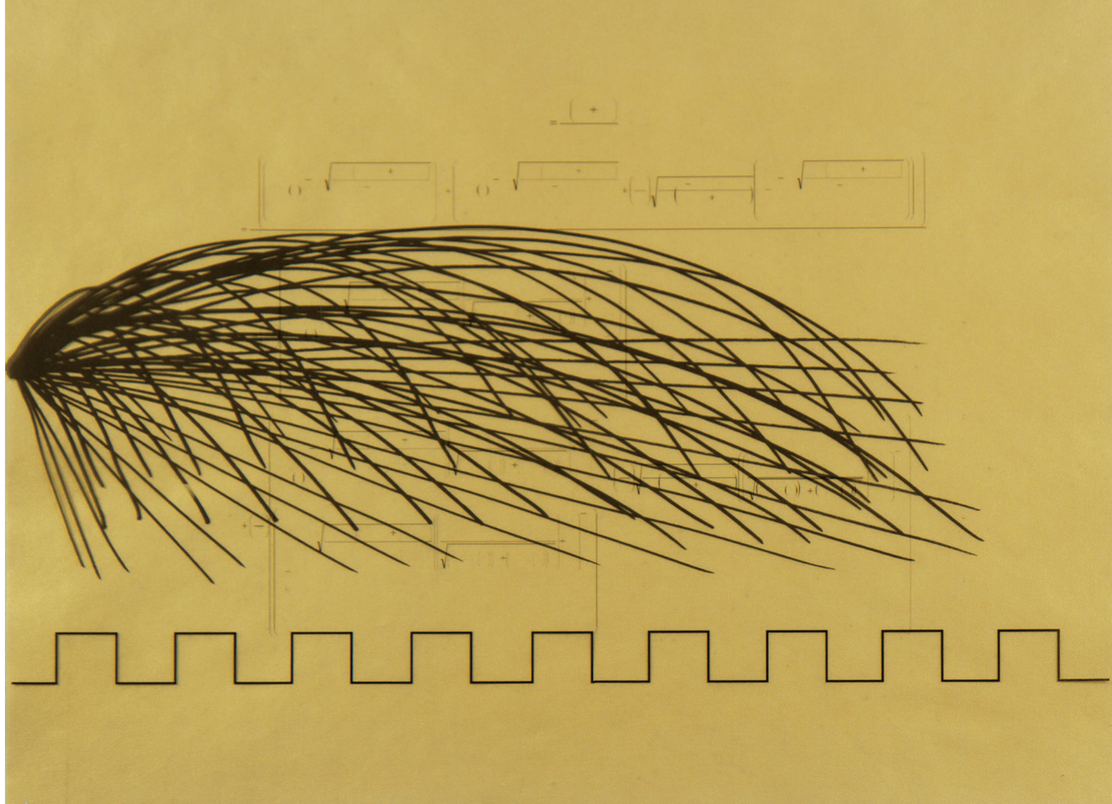
Candice Hopkins is an independent curator and writer based in Albuquerque, New Mexico, and Ottawa, Ontario. She has held curatorial positions at the National Gallery of Canada, the Western Front, and the Walter Phillips Gallery, The Banff Centre. Hopkins holds an MA from the Center for Curatorial Studies, Bard College, where she was awarded the Ramapo Curatorial Prize for the exhibition Every Stone Tells a Story: The Performance Work of David Hammons and Jimmie Durham. Her writings on history, art, and vernacular architecture have been published by MIT Press, BlackDog Publishing, Revolver Press, New York University, *The Fillip Review*, and the National Museum of the American Indian, among others, and she has lectured widely, including at the Witte de With, Tate Modern, Dakar Biennale, Tate Britain, and the University of British Columbia. In 2012 Hopkins was invited to present a keynote lecture on the topic of the "sovereign imagination" for *documenta 13*. Her recent curatorial projects include Close Encounters: The Next 500 Years, a multi-site exhibition in Winnipeg, co-curated with Steve Loft, Jenny Western, and Lee-Ann Martin; Zone A for Toronto's Nuit Blanche; and Sakahàn, co-curated with Greg Hill and Christine Lalonde, the National Gallery of Canada's largest survey of recent Indigenous art, which opened in May 2013. Hopkins is co-curator with Lucia Sanroman of the 2014 SITE Santa Fe Biennial exhibition, Unsettled Landscapes.

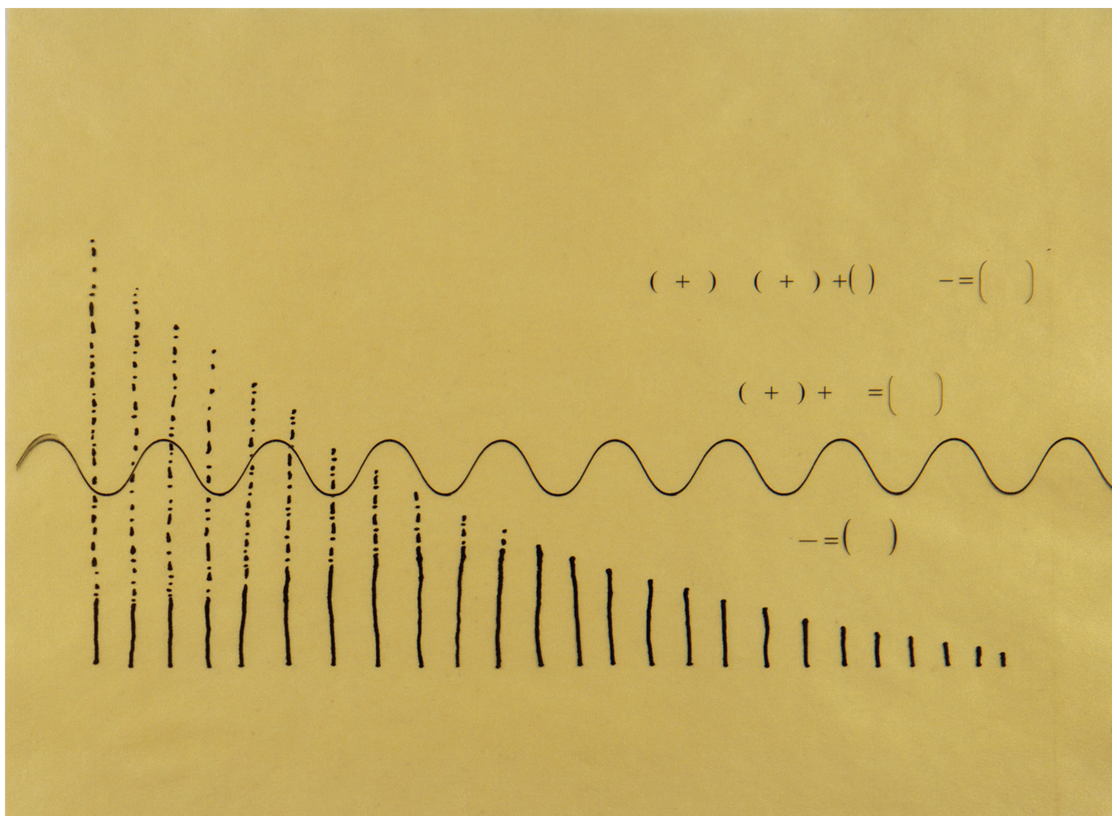




(this page and facing page) Graphic scores representing the trajectory of each weapon, the formula of the ballistics data (without numerical symbols), and the tone shape.

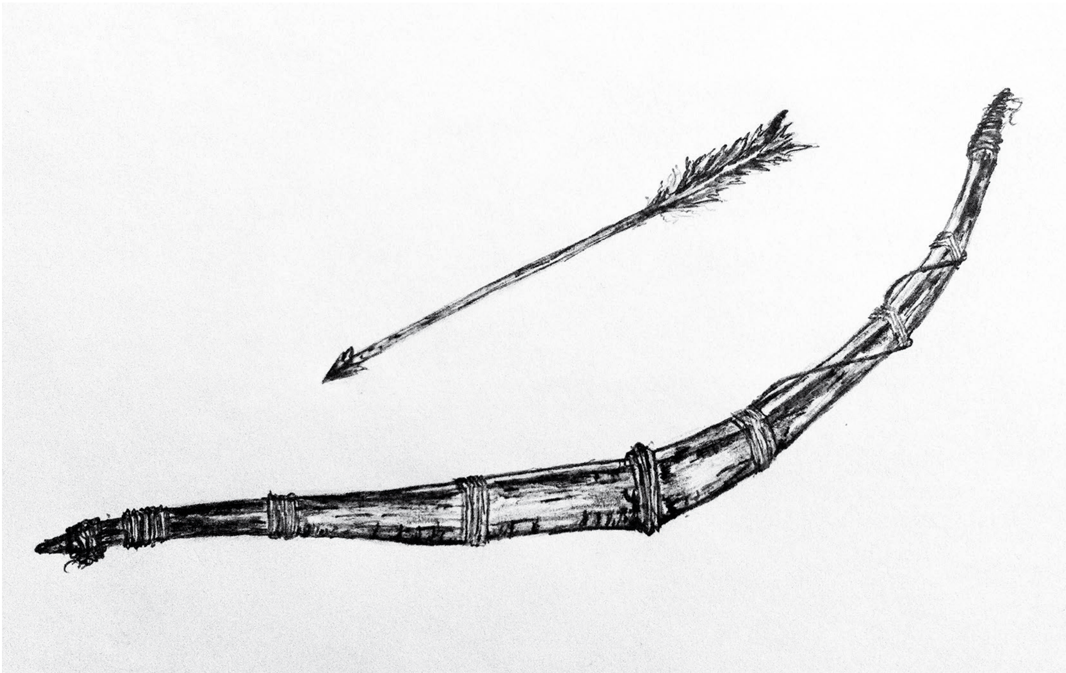
(this page, above) Postcommodity, *Graphic Score (Triangle/Bow and Arrow)*, 2010; (this page, below) Postcommodity, *Graphic Score (Sawtooth/Atlatl and Spear)*, 2010

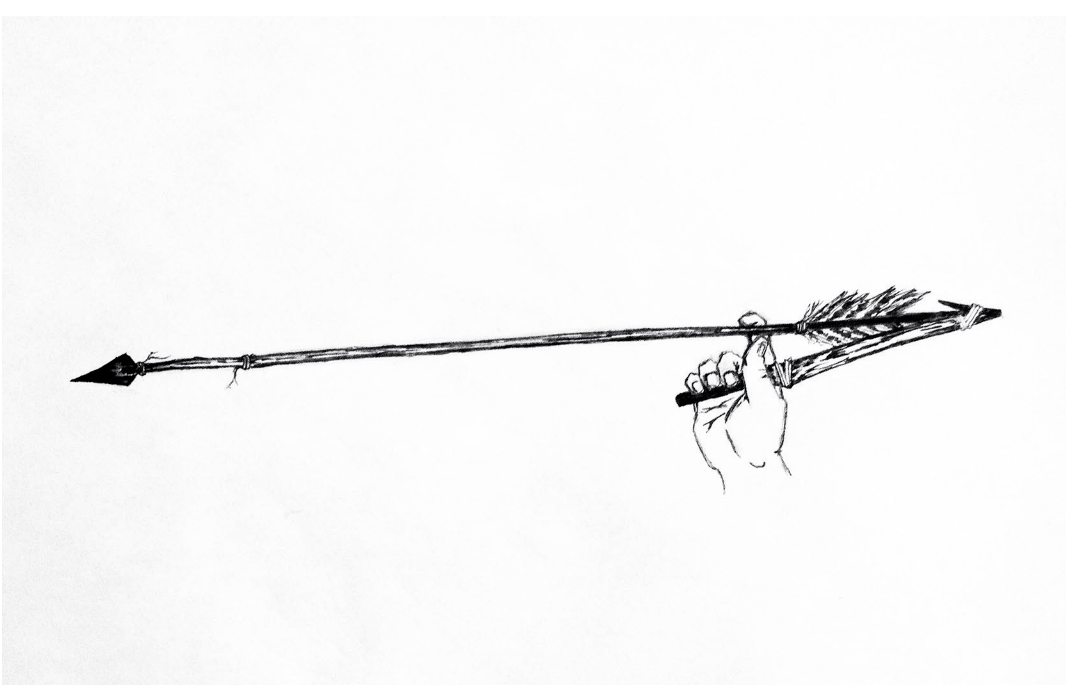




(above) Postcommodity, *Graphic Score (Square/ Rock and Sling)*, 2010; (below) Postcommodity, *Graphic Score (Sine/War Club)*, 2010

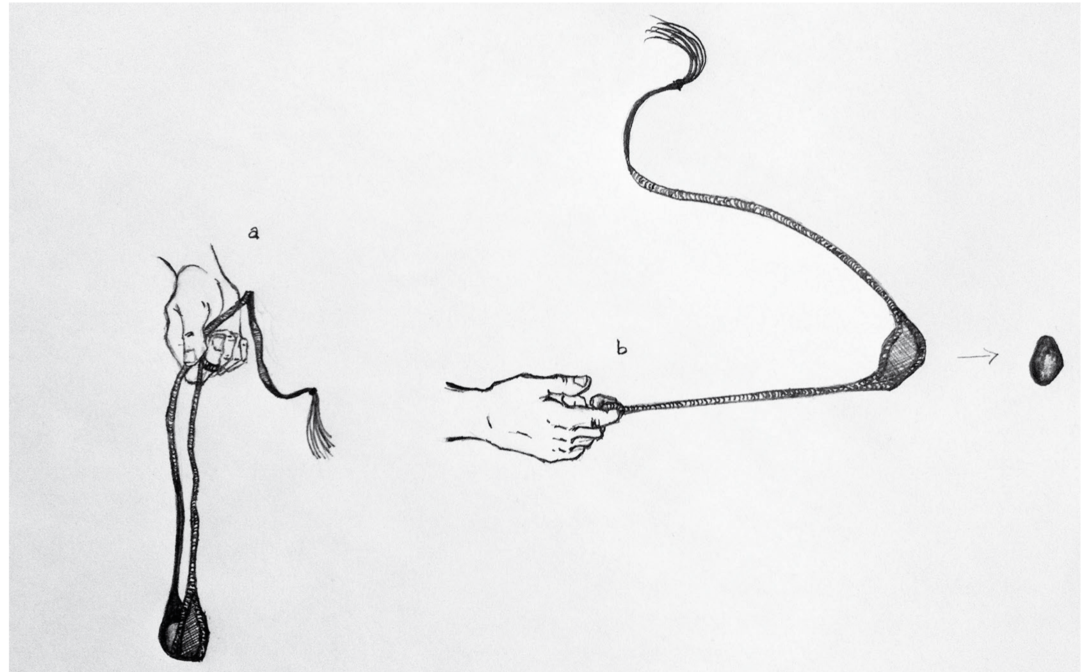
Credit (all images): Courtesy of Postcommodity.

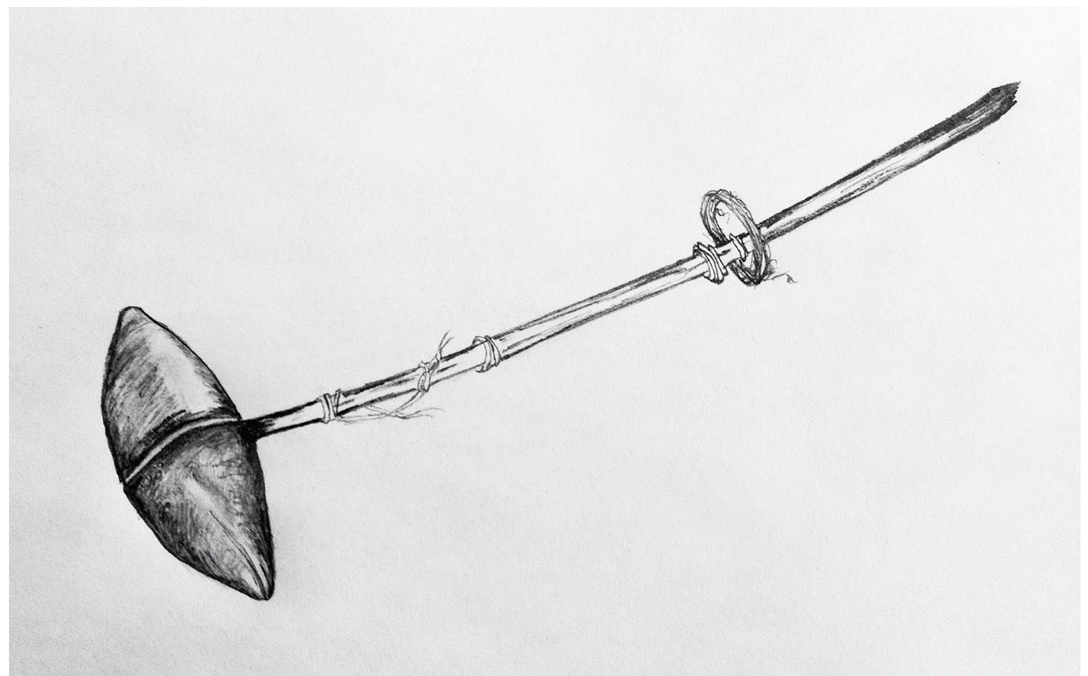




(this page and facing page) Sketches of Pueblo Revolt-era weapons.

(this page, above) Postcommodity, *sketch (Bow and Arrow)*, 2010; (this page, below) Postcommodity, *sketch (Atlatl and Spear)*, 2010





(above) Postcommodity, *sketch (Rock and Sling)*, 2010; (below) Postcommodity, *sketch (War Club)*, 2010

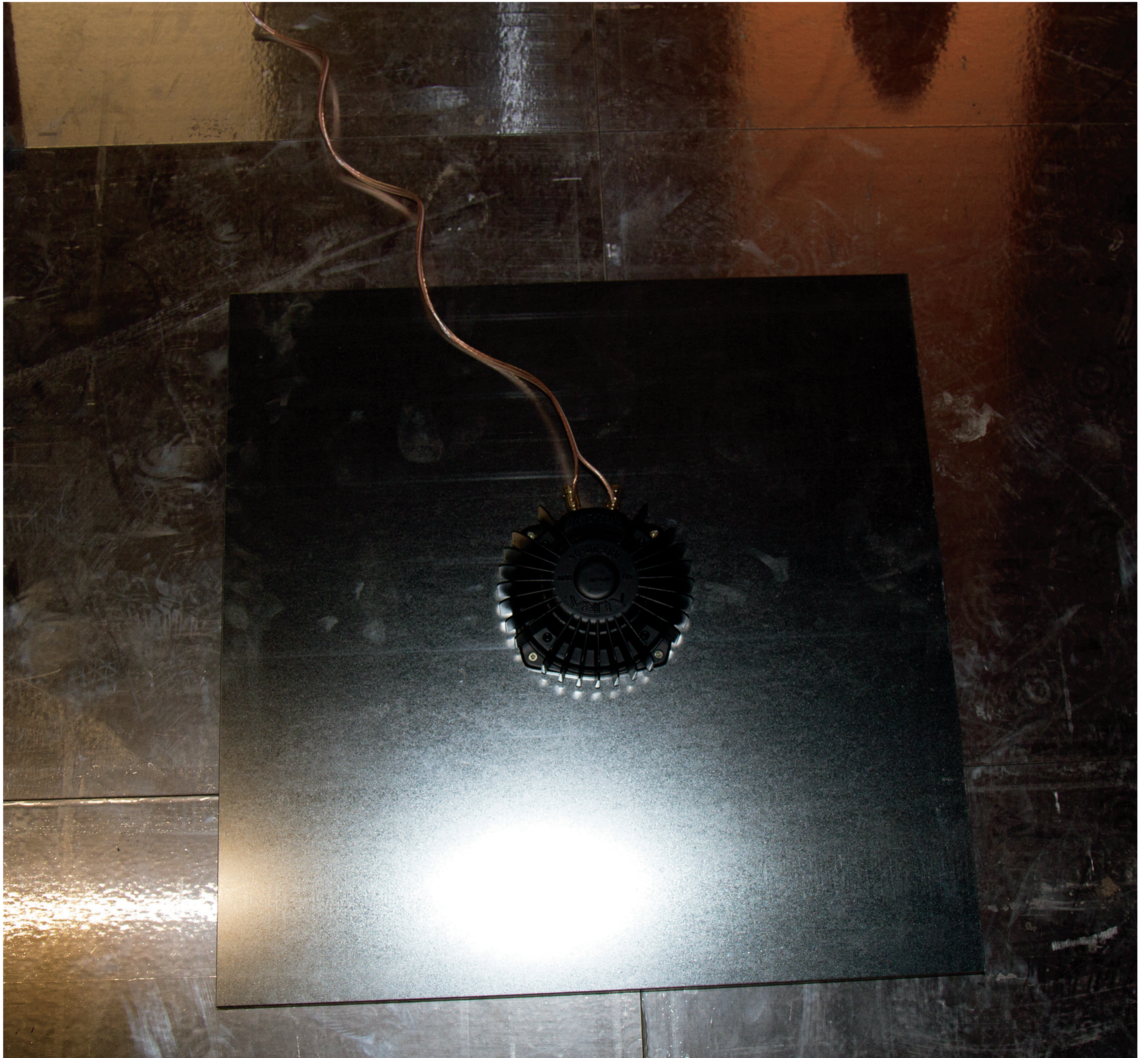
Credit (all images): Courtesy of Postcommodity

(above) Postcommodity, *If History Moves at the Speed of its Weapons, Then the Shape of the Arrow is Changing*, 2010. (Image composite, installation view: Museum Of Contemporary Native Arts, Santa Fe, NM, August 2010.) Credit: Courtesy the Museum of Contemporary Native Arts and Postcommodity. Photo: Will Wilson.

(facing page) Postcommodity, *Promoting a More Just, Verdant and Harmonious Resolution*, 2011. (View of hallway leading to installation as part of the exhibition *Contour: 5th Biennial of Moving Image*, Mechelen, Belgium, 2011.) Credit: Courtesy of *Contour* and Postcommodity.

(above) Postcommodity, *Promoting a More Just, Verdant and Harmonious Resolution*, 2011. (Installation view: *Contour: 5th Biennial of Moving Image*, Mechelen, Belgium. 2011.) Credit: Courtesy of Contour Mechelen and Postcommodity.

(facing page) Postcommodity, *Promoting a More Just, Verdant and Harmonious Resolution*, 2011. Detail of transducers installed beneath custom floor tiles. Credit: Courtesy of Postcommodity.



5 If History Moves at the Speed of Its Weapons . . .

CANDICE HOPKINS

I: CIBOLA, THE SEVEN CITIES OF GOLD

It was situated on a level stretch of the brow of a roundish hill. It appears to be a very beautiful city, the best I have seen of these parts.—*Fray Marcos de Niza, describing the seven fabled cities of Cibola, 1539*[1]

We didn't have a dream of these golden cities. That's not why we are here. It's not necessarily the Spanish's fault, or gold's fault. It could have been anybody. It's the market.—*Nathan Young, Postcommodity member*[2]

Spanish interest in the Southwest was initially sparked by the stories of four men shipwrecked off the coast of modern-day Texas. The men were a part of the ill-fated Narváez expedition. In the summer of 1536, after an eight-year trek across the North American continent by foot, they arrived in Mexico City. Upon arriving, they recounted stories of "fertile and populous lands" to the north, places rife with "turquoise, bison hides, and gold and other metals."[3] And these weren't tall tales; many of these things they had witnessed first-hand. For the Spanish, the news was electrifying. It added further evidence to their belief of fantastically wealthy cities in the north, particularly the centuries-old myth of the seven gold-

en cities. In 1539, Antonio de Mendoza, the Viceroy of New Spain, sent four men out on a reconnaissance mission. The group included Marcos de Niza, a Franciscan friar experienced in navigation and cosmography; Fray Onorato (also Franciscan), an Indian guide who remains unnamed in historical texts; and Esteban,[4] the North African slave of one of the original shipwrecked men.[5] Marcos and his party (minus Onorato, who fell ill a month into the journey and was forced to return) travelled over one thousand miles from the settlement of San Miguel de Culiacán to what were seven Zuni settlements in present-day New Mexico.

Marcos's texts recount a kingdom called Cibola, a place "larger than Mexico City," and which local Native informants described as "wealthy beyond belief."[6] Marcos never exactly reported cities of gold but this didn't stop the Spanish from trying to seek them out.[7] Marcos also never entered the walls of Cibola. His description was purely based on testimonies from informants and the view from afar: upon reaching the city, Esteban was allegedly killed by the Zuni after he failed to heed their orders to turn back.[8] Marcos would have met a similar fate had he soldiered on.[9]

The Spanish, having conquered many of the great cities in the lower half of the New World, *needed* to believe in Cibola's existence: the fabled city offered the means to continue to fuel their imperial mission. The idea that there might be cities of gold is perhaps not so absurd considering the exceptional material wealth the Spanish had already amassed from pillaging the great cities and cultures of Meso-America.

One of the characteristics of imperialism is extraterritoriality. This need for territorial expansion is driven by a near-irrational desire for material possessions such as "spices, sugar, slaves, rubber, cotton, opium, time, gold, and silver"; in other words, "profit and hope of further profit" was vital to the expansion of Western Empires.[10] But, as Edward Said observes, something else is at play as well: profit, while a driving force of imperialism, is superseded by inertia, "a commitment in constant circulation and recirculation"

of these material possessions.[11] And underpinning all of this are complex ideologies of domination, ideologies that continue to play out at present:

> Neither imperialism nor colonialism is a simple act of accumulation and acquisition. Both are supported and perhaps even impelled by impressive ideological formations that include notions that certain territories and people *require* and beseech domination, as well as forms of knowledge affiliated with domination: the vocabulary of classic nineteenth-century imperial culture is plentiful with words and concepts like "inferior" or "subject races," "subordinate peoples," "dependency," "expansion," and "authority." Out of the imperial experiences, notions about culture were clarified, reinforced, criticized, or rejected.[12]

The desire for riches brought the Spanish north to claim Nueva Spain, but it was the underlying ideologies that accompany imperialism that kept them there.

II: IF HISTORY MOVES AT THE SPEED OF ITS WEAPONS, THEN THE SHAPE OF THE ARROW IS CHANGING

Is there not an echo of those who have been silenced in the voices to which we lend our ears today?—*Walter Benjamin*[13]

In August 2010, during Indian Market in Santa Fe and the city's 400-year anniversary celebrations, the artist collective Postcommodity installed a work based on the Pueblo Revolt of 1680.[14] During the revolt — more accurately described as the Great Southwest Rebellion — the various Pueblo tribes under the leadership of Po'Pay[15] came together to resist Spanish colonialism and reclaim the region of Santa Fe. They held the city and surrounding area for twelve years. The artists' installation uncovers an oft-forgotten

moment in United States history — an instance of Indigenous agency, sovereignty, and the remaking of culture relative to colonial expansion — through digital media and sound. They consider this installation, entitled *If History Moves at the Speed of Its Weapons, Then the Shape of the Arrow Is Changing*, the first in a two-part work. The second, *Promoting a More Just, Verdant, and Harmonious Resolution*, was installed in Mechelen, Belgium, as a part of the Contour Biennial in October 2011. Each installation stems from two very different instances of do-it-yourself (DIY) warfare and the need to defend homelands, and each gesture is no less complicated than the other.

For their first installation, the only objects visible in a gold-painted gallery space of the Museum of Contemporary Native Art in Santa Fe were a set of eight small speakers. (The gold paint being a nod to the perceived riches of the Santa Fe region that fuelled Spanish conquest, as well the riches, both real and imagined, that continue to characterize the city.) From the artists' perspective, the installation is a historical piece. It was created in response to Santa Fe's 400-year anniversary celebrations, and it couldn't have been better timed. In the room's warm glow, the eight speakers emitted nothing short of a sonic ambush. In a kind of digitally produced sympathetic magic, the artists had transformed ballistic data of Pueblo Revolt–era weapons into sound: here the *atlatl* (a spear-thrower) became a square tone; the rock and sling, a sawtooth tone; the bow and arrow, a triangle tone; and the war club, a sine tone.[16] The speed of the weapon was transformed into the speed of the sound tone travelling through the air.[17] The artists' decision to assign each armament a specific tone was not arbitrary; they selected tones whose forms, revealed by Cymatics, were symbolically related — think of the shape of the arrow relative to a triangle wave, for example.[18] The weapons *as sound* were highly accurate renderings of the originals — something aided by the advent of digital technology in both the analysis and modelling of the weapons.

And their impact was palpable. The weapons' piercing tones were acutely heard and felt while the armaments themselves remained altogether unseen.[19]

In the essay, "Theses on the Philosophy of History," Walter Benjamin observed the ungraspable nature of the past and its fleeting nature. "The true picture of the past," he writes, "whizzes by." Capturing this true picture requires a temporary stasis of sorts: "[history] must crystallize into a shape and be constructed as something immediately present."[20] From the artists' perspective, in experiencing *If History Moves at the Speed of Its Weapons, Then the Shape of the Arrow Is Changing*, the viewer becomes "a spectator of history." It is through this direct engagement — the experience of this historical moment via a sonic assault — that one might begin to understand the present. "To articulate what is past," writes Benjamin, does not simply mean "to recognize 'how it really was,' it means to take control of a memory, as it flashes in a moment of danger."[21] But this isn't to lose sight of speed as a defining feature in all of this and in Benjamin's original observation as well. As Postcommodity member Kade Twist explains:

> [The installation] is also influenced by the writing of Paul Virilio (*Speed and Politics*). He came up with the idea that history and the rationalization of temporary relationships within a particular society/civilization moves at the speed of its weapons — we culturally rationalize velocity through our weapons systems — in this context we are looking at the velocity, or dromological difference of the two clashing civilizations and analyzing the indigenous cultural identity and worldview embedded in the weapons systems.[22]

The installation also pointed to the future. Small graphite drawings, visualizations of the different sound waves, were exhibited on the wall outside of the room. These algorithms functioned as graphic music scores. The scores, for member Raven Chacon, reveal how,

for example, "a sawtooth wave will always sound like it's from another time, much like how yesterday's robot will always look futuristic."[23] While these tones are "primitive" — they are the most basic sound waves and tones — compared to 1680, they might as well be from outer space.

Underlying the visible and sonic elements of the installation is an ambitious combination of custom computer programming, physics modelling, and mathematical computation. To this end, Postcommodity worked together with computational scientist Andrew McCord to generate physics models of each of the weapons (McCord also assisted with their second installation in Mechelen, Belgium). These models were centred on the impact, energy, and amplitude for each weapon. Postcommodity member Crístobal Martínez wrote computer code in Max, and this programming is what generates the sounds. The code took certain parameters into account: five of the parameters had to do with site, including the humidity, pressure, temperature, latitude, degrees, and altitude of Santa Fe, as well as the physical characteristics of the gallery as battlefield (its length, width, and height); others denoted the height of the warriors and thus the height at which the weapons were launched (this was given a range from zero to ten feet); yet another set reflected the specific characteristics of each of the four armaments themselves, accounting for such things as length (particular to the atlatl and war club), velocity, mass, and force of impact. For accuracy's sake, the code accommodated for a wide range of possible hits, misfires, and successful strikes. If a spear didn't go through you, you might hear it land beside your right foot. Randomness was at play as well. The number of warriors on the battlefield fluctuated, as did the number of weapons. Finally, to heighten the ambush situation, the software was "skewed to have a certain intensity of battle at all times."[24]

Weapons reveal the cultural ideologies of their creators. They contain much information and meaning. The Revolt-era weapons, despite their seeming lack of technological sophistication, were

highly deadly in the right hands. These weapons, combined with the general stealth of the resistors and their effective use of asymmetric warfare, effectively staved off the Spanish with their muskets, steel weapons, their tactical knowledge gained from conquering the huge cities of Meso-America, and their propensity for extreme acts of violence.[25] When brought to life as part of the installation, they serve as one means of countering the historical amnesia that characterizes the Americas, an active forgetting of the blood that has been spilled generations ago on the very ground beneath our feet.

III: THE PUEBLO REVOLT

You don't have anything / if you don't have the stories. / Their evil is mighty / but it can't stand up to our stories . . . / And in the belly of this story / the rituals and the ceremonies / are still growing.—*Leslie Marmon Silko (Laguna Pueblo)*[26]

People in what is now northern New Mexico had lived under imposed Spanish rule for some eighty years prior to the 1680 Revolt. (The semi-nomadic Navajo and Apache managed to escape much of the tyranny.) Yet this was not the first time that they, together with their strategic allies, drew up arms against their invaders and those seeking to "civilize" them in the name of religion. As John Berger notes, "Each tyranny finds and improvises its own set of controls, which is why they are often, at first, not recognized as the vicious controls they are."[27] The various Pueblo peoples who took part in the revolt — among them the Keres, Tompiros, Tewas, Tiwas, Towas, Piros, and Zuni — were by no means a homogenous group; many did not even share the same language. The word *pueblo*, of Spanish origins, does not denote a singular cultural group.

Many factors contributed to the uprising. Among the most significant was the Acoma War, an event likely still burning in the memory of every Indigenous person in the region. In October 1598, the Keres at Acoma Pueblo killed twelve soldiers when a skirmish

erupted. The Spanish military, under orders of then-governor Don Juan de Oñate y Salazar, demanded that the Keres turn over all of their supplies — supplies essential to the Keres's survival over the winter.[28] Oñate's nephew was among the dead. His death hit close to home. Oñate retaliated in January 1599, and under his orders, Spanish military ruthlessly killed 800 villagers. Women and children were not spared the massacre. With the remaining 500 villagers enslaved, on Oñate's orders, the right foot of every man over the age of twenty-five was amputated. Between twenty-four and eighty men were mutilated as part of this decree.[29]

Priests followed on the heels of the conquistadors as the second stage of colonization. While not as outright ruthless as the Spanish invaders, they also didn't hesitate to resort to violence in their efforts to "civilize" the local Native people. Despite being outlawed, slavery was commonplace, with the practice often taking place under the direction of the priests themselves. Prior to the Acoma War, forced labour was also practised. In the early days of his arrival in northern New Mexico, Oñate enlisted 1,500 native people to build an *acequia* for the Spaniards. By the fall of 1680, the Pueblo peoples had had enough. Not only had they suffered greatly under Spanish rule and the imposed religion, they were also suffering unprecedented rates of death by disease, crop failures, starvation, and the new demand on their harvests from the Spaniards.[30]

The Revolt took the priests and colonists largely by surprise. Key to the Pueblo's stealth was their use of a knotted rope calendar, a form of counting ubiquitous in Meso-America prior to Spanish arrival.[31] Knotted ropes were distributed among the villages along with instructions indicating for leaders to untie one knot for each day leading up to the Revolt. When the final knot was undone, each of the disparate groups knew it was time to attack.

On August 10, 1680, "Catholic priests were killed, churches destroyed, and haciendas raided."[32] Those who survived this first attack sought refuge in the capital of Santa Fe. Two thousand five hundred Pueblo warriors invaded the capital later in August,

capturing the city by severing the water supply. The majority of Spaniards who survived the attack, along with their Tiwa allies, retreated southward to El Pase del Norte.[33]

The twelve-year period that followed the reclaiming of Santa Fe essentially fell out of history. Some now view this as yet another act of strategic resistance: having observed the high value that the Spanish and the Franciscan priests placed on the written word, Native resistors took it upon themselves to destroy every document they could find. During this time, the written record slipped back into oral testimony, essentially shutting out conventional historical inquiry.[34]

What is known is that relatively soon after the Revolt, Po'pay's leadership waned.[35] Disease continued to take the lives of Native people at a rapid rate and the galvanizing force of change also dissipated. But all wasn't lost. Collaboration with Pueblo peoples, archaeological evidence, and with the increased legitimacy of oral testimony within "official" narratives, additional information has surfaced about this period — a time when history went underground. Cultural revitalization, for example, was integral to the revolt. New understandings of the spatial organization of early Pueblo Revolt–era villages reveal the extent to which "leaders used architecture and village locations to establish a revitalization movement": an idea first established by Po'Pay during a meeting of leaders in the village of Taos Pueblo.[36] During this meeting, Po'pay "espoused a message of cultural revitalization involving the renunciation of Spanish beliefs and customs, ritual purification, performance of traditional ceremonies, and an armed insurrection to destroy the Christian missions and retake Pueblo land from Spanish and Hispanic colonists."[37] This idea was carried forward and reflected in the villages established following the Revolt. Leaders encouraged Pueblo people to rid their lives of the influence of the colonialists, and, with this, to "revive their traditional pre-Hispanic ceremonies and beliefs."[38] Po'Pay promised that bountiful harvests would follow.[39]

The Pueblo Revolt remains an exceptional moment of Indigenous resistance, one never again replicated in the northern Spanish frontier. What it shares with resistance movements in contemporary war is the use of DIY weaponry and effective asymmetrical tactics set into motion from the deep need to defend homelands and to resist the effects of imperialist ideologies. However, as Edward Said points out, even so-called "de-colonization and the growth of supra-nationalism" are not "the termination of imperial relationships but merely the extending of a geo-political web which has been spinning since the Renaissance."[40]

The two installations by Postcommodity add a critical and social dimension to new media practices, something that is characteristic of the ways in which Indigenous artists have continued to reinvent the medium. In the first work, digital media offers a platform through which to recreate a historical event. It is an opportunity to confront historical amnesia: an active forgetting that is at the root of American exceptionalism, a blind entitlement that has had deadly consequences the world over. In the second, digital media is a means by which to implicate the viewer in the resonating blast of an "improvised explosive device," a weapon central to the guerrilla tactics in contemporary war.[41] The "sound bomb" that the artists developed is comprised of shards of DIY music — early hip hop and punk — as well as heavy metal and generation-defining pop songs from The Beach Boys and The Beatles, all formative music in the American imagination. The two installations reveal the extent to which weapons are carriers of cultural ideologies — ideologies quite literally transmitted at the speed of their weapons — and how images, aesthetics, and sound are now inextricably linked to war.

IV: PROMOTING A MORE JUST, VERDANT, AND HARMONIOUS RESOLUTION

Both the assembly line and the urban crowd bombard the senses with disconnected images and shock-like stimulae. In a state of constant distraction,

the consciousness of the collective acts like a shock absorber, registering a sense of impressions without really experiencing them.—*Walter Benjamin, writing on early capitalism*[42]

The most infamous scene in the 1973 dystopic cult movie *Soylent Green* is the benevolent suicide of Sol, a character played by Edward G. Robinson. (The actor's own death followed shortly after.) Taking place in the near future of 2022, Sol decides to end his life after discovering that the super food Soylent Green is now made from people. (Plankton, the original source of Soylent Green, is extinct.) The scene unfolds with Sol lying in a white bed in the middle of an empty room. He is surrounded by a cinematic panorama of idyllic images of the earth prior to the population boom. The series of images begins with a long pan over an endless hill of tulips, then we see a herd of deer glance up from their lush forest enclave, a rushing mountain stream, and bucolic fields. The panorama ends with a view of the sun-soaked ocean at dusk, just before the remaining light has drained from the sky. Set to classical music, the images show a world decidedly devoid of people, prior to the human-induced extinction of plant and animal life. The images of the earth act as a panacea for present-day ills, similar to Postcommodity's use of projected images in their installation, *Promoting a More Just, Verdant, and Harmonious Resolution*.[43] Postcommodity's installation, a work concerning actual, not imagined, man-made disaster, implicates the viewer in the "War on Terror," the effects of American exceptionalism, and globalized economies by harnessing the potential of DIY modes of resistance. It also calls attention to the complex relationship between war and images in contemporary society.

Media theorist Thomas Keenan writes that "the structure of the photo opportunity . . . indicates that at least sometimes things appear in the world for the sake of a picture, that they wouldn't happen without the image."[44] With the Gulf War came a major shift in the relationship between images and war. At this moment, instead

of a bloody struggle between people, weapons, and tactical knowledge, war became a battle of images. The Gulf War, as Keenan observes, constituted the birth of embedded reporting and, perhaps even more significantly, the emergence of a different kind of image. This war "was also famous, or infamous, for the initial experiments in corralling journalists in briefing rooms and hotels, and subjecting them to videotapes that were made by the weapons systems as a substitute for reporting."[45] "This was another kind of photo opportunity — the mechanically — or technically generated news image from laser-guided bombs, tele-guided missiles, and the like."[46]

Theorist Paul Virilio, one of the most lucid (and prophetic) thinkers regarding the relationship between images and war, believes that the connection between the two began as early as 1906. For Virilio, images include both still photography and cinema. Not only does he posit a relationship between the development of automatic weapons — the repeating gun — and the invention of cameras that took rapid-fire images in much the same way,[47] he also describes the newly emerging relationship between war and perception, namely the tendency towards tactical invisibility:

> However great the area of the battlefield, it is necessary to have the fastest possible access to pictures of the enemy's forces and reserves. Seeing and foreseeing therefore tend to merge so closely that the actual can no longer be distinguished from the potential. Military actions take place "out of view," with radio-electrical images substituting in real-time for a now failing optical machine.[48]

This rise in perceptual abilities has resulted in nations concentrating a great deal of their resources, monetary and otherwise, on concealment instead of "what used to be invested in simple exploitation of one's available forces."[49] Manuel de Landa, in his book *War in the Age of Intelligent Machines*, takes this idea one step

further when he makes the case for how the need for concealment in turn affects human behaviour: "certain components of intelligence agencies are not truly military, but rather form . . . a new kind of 'religious order' in which secrecy comes to be worshipped for its own sake."[50] It is not only weapons that are ideological, but the ideology of weapons now influences people.

DIY makers of the improvised explosive devices are savvy to this shift towards concealment. The relative undetectability of these bombs, combined with their tactical asymmetry, renders them all the more deadly. Like most weapons, they are highly indiscriminate — most of their casualties are innocent civilians. But as weapons they are a highly effective. They are deeply destabilizing for their enemies, who often have little prior warning before the attack.

Postcommodity's second installation featured a room awash in a cinematic panorama of idyllic stock advertising footage — the kind of images used to imply a capitalist utopia — while the mechanics of the improvised explosive device, a resistance weapon integral to guerrilla warfare, was transformed into a "sound bomb." This acoustic blast was composed of "sonic shrapnel" from over one hundred samples of music and triggered when a viewer inadvertently steps on one of the custom tiles integrated into the floor of the installation. When the device is set off, the projections — stock film footage that was slow and mesmerizing, the pace and the aesthetic evoking a kind of capitalist-induced dream state — and the lulling sound of a "new-age" drone was radically interrupted. With an initial resounding blast, the images became static and faded to grey. To call this event a "sound bomb" is not to invoke the name of the weapon lightly. When triggered, the sound "physically punished you and the sonic explosion was much louder than a shotgun."[51] And it wasn't only the sound that was experienced; at the same time, when triggered, the floor tiles below the viewers' feet also vibrated with the blast.

To achieve this degree of simulation, Postcommodity again collaborated with computational scientist Andrew McCord. McCord developed models based on common nitrate (or fertilizer) bombs

and then "distilled the model down to one from a variety of different explosion models."[52] By analyzing the shockwaves of the blast — the initial attack and its deterioration — the artists applied this data to the amplitude of the sound. Much like the initial compressed matter of a bomb, the sounds were densely layered, then broke apart with the force of the blast. To this end, it wasn't possible to determine that the blast was comprised of individual music samples until its "decay, which left behind shards of sonic shrapnel."[53] At this moment, the different layers of songs revealed themselves as "heavy bass lines, blast beats, as well as iconic melodies"[54] of iconic pop songs, metal, hip hop, and punk; music that is both highly commercial — The Beach Boys, for example — as well as sourced from band demos. From the artists' perspective, the chosen music represent songs that are "formative to the American imagination."[55]

The local effects of the wars (and the deadly "peace-keeping efforts") that the United States, Canada, and their allies are waging overseas are so highly mediated and distanced from everyday life in North America that they might as well be virtual. Recognizing the implications of this disconnect, Postcommodity's installation sought to produce an "embodied experience." With this in mind, the viewer is implicated in the artwork from the moment they step in the room. For the artists, the physical experience of the blast has the potential to generate some degree of understanding; for them, it is this sense of embodiment that "facilitat[es] the narrative experience."[56] This is a complicated gesture, one that implicates the viewer in the "War on Terror," a war fuelled by ideas of American exceptionalism, while at the same time recognizes our own complicity within it. Edward Said describes the sentiments of exceptionalism and its relationship to consent as follows:

> The amazing thing about this [the United State's invasion of Panama, the Gulf War, and now Iraq and Afghanistan] is not that it is attempted, but that it is done with so much consensus and near unanimity in a public sphere constructed as a kind of

> cultural space expressly to represent and explain it. In periods of great internal crisis (e.g., a year or so after the Gulf War) this sort of moralistic triumphalism is suspended, put aside. Yet while it lasts the media play an extraordinary role in "manufacturing consent" as Chomsky calls it, in making the average American feel that it is up to "us" to right the wrongs of the world, and the devil with contradictions and inconsistencies.[57]

Said's observation underscores the need to continue to cite the forces that oppose consent. With this we are reminded of the roots of terrorism as something that does not emerge fully formed from some unknowable impulse but is often an unintended result of the transformation of imperialism into new forms of domination. "History also teaches us," writes Said, "that domination breeds resistance, and that the violence inherent in the imperial contest — for its occasional profit or pleasure — is an impoverishment for both sides."[58] Central to this, and to the historical amnesia that continues to plague the United States regarding its relationship to Indigenous people, is the need to continually generate a "distant and mostly unknown enemy" always formed relative to national narrations.[59] Further complicating matters is the increased labelling of Indigenous people as potential terrorists by the United States and Canada.[60] But what is shared by those who, left with little choice, resort to more extreme forms of resistance, is a desire to disengage market forces in their various forms — whether they be resource extraction on traditional lands or the granting of rebuilding efforts in Iraq to U.S.-owned corporations. Understood simply, these market forces are symptomatic of the transformation from imperialism into empire and the machine of hyper-capitalism that fuels the insatiable appetite of the latter.

CONCLUSION

New media theorist Wendy Chun argues that one of the hardest tasks faced by new media is the ability to address the present.[61]

Postcommodity's work does just this and more. Both of their installations are an attempt to bring about new understandings, much like the potential that Walter Benjamin saw in dialectical images to provide a new form of consciousness, an awakening from the dream-state of capitalism. For him, this awakening, much like the jarring effect of the sonic shrapnel and the Pueblo weapons rendered in sound, "is synonymous with historical knowledge."[62]

And, with this, it seems fitting to end with Jimmie Durham's words first written in 1992 regarding perceptions of Native people, as they still ring true today.

> We are from the past but we echo and reverberate in the present. What a responsibility! It is necessary that, with great urgency, we all speak well, and listen well. We, you and I, must remember everything. We must especially remember those things that we never knew. Obviously that process cannot begin with a longer list of facts. It needs newer, and much more complex kinds of metaphors. Perhaps we must trust confusion more, for a while, and be deeply suspicious of simple stories, simple acts.[63]

Durham's words offer a possibility for the future and a means to continue to counteract the active forgetting of history.

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NOTES

1 Daniel T. Reff, cited in "Anthropological Analysis of Exploration Texts: Cultural Discourse and the Ethnological Import of Fray Marcos de Niza's Journey to Cibola," *American Anthropologist*, New Series, 93, no. 3 (September 1991): 639.

2 Nathan Young, originally cited as part of an online article, "Collisions of Art and Science," by art historian Lara Evans. http://travelpeapod.wordpress.com/2010/09/12/collisions-of-art-and-science/ (accessed March 5, 2012).

3 Reff, “Anthropological Analysis of Exploration Texts,” 638.
4 According to Reff, the three shipwrecked men declined the journey and Esteban was offered in their place. See “Anthropological Analysis of Exploration Texts,” 638.
5 As Daniel Reff points out, “The information regarding Cibola that was brought back by Fray Marcos followed closely on the heels of the discovery of gold in Peru, and led many in Mexico to believe that Fray Marcos had discovered yet another source of great wealth.” Reff, “Anthropological Analysis of Exploration Texts,” 639.
6 Ibid.
7 Reff's article, cited above, provides a valuable account of Marcos's findings by re-contextualizing the Friar's primary written documents.
8 Reff, “Anthropological Analysis of Exploration Texts,” 639.
9 Fuelled by Spanish imaginings of Cibola's wealth, a much larger expedition, led by then-governor of Nueva Galicia, conquistador Francisco Vásquez de Coronado, followed on the heels of Marcos's journey. It was a ruinous four-thousand-mile trek that spanned from western Mexico to modern-day Kansas. But it wasn't all for loss. During his journey, Coronado succeeded in claiming the lands they travelled through in the name of Spain (including all of present-day New Mexico). The expedition bankrupted most of those involved and only one hundred of the original one thousand men sent out returned. The fabled seven cities of gold were never found.
10 Edward Said, *Culture and Imperialism* (New York: Vintage, 1994), 10.
11 Ibid., 9.
12 Edward Said also offers a succinct definition of both imperialism and colonialism. At its very base level, imperialism means “the practice, the theory, and the attitudes of a dominating metropolis center ruling a distant territory,” while colonialism, “which is almost always a consequence of imperialism, is the implanting of settlements on distant territory.” Ibid.
13 Walter Benjamin, cited in Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge, MA: MIT Press, 1991), 390.
14 Ryan Rice, Senior Curator of the Museum of Contemporary Native Arts, a part of the Institute of American Indian Arts in Santa Fe, invited the artists to produce new work during Santa Fe's anniversary celebrations. *If History Moves at the Speed of Its Weapons. . .* was one of three works the artists made for the exhibition. Collectively titled *If It Wasn't the Dream of Golden Cities*, the exhibition went beyond a simple critique of historical knowledge. At the time of the first exhibition, Postcommodity included members Raven Chacon, Kade Twist, Steven Yazzie, and Nathan Young. They collaborated with fellow artist and programmer Crístobal Martínez in the creation of *If History Moves at the Speed of Its Weapons, Then the Shape of the Arrow is Changing*. Martínez formally joined the group thereafter.

15 Po'pay, a Tewa, was given the name Popyn, which means "ripe squash." His name is spelled alternately as Popé in texts.

16 The ballistic data was sourced from the holdings of the National Museum of the American Indian, staff members at the New Mexico State Museum, and scholarly texts.

17 Importantly, for Postcommodity, whose members include musicians and composers of experimental music, these fundamental sounds — all variations on the sine tone — are the basis for which all sound is comprised. They are also foundational to early electronic music.

18 Raven Chacon, telephone interview with Candice Hopkins, March 2012. Cymatics, which is derived from the Greek word, κῦμα, meaning "wave," is the study of vibrations and "visible sound," including the effects that sound and vibrations have on matter and the study of the inherent geometries within music and sound tones.

19 This invisibility correlates to the tendency in weapons technology toward increasing "stealth" to the point where the weapons are largely undetectable to the enemy.

20 Walter Benjamin, cited in Buck-Morss, *The Dialectics of Seeing*, 390. Following Benjamin, the historical materialist is the figure who contemplates history not via the modes of production and their relations but through a consideration of what is produced. Alfredo Lucero-Montano, "Walter Benjamin's Historical Materialism," published online at http://anselmocarranco.tripod.com/id56.html (accessed February 5, 2012).

21 Walter Benjamin, cited in Buck-Morss, *The Dialectics of Seeing*, 390.

22 Kade Twist, originally cited as part of an online article, "Collisions of Art and Science," by art historian Lara Evans, http://travelpeapod.wordpress.com/2010/09/12/collisions-of-art-and-science/ (accessed March 5, 2012).

23 Chacon, telephone interview, March 2012.

24 Ibid.

25 For example, to conquer the Aztec empire of Tenochtitlan, then the third largest city in the world (modern-day Mexico City is built upon its ruins), the Spanish first captured the leader Moctezuma. It was a slow, gruelling war, lasting from 1519 to 1521. After significant Aztec resistance and heavy losses early on, the Spanish formed a strategic alliance with the people of Tlaxcalan, as well as with Indigenous leaders in other outlying regions (all previously subjugated by the powerful Aztecs). The Spanish attempt to conquer the city was aided by the rapid spread of smallpox, which killed an estimated 40 per cent of the Aztec population, including important leaders, before their final siege. The Spanish then gained control of the majority of the waterways into the city, and now at a distinct advantage, cut off the food supply. Those who were not taken by disease died of thirst and starvation. In the final stage of

conquest, over a period of eighty days, the Spanish and their approximately 200,000 Indigenous allies slaughtered some 240,000 Aztecs who still remained in the heart of the city, and then pilfered the riches. Those who survived the onslaught were mostly young children. Although Cortez agreed to share in the wealth, none of his allies benefited from the fall of Tenochtitlan, which was the last great city of Meso-America.

26 Leslie Marmon Silko, cited in her new preface to *Ceremony* (1977; New York: Penguin, 2006), 2–3.

27 John Berger, *Meanwhile* (London: Drawbridge, 2008), 7.

28 In 1598, on the orders of King Phillip II, Don Juan de Oñate y Salazar began the process of colonizing the northern portion of Nuevo Spain (modern-day New Mexico). Oñate founded Santa Fe, among other settlements, and was the region's first governor.

29 In 1606, Oñate was forced to return to Mexico City to face charges of cruelty to both Natives and colonists. His conviction was overturned by appeal, and he eventually made his way back to Spain and was appointed head of the country's mining operations by the King. See Reff, "Anthropological Analysis of Exploration Texts," 637.

30 See Edward Countryman, "The Pueblo Revolt," published online by the Gilder Lehrman Institute of American History at http://www.gilderlehrman.org/historynow/06_2011/historian3.php (accessed March 1, 2012).

31 Cyrus L. Day, "Knots and Knot Lore: Quipus and Other Mnemonic Knots," Western Folklore 16, no. 1 (1957): 8–26.

32 Matthew Liebmann, T. J. Ferguson, and Robert W. Preucel, "Pueblo Settlement, Architecture, and Social Change in the Pueblo Revolt Era, A.D. 1680–1696," *Journal of Field Archaeology* 30, no. 1 (2005): 46. The attack was meant to take place on August 11, but priests got wind of the planned uprising after they captured and questioned two young Pueblo boys. In response to this breach, Po'pay moved the revolt up a day.

33 Ibid., 48.

34 Here, the Pueblo people took a page from the book of their colonizers and wiped out history in much the same way that the Spanish had previously destroyed hundreds of Maya codices — known in their own names as *pik hu'un* — when the information that they held was deemed a threat to the imposition of new religious ideologies. With this, thousands of years of astronomy, time keeping, religious documents, agricultural and historical records, prophecies, and myths (along with other important information) went up in flames. Charles C. Mann, *1491: New Revelations of the Americas Before Columbus*, 2nd ed. (New York: Vintage, 2011), 243.

35 Po'pay had also previously suffered at the hands of the Spanish. In 1675, he and some forty-six other Pueblos were convicted of practising "witchcraft" by

local priests. While Po'pay was jailed and flogged, other religious leaders were executed. See United States of America Congressional Record, V. 151, Pt. 15, September 8 to September 22, 2005.

36 Liebmann et al., "Pueblo Settlement, Architecture, and Social Change," 48.

37 Ibid.

38 Ibid.

39 Po'pay espoused the belief that if the Pueblo people once again lived "in accordance of the laws of their ancestors" that they would be rewarded and "harvest a great deal of maize, many beans, a great abundance of cotton, calabashes, and very large watermelons and cantaloupes." Cited in Hackett, Charles Wilson, and Charmion Clair Shelby, *Revolt of the Pueblo Indians of New Mexico, and Otermin's Attempted Reconquest, 1680–1682* (Albuquerque: University of New Mexico Press, 1942), 248.

40 Said, *Culture and Imperialism*, 292.

41 An improvised explosive device (IED) is a homemade bomb, constructed from commonly found materials and/or from parts sourced from conventional military explosives. It is also known as a "roadside bomb" because of its frequent use in targeting army convoys.

42 Benjamin, cited in Buck-Morss, *The Dialectics of Seeing*, 268.

43 In their description of *Promoting a More Just, Verdant, and Harmonious Resolution* on their website, www.postcommodity.com, the artists note this scene from *Soylent Green* as an important point of reference.

44 Thomas Keenan, cited in "Interview with Thomas Keenan by Özgo Ersoy," published online in *Art Territories*, January 2007, http://www.artterritories.net/?page_id=1832 (accessed March 22, 2012).

45 Keenan, "Interview with Thomas Keenan by Özgo Ersoy."

46 Ibid.

47 Paul Virilio, *Speed and Politics: An Essay on Dromology* (New York: Semiotext(e), 1986), 14.

48 Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso, 1989), 3.

49 Ibid., 4.

50 Manuel de Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991), 6.

51 Chacon, telephone interview, March 2012.

52 Members of Postcommodity, telephone interview with Candice Hopkins, March 2012.

53 Although not visible to the audience, the artists note that the circuits under the floor, which connected each of the floor tiles that triggered the "bomb," were wired similarly to the way in which someone would hook up a land mine

or an IED. These floor tiles are what set off the sonic explosion. Members of Postcommodity, telephone interview, March 2012.

54 Ibid.

55 Ibid.

56 Ibid.

57 Said, *Culture and Imperialism*, 286.

58 Ibid., 288.

59 Ibid.

60 Tom Flanagan, a former advisor to Canadian Prime Minster Stephen Harper on Aboriginal issues, has suggested that Aboriginal people, because of their potential resistance to resource development on their lands, represent a significant threat to capitalist interests and, at worst, are potential terrorists. Flanagan's 2009 article "Resource Industries and Security Issues in Northern Alberta," prepared for The Canadian Defence and Foreign Affairs Institute, outlines his view: "A nightmare scenario from the standpoint of resource industries in northern Alberta would be a linkage between warrior societies and eco-terrorists. Members of warrior societies would brandish firearms and take public possession of geographical sites, while eco-terrorists would operate clandestinely, firebombing targets over a wide range of territory. The two processes could energize each other." Cited in http://www.cdfai.org/PDF/Resource%20Industries%20and%20Security%20Issues%20in%20Northern%20Alberta.pdf (accessed April 20, 2012). By characterizing Aboriginal people as militant and potential threats, the article initiates a dangerous rhetoric that in no way attempts to understand the sources of potential resistance to industrial development by Aboriginal people or proposes the means to reach equitable agreements regarding land use.

61 See Wendy Hui Kyong Chun's essay, "The Enduring Ephemeral, or the Future Is a Memory," in *Critical Inquiry* 35, no. 1 (2008): 148–71.

62 Benjamin, cited in Buck-Morss, *The Dialectics of Seeing*, 261.

63 Jimmie Durham, "A Certain Lack of Coherence," in *A Certain Lack of Coherence* (London: Kala Press, 1993), 148.

Cheryl L'Hirondelle

My interest in, and use of, technology is at once a metaphor and an imperative. Growing up in a household with a Native mother and a non-Native European immigrant father, I noticed that there were always many languages simultaneously being spoken. As a child I had to learn to compile these different world views to find my uniqueness and to make sense of my place in the world. Later, when I started working with computers, I realized they too were always compiling languages to execute a command and be a useful tool for creativity and communication.

Cheryl L'Hirondelle is an Alberta-born mixed-blood multi- and interdisciplinary artist and singer-songwriter whose creative practice is an investigation of the junction of a Cree world view (*nêhiyawin*) in contemporary time/space. Since the early 1980s, L'Hirondelle has created, performed, and presented work in a variety of artistic disciplines, including music, performance art, theatre, spoken word, storytelling, pirate radio, and new media. In the early 1990s, she began a parallel career as an arts consultant/advisor and programmer, cultural strategist/activist, and director/producer. L'Hirondelle's various activities have also found her working in the Canadian independent music industry, national artist-run centres, educational institutions, the Canadian prison system, First Nations bands, tribal councils, and governmental funding agencies at the municipal, provincial, and federal levels.

L'Hirondelle's performance work is featured in *Caught in the Act: An Anthology of Performance Art by Canadian Women* (2001) and *Making a*

Noise: Aboriginal Perspectives on Art, Art History, Critical Writing and Community (2006) and in addition is discussed in a variety of exhibition publications, periodicals, and doctorate theses. In 2004, L'Hirondelle was invited to present her work at DAK'ART Lab, at the 6th Edition of the Dakar Biennale for Contemporary African Art, Senegal. In both 2005 and 2006, L'Hirondelle was the recipient of the imagineNATIVE New Media Award for her online net.art projects: *treatycard*, *17:TELL* and *wêpinâsowina*. Her 2008/9 project *nikamon ohci askiy* (songs because of the land) was recognized as an Official Honoree of the 13th Annual Webby Awards in the NetArt category. L'Hirondelle's previous musical efforts have also garnered her critical acclaim with two Canadian Aboriginal Music Awards (2006, 2007) and a nomination for a KM Hunter Music Award in 2011. She is a member of the Indigenous Advisory Council and teaches in the Integrated Media Department at OCAD University.

Bear Witness, artist. *Passing By*, 2011. From the exhibit SOS3 (Signals of Survival), curated by Cheryl L'Hirondelle. A Space Gallery, Toronto. Photograph by Felina Whittaker.

Screen capture from website Prayer of Thanksgiving by Melanie Printup Hope, [http://www.artinjun.ca/printup_hope]. From Codetalkers of the Digital Divide, A Space Gallery, Toronto. Image courtesy of the artist.

Dene/Cree ElderSpeak: Tales from the Heart and Spirit

kiskêyihtamâsowin (Wisdom) Part 1

kiskêyihtamâsowin (Wisdom) Part 1

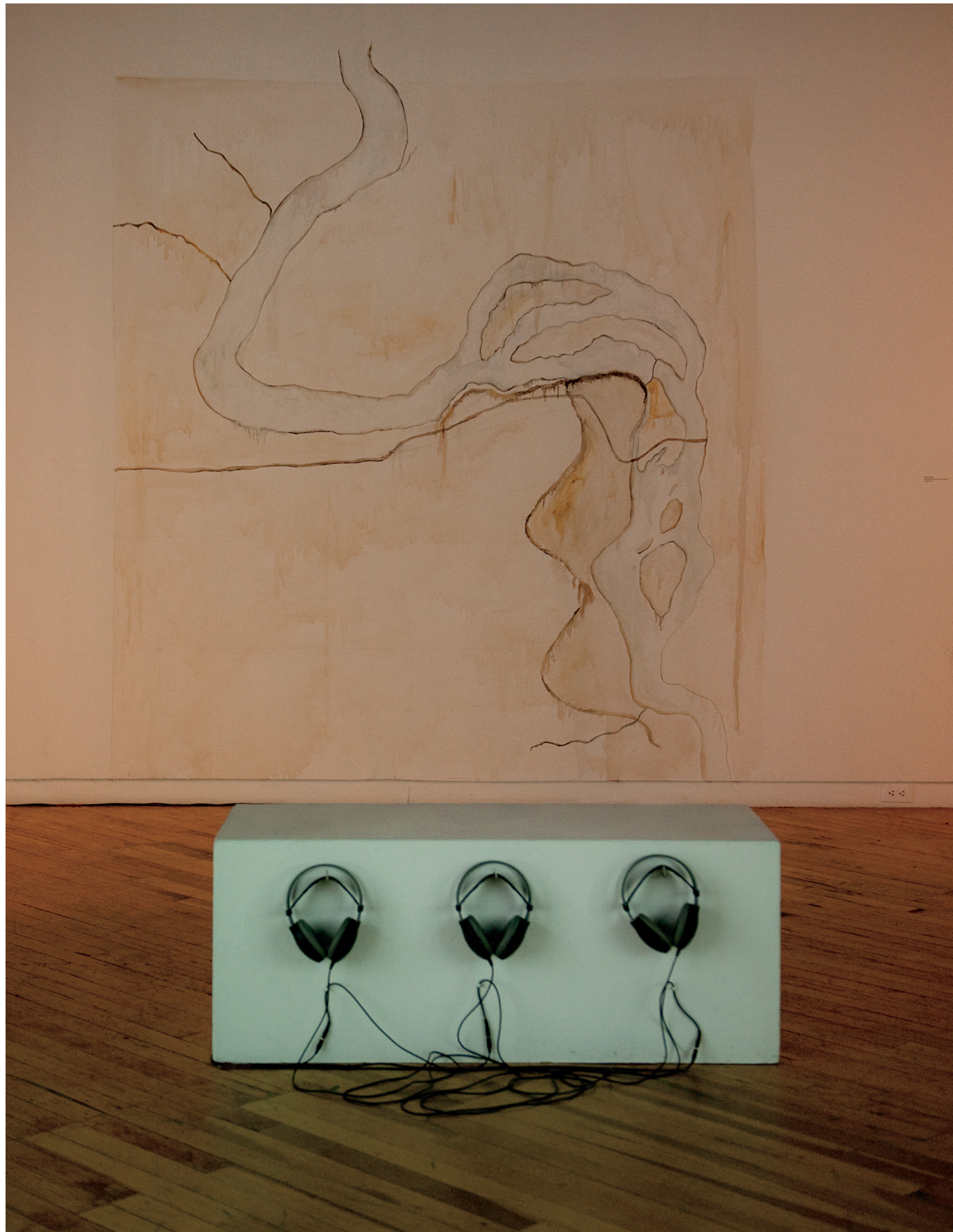
Jonas Lariviere
Nêhiyawêwin (Cree)

1. "I am Jonas Larivierre. I have not always been from Apâsihk (Canoe Narrows). My parents

1. Jonas Lariviere niya, namôya kâkikê ôta nôh-ayân wapâsihk. tâpitawê nikî-

Screen capture from v1.0 of website Dene/Cree ElderSpeak: Tales of the Heart and Spirit, [http://www.horizonzero.ca/elderspeak]. Image courtesy of the artistic director/producer.

Jordan Bennett, artist. *Turning Tables*, 2010. from the exhibit RE:counting coup, curated by Cheryl L'Hirondelle. A Space Gallery, Toronto. Photography by Felina Whittaker.



6 Codetalkers Recounting Signals of Survival

CHERYL L'HIRONDELLE

(facing page) Julie Nagam, artist. *white pines lay over the water*, 2008–2011. From the exhibit SOS3 (Signals of Survival), curated by Cheryl L'Hirondelle. A Space Gallery, Toronto. Photograph by Felina Whittaker.

KAYÂS MÂNA KAYAS (A LONG TIME AGO)

Following the 1994 international Indigenous think tank at the Banff Centre for the Arts entitled *Drumbeats to Drumbytes*, the late Ahasiw Maskegon-Iskwew noted:

> 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.[1]

As a participant and contributor during that event, I would add that to be truly *free*[2] and self-governing, we must also acknowledge and be aware of our pre-contact ingenuity as inventors and technologists — experts in new media and avatars of innovation. And we must use, publish, distribute, and disseminate this information in keeping with our modus operandi of *pimâtisiwin*,[3] in order to sustain life and ensure our world views continue to be accessible and viable survival tools for future generations.

Cree language is built on root concepts of metaphor and metonymy, so it is appropriate to start out with some analogous terminologies with which to identify my role and the intent of this essay. I do not invent or claim to be the *creator*[4] of the information contained here. I am like a compiler who assembles information collected from other sources in order to produce something — this essay is one such result. A compiler, though, is also a computer program that transforms code written in one language into another to translate and transform the original source code to both create an executable program and/or to parse data that may become meaningful. This essay, hopefully, then also operates as a computer program, both to effectuate the imagination by parsing the data contained herein and to provide insight on cosmologies and the work of many contemporary Aboriginal artists working with digital and new media.

Like most of my work, this is an homage to the many codetalkers, pathfinders, and cultural compilers who have come before me; the many others with whom I have been fortunate to communicate, confer, and debate; and to those still to come. It is a direct homage to Ahasiw's contribution to this ongoing compilation pertaining to the field of knowledge of Indigenous media production. The essay is, simultaneously, my own recounted documentation and contribution to this ever-burgeoning field.

Though it is true, *namôya mistahi ê-kiskêyihtamân*![5] (I do not know very much), Ahasiw frequently reminded me that the five years I dedicated to working with elders as a co-storyteller-in-residence with Joseph Naytowhow for nine Cree and Dene First Nation communities in northern Saskatchewan was my bush-style master's degree. Those years were spent compiling (via historical recounts, personal accounts, sacred stories, and my own personal insights) aspects of a cosmology which, though a gift from my mother embedded into my very genetic makeup, was largely inaccessible living in the city. Previous participation in community, cultural, and family events; one-on-one meetings with role mod-

els and elders; and the many Native books being published were pieces of a puzzle that I dutifully pieced together and that fortuitously, finally, led me north. My time living with *kêhtê-ayak* (Old Ones), attending ceremonies, and being on the land was the key to deciphering and cracking the veneer between contemporary urban concerns and the deep knowledge and relationship between language and land. First-hand, I was given the gift to learn from their stories, watch their subtle hand movements ("an alphabet of gestures"),[6] and witness their ability to shift between several languages while multitasking amidst their own large families — all in one conversation.[7] This access to source and its ancient semiotics was more in sync with my thoughts, feelings, and intuition and taught me to heed my dreams and make meaningful connections to what I was experiencing in the world around me — *tâpwê* (truly) an indisputable tool for survival.

Two of my previous mentors would always tell me to "do things for the healing of mother earth and all her beings" and "to come up with at least two solutions instead of just being aware of the problem."[8] So it was serendipitous when an opportunity arose that would both meaningfully employ my skills plus fulfill a desire to learn my mother's language by immersing myself in the ways of her land base[9] by accepting an invitation to work with both Wapimon Artist's Centre[10] and later, in 1995, the Meadow Lake Tribal Council. This move, importantly, allowed me to live amongst elders and Cree speakers. Sitting at the kitchen tables and in their living rooms provided me with another vital survival skill — the ability to think critically and act compassionately from within *nêhiyawin* (a Cree world view).[11] Like my ancestor before me, I had returned.[12]

In 1996, Joseph and I once again joined Ahasiw and a group of other artists he had assembled at The Banff Centre to collaborate and create the seminal website *Isi-pîkiskwêwin-Ayapihkêsîsak* (Speaking the Language of Spiders).[13] This all coincided with the burgeoning of the World Wide Web: the public distribution of web browser software such as Netscape, early search engines such

as Inktomi[14] and the Canadian government's awareness to create opportunities in remote and rural communities via their Community Access Program (CAP).[15] By 1998, I was ready to take the challenge and run with these new ways to publish our stories using this new delivery platform with its own many layers of codes. This time I invited Ahasiw to come to the north and work on our first cultural web project: Dene/Cree ElderSpeak: Tales of the Heart and Spirit.[16]

We continued to use every opportunity to introduce this new media to northern community members and to utilize it in a variety of projects that included print publications, community Internet workshops for elders, youth video training projects, and reserve radio transmissions. A transformative and perceptible shift came one day when a group of youth, taking turns being the audio person on a shoot interviewing an elder in their community, realized their flashy gym clothes, incessant gum-chewing, and background chatter was being picked up by the shotgun microphone. This caused them to become very still and quiet, which in turn meant they began listening closely to what was being recorded. The Old People involved quickly understood the implications of this shift as we listened and noted the stillness in the room. We all became conscious of the power the technology had in effecting positive change. Technology immediately established itself as a useful tool for survival.

CODETALKERS OF THE DIGITAL DIVIDE

Aboriginal people have been, since time immemorial, making things our own and, certainly since the 1960s, finding our own "indigenous aesthetic in digital storytelling."[17] This is proven in the vast array of film and video, radio, and new media programmed every year at artist-run galleries, media centres, festivals, and independent radio stations across this land now called Canada and beyond.

Now, information is propelled through time and space as packets, bits, and bytes via wireless and satellite signals. We now readily

use this technology as the imperative of our continued survival. However, as we are bombarded with popular dominant culture, new trends, and the glut of global information, it is important to return home to our source, reflect on our history, and pay homage to the agency and ingenuity of our pathfinders.

Choctaw, Navajo, Cherokee, Lakota, Meskwaki, and Comanche soldiers fluent in their languages were used by the American military for codetalking during both world wars, showing the world how our languages and world views are inherently relevant in common goals and the pursuit of freedom and liberty. Our modern-day codetalkers utilize government funding to disseminate Indigenous intellectual property transposed on top of, and integrated into, technological platforms to assert our presence in the World Wide Web and other immersive and documentary technologies. These warriors have similarly dedicated their lives to bridging digital, cultural, linguistic, and geographic divides.

A "divide" evokes many different concepts and images. It is at once the opposite or taking away of multiplication, and it is the colonial tactic of gaining and maintaining power also known as a strategy of "divide and conquer." However, to many Native people a "divide" also refers to the beautiful vistas and intricate landscapes of the geological term that connotes watersheds, ridges of land between two drainage basins, and/or that of the grandiosity of a continental divide.

My memory immediately wormholes or shortcuts through the space-time continuum and transports me back to the (historically incorrect) black-and-white Hollywood westerns of cowboys and Indians and the beautiful panoramas of Apache, Pueblo, Navajo, and Hopi territory. The ridges, mesas, escarpments, and cliffs of this terrain provide good vantage points and line of sight. Geological outcroppings that still symbolize and embody traces of our tricksters and giants are also home to our "books" — milestones of petroglyphs and pictographs depicting creation stories and histories. Deep flat lowlands and valleys provide for both sneak-up and

swift passage, for setting up camp, and a rich abundance of flora and fauna. For Native people, a divide therefore is not a binary, an either/or — it is rich with variety and the means of our sustenance and continued survival.

Our connection to the land is what makes us Indigenous, and yet as we move forward into virtual domains we too are sneaking up and setting up camp — making this virtual and technologically mediated domain our own. However, we stake a claim here too as being an intrinsic part of this place — the very roots, or more appropriately *routes*. So let's use our collective Indigenous unconscious to remember our contributions and the physical beginnings that were pivotal in how this virtual reality was constructed.

(WHY WE DIDN'T BECOME "ROADKILL ON THE INFORMATION SUPERHIGHWAY")[18]

ARPAnet, born in 1969, was a U.S. Department of Defense project that, although at the time an "intranet" system, "employed what is called packet-switching whereby data is broken into small packets that are routed over the network separately, and then reassembled on their arrival."[19] Though this type of data transmission is how the Internet would initially be implemented using the telephone lines that crisscross this land, what is forgotten is the history of the location of the extended physical network itself. If one traces the location of these thoroughfares back to the very beginning, we quickly understand how a long, long time ago, our ancestors moved across "this land now known as Canada"[20] to seasonally hunt and gather, conduct ceremonies for visioning and purification, and, when necessary, to sneak up to raid and engage in skirmishes with enemies.

Many of the routes passed through challenging terrain that had been revealed by our ancestor's predecessors who, similarly, tracked prey to water sources and sanctuary.[21] Over time, these very animal paths became well-known trails to and from multiseasonal

campsites. Vine Deloria asserts that "over the generations, different tribes learned to coordinate their activities with the forces and entities of the natural world, and they produced an amazing knowledge of how the larger world functioned . . . [and] had an intimate knowledge of the flora over a 500- to 600-mile radius."[22]

Later yet, these paths became trade routes between bands and territories as we established networks and trade languages and built a knowledge base around what we knew about each other. So when the first Europeans came to "explore" the land, our ancestors naturally led them along these well-established paths, which, over time, as the newcomers settled, became roadways and thoroughfares. With the advent of the telegraph and the telephone, wire was hung along these thoroughfares that literally became the beginnings of the physical network that now allows more and more packets of information to move as freely as our ancestors.[23]

Besides being at the root of the actual location of the network, these trade routes embodied the intent of the current global network. The late Rodney Bobiwash explains:

> The importance of the trade network was not only in the procurement of goods from other areas but in the establishment of relationship with other peoples, in the exchange of information, and in the apprehension of knowledge about people and places far beyond their immediate environs.[24]

Native people want to know who is out there. We enjoy visiting, bartering, trading, sharing with neighbours and relatives, and, when necessary, battling with competitors and enemies. The World Wide Web continues to be a place where we act out age-old ways and protocols as much embedded in that source code as in our own genetic makeup.

Many years ago, I had the opportunity to experience one of these early trade routes first-hand. During a visit with the late Mr. Jonas

Larivierre, the *kêhtêyiniw* (Old One) related a story about how as a younger man he had travelled by canoe between Northern and Central Saskatchewan along several river systems, portaging when necessary. I listened with great intent, and because I was not fully fluent in the Cree language (and I was focussing on stringing together the words and concepts I could grasp), I did not get to ask him questions afterwards, such as how he knew where to get out along a lake or river to cross land to the next water system. Mr. Larivierre seemed to have read my mind, however, and later that night as I entered the dream world, he was there ready to answer my questions and show me the signs. There in the remoteness of the forest, he pointed out various outcroppings of distinct land features; showed me how to detect differences in types of shores — grassy, rocky, sandy, etc.; taught me how to feel the direction of the wind, the scent of different types of flora, and the sonics of the land. He instructed me about the length and direction of shadows the sun cast by day, and under a night sky he instructed me in the ways the stars moved in the sky. The destination we arrived at was the morning and I awoke with immense gratitude for the commitment and compassion the old man had in teaching me these ways along his familiar lifelong route. I awoke refreshed with yet one more bit of knowledge, one more survival skill to use for my own journey still to come.

Rereading his eloquent story,[25] I realize he also taught me that night that as I was living in the north and listening to and resonating with the Old People's stories, I was repeatedly "returning home" to myself and renewing my intrinsic understanding of *nêhiyawin* (a Cree world view). Neal McLeod explains:

> In a sense, "coming home" is an exercise in physical and spiritual cartography. It is trying to locate the place of understanding and culture. It is the attempt to link two disparate narrative locations, and to find a place of speaking wherein the experiences of the present can be understood as a function of the past. At the same

time, culture is a living organism, with many layers and levels, and there will always be manifold interpretations.[26]

RE:COUNTING COUP

I was once told that an early term for "computer" in Cree language was *akihcikêwikamikos* or "little counting shack" (because it is a little building or enclosure that contains the process of counting). With this concept, and because, as Native people, we are from a "gift economy," I started to become cognizant that there was something extremely vital to the relationship between processes, objects, and the data they hold. This, in itself, is an important part of the process of how new expressions are formed. It allows the world view to read or flex around an object or an event to continue to evolve and be relevant.

Historically, many objects were created and utilized as a method for counting, recounting, and accounting. This history of creating physical objects served many purposes. It was at once proof of an experience, an interchange and/or an exchange of a journey or of life cycles, a tool to store the data to aid in the recounting/remembering, and a multifaceted new media object — and sure evidence of the intimacy and cleverness our ancestors had in keeping this information.

Also, the importance of *numbers* and *counting* amongst Indigenous peoples cannot be underestimated. There has always been a criticality in the data we collect and know about ourselves, crucial to our continued survival. As Chippewa writer Louise Erdrich explains, "[m]athematics wasn't abstract. It was intimate. Dividing and multiplying and factoring were concerns of the body, and of *survival*."[27] Historically, many forms of counting, accounting, and recounting were equally relevant and essential within most Indigenous world views. A central aspect of these practices was either to create a physical object or to create a likeness as proof, and to store the data to aid in its recounting.

One such example was the winter count in Plains tradition, a multimedia method of documenting the histories of a tribe by creating pictorial calendars — paintings and drawings on tipis and skins (and later using other materials) to record and document the historical data of the camp. “The images served as mnemonic devices for community members and for the winter count keeper, who was responsible for recording and remembering events.”[28] The drawing would be added to for a series of years and, in some instances, took on the form of a map, which acknowledged, through time and space, the exploits and seasonal history of the tribe.

Similarly, *count coup* acknowledged, for many plains tribes, prowess and victories in skirmishes and raiding parties, leading to stories that chronicled the events upon return to the camp. *Coup sticks* would be notched to denote how many enemies had been “touched” or “tagged” as proof for recalling the encounter. Off the battlefield, the value of tracking accomplishments was equally vital: “[w]hen a woman made marks on her awl handle to record the hides and lodge covers she had completed, she was participating in a tradition of keeping careful track of personal accomplishments and displaying the record for all to see.”[29] Information encoded in other examples of women’s work such as quillwork, weaving, and later beadwork confirm similar concepts of counting and of the importance of keeping detailed accounts. “It was women . . . who were responsible for beginning Ojibwe mathematical calculations. They began because they had to be concerned with their own cycles, had to count the days so that they would know when they would be fertile.”[30]

On the Plains, our ancestors’ profound knowledge of numbering systems, such as the *Fibonacci sequence*, is evident in the lodges they survived long winters in — tipis constructed on the patterns of life itself.[31] “[E]ach number after the pair of initial 1s is the sum of the two that comes before”[32] is a key characteristic of the number system. For me, this definition bears a striking resemblance to the adage: *if you know who and where you are from, then you will*

know where you are going.[33] We are part of an array, sequence, or formula in process and "continually in flux"[34] as Leroy Little Bear would say.

The very act of erecting a tipi is a ceremony, and the relationship and interplay between every element (the poles and the directions in which they are placed, the rope/ligature that is wound around sun-wise, the skin/covering that drapes over and completes the structure, and, in particular, the ground it lives atop) is all steeped in the sacred mystery of the cycles of life and various realms of existence. Thus it is for most Indigenous world views that our continued knowledge of numbering systems are still embedded in the ceremonies or *âtayôhkêwina* (sacred stories) of societies and clans.

In essence, a *mîkiwahp* (lodge) further amplifies the central Cree concept of *pimâtisiwin* (life) by continuing what is evident in the budding of plant life, the unfurling of shoots, the constant spiralling of life. The relationship then between numbers and objects finds a home here — literally and figuratively. The lodge is where life was created, nurtured, lived with the covering skins themselves, and where winters were counted — life and death accounted for.

What these historical Indigenous practices and knowledge of numbers and counting suggest is our ability to take account of vital information with the creation of a physical object and move beyond what has been oversimplified as solely orally centred transmission processes. The "object" is charged and embodies the interplay of processes between the oral and the written (notched/drawn) used to aid in its own retelling. The combination of the oral testimony and the interaction with the object created becomes multimedia and/or an event. The object then, from the perspective of many Indigenous world views, literally becomes *animate* and alive. The process of witnessing further animates these "things" and imbues them with spirit — or a sacred power supply. No batteries needed.

Of equal importance in these processes of counting is the dynamic relationship between the physical creation, the narrator, the narrative itself, the act of narrating, and the audience. The

performance event could even be viewed as an *object*, and it and the audience/participants become part of a larger "*transactive memory device*,"[35] whereby their memory of the event becomes part of a matrix to verify and cross-reference the information being offered. As the audience moves from participant to co-author, the object/narrative/event/memory is then immersive and moves away from being static to something integrated and performed. This brings us to what constitutes successful new media — participation, engagement, interactivity, and an enthusiastic sense of inventive wonderment.

Since the shift from stand-alone computer terminals to that of an entry point to a worldwide environment and matrix of users and interaction, Cree speakers are now using a newer Cree term: *mamâhtâwi-âpacihcikan*. Translated, the definition is that of a "magical and useful device"[36] or as Neal McLeod defines it, "the machine which taps into the mystery of life."[37] Norval Morrisseau also makes mention of this connection we have to computing objects in recalling powerful dreams he had showing him his connection to his own prolific creative inspiration: "I go to the inner planes. I go to the source. I even dare to say I go to the source where all the inventors of mankind go . . . to the House of Invention."[38]

S-O-S3 (SIGNALS OF SURVIVAL)[39]

A repeating signal is not always a plea for help. Transmissions can, in fact, state something else. The English poet and mythographer Robert Graves suggests this in his treatise on the relationship between language and the spirit of nature herself, in the poignant refrain, "Where? Where? Where is my love gone? Where are my companions?,"[40] as in a bird song.

Blackfoot philosopher Dr. Leroy Little Bear reminds us:

> The [Blackfoot] notion of sustainability, the notion of renewal is something that stays in that flux that exists, there are regular patterns we search out for. Those regular patterns make for our

> continuing existence. We search for regular patterns in that flux and it's those regular patterns that we want to be able to use as reference points, something to hang our hats on to say, hey, this is what gives us life.[41]

I think back to Ahasiw's reminder and the useful and elegant nuances of signals made from clouds of smoke rising into the ether on the horizon or the distinct rhythmic thunder of distant drums as the wind may have pushed and pulled it from earshot. My imagination immediately transports me once again to tracking prophetically painted and etched pictographs and petroglyphs echoing from natural outcroppings of rocks throughout this land — deliberate repeating signals that our ancestors produced as a means to send and receive invaluable information. Not that long ago, these cloud patterns in the sky, changing with the wind's direction, and images carved or painted into stone, would have been heeded, decoded, and understood like the rising and setting of the sun — a lexicon of meaning forged by the elements themselves and directly related to the seasonal cycles of moving across the land. These were our signals of survival.

Encoded deep in our genes is the memory of survival methods, originating as impulses that over time and with repetition became encoded into designs, stories, dances, songs, and language. The land and elements, also witness to this, are simultaneously transmitter and receiver. Songs are composed on the rise and fall of the horizon line, sung for the benefit of clouds, to growing crops, to enchant prey. "Land is also one of the tenets of the Native paradigm, the land is so sacred, it is the creator of life."[42]

An instruction of how to backtrack to sneak up on prey is later rendered as a geometric design; the sound of a spiritual entity existing in nature over time is concretized into an image, an uttered sound-cum-word or phrase. It seems that to consider this connection, to source and to derive a distinctly Indigenous aesthetic, is also an inner journey along a dendrite to a muscle, tendon, or tissue that holds the memory of a design, the crux of a story, the

imperative of a dance, and the refrain of a song. We trace and retrace, backtrack, look for signs, and find meaning in flux.

With the advent of Western science's awareness of quantum mechanics, scientists, physicists, philosophers, and academics are increasingly meeting with our elders and thinkers. The Western world is finally coming to understand how our ancestors embedded and encoded our ceremonies, languages, world views, and metanarratives as complex algorithms that refer back to the very creation of the universe.[43]

We all now live in a world where new media and digital technology are deeply embedded in our daily transactions — they are our "tools for survival" — and for Indigenous artists working with new media there is an imperative to adapt to these tools and to adopt new modes of communication. Though the means have changed, the message remains consistently unrelenting and unending. These calls continue to assert our unique and distinct world views. These are the patterns we retrace that are encrypted in the broad strokes of our art. They are our transmissions past, present, and future to all within earshot and line of sight. This is not some "feral nostalgia . . . [it is as] urgent as the blueness of sky."[44]

Victor Masayesva reminds us:

> How often have we heard time and space described as recurring cycles? This is a Native reality, and the representation of storytelling . . . provides a pure distillation of the concept. These choices, these aesthetics, could only derive from Indigenous people, who take changes in their way of life, such as technology, and shape them to their own values, purposes, enjoyment, always aware that the past continues to be ever present.[45]

SONGLINES

Sounds rise and fall, cascading over the edge of the horizon line and into every nook and cranny.[46] The land is not experienced as a

concrete material but as a living being in flux, and so movement, action, reaction, and interaction with the land grows and creates a bond, the shift from thought to the sonic proof of a relationship — a promise uttered, an infinite refrain.

My initial interest in the World Wide Web, computing technology, and new media was as a singer. I was keenly interested in these tools that would allow my keyboard to talk to my computer and notate my compositions.[47] Musical icons such as Buffy Sainte-Marie and Jane Siberry further enticed me when I heard them talk about recording their albums using their Apple computers while communicating and working over long distances with musicians and producers.

Even more so, as the daughter of a road-allowance[48] woman and being from a large musical family, I was intrigued with the new virtual domain of cyberspace. Using echolocation, I wanted to know how one's voice could be heard, how could it be amplified, and what objects were here for my voice to resonate against, be measured by, or be received by. I also wanted to know the edges of the territory I was allowed to inhabit or if it was truly as infinite as was suggested, and I truly wanted to find meaningful friendship there. In short, how and where and by whom would I be found here?

So, we are all collectively echolocating ourselves in this ever-expanding virtual landscape. Perhaps this is the gift the artist gives the world, continually in process and along the way creating signposts of where we've been, what terrain we've traversed, and what it has taught us. This is also the gift that the singer and the songbird share — the chorus that is both question and answer and ever-repeating, "What am I? What am I? I, the song, I walk here."[49]

* * *

Returning to the first three poles of the *mîkiwahp*[50] or *tipi* (as this infers the dynamic and well-placed beginnings of a larger structure), I offer this thought: they are a metaphor of a tripod that is

draped over with the triptych-like narrative elaboration of triangulation and hence trace an Indigenous new media practice in contemporary time and space.

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NOTE

Parts of this essay were taken from the curatorial texts accompanying three inaugural new media exhibitions curated for the imagineNATIVE Film + Media Festival between 2009 and 2011. The work of nineteen Indigenous artists was presented and contextualized under the three exhibition themes, as denoted in the essay’s subtitles. The artists are:

Codetalkers of the Digital Divide (or why we didn’t become “roadkill on the information superhighway”):
Alanis Obomsawin, Buffy Sainte-Marie, Ahasiw Maskegon-Iskwew, Melanie Printup Hope, Mike MacDonald, Jimmie Durham, Jackson 2bears, Jennifer Wemigwans, ISUMA (Igloolik Isuma Productions)

RE:counting coup:
KC Adams, Jordan Bennett, James Luna, Archer Pechawis, Lisa Reihana
S-O-S3 (signals of survival):
Raven Chacon, Jason Baerg, Jason Lujan, Julie Nagam, Bear Witness

NOTES

1 Ahasiw Maskegon-Iskwew, "Drumbeats to Drumbytes: Origins — 1994," http://drumbytes.org/about/origins-1994.php (accessed June 21, 2009).
2 "*tipêyimisow* — s/he controls him/herself, s/he governs him/herself, s/he owns him/herself; s/he is in charge of him/herself, s/he is on his/her own, s/he is free . . ." Arok Wolvengrey, *Nêhiyawêwin: itwêwina (Cree: words)*, vol. 1, *Cree-English* (Regina: Canadian Plains Research Centre, 2001), 225.
3 *Nêhiyawin* (Cree world view) modus operandi that translates to mean "life," though most would add the prefix *miyo* to denote "good."
4 I am most definitely a dedicated contributor and participant in this field of knowledge.
5 This simple phrase is important in understanding Cree narrative memory. People did not believe they had power over the narrative, or owned it; rather they believed that they were conduits, that there was a balance between the individual and tradition. When the play between individual and collective is taken into account, it becomes evident that no understanding can ever be complete, because there could always be more interpretations. Paul Ricoeur's notion of a "surplus of meaning" complements this point. Neal McLeod, *Cree Narrative Memory: From Treaties to Contemporary Times* (Saskatoon: Purich, 2007), 16.
6 Klyde Broox, conversation with Cheryl L'Hirondelle, 2012. Broox is a Hamilton-based dub poet. Our conversation was regarding "things that are encoded to us through history."
7 This encoded layering of subtle and definitive actions much later made me realize they too exemplified the task of compilers and that I was now being mentored by them to pass this on.
8 Maliseet poet, visual artist, and activist Shirley Bear and dub poet and activist Lillian Allen were my two mentors from Minquon Panchayat, where from 1992 to 1993 I had been the co-conference coordinator of ANNPAC/RACA's *It's a Cultural Thing* and animation coordinator of the national caucus/coalition movement to assist the artist-run centre movement in this land to become more open to Aboriginal artists and artists of colour.
9 My mother's family spent many years in the Lac La Biche / Kikino Metis Settlement region of northern Alberta, which the Beaver River also ran

through. In 1995, I located myself in northern Saskatchewan on the La Plonge Reserve just outside of the Beauval Metis town ship along the same river system.

10 Wapimon was the northern artist collective that resulted in Circle Vision Arts Corporation decentralizing and becoming three distinct regional entities (Tribe Inc was the Saskatoon-based central group and Sâkêwêwak artists' collective was the Regina-based southern entity).

11 Willie Ermine offers this insight into this way of learning: "The manner by which I found myself 'coming to knowing' as we sat and talked at the Old People's home was through the process of dialogue. . . . Paulo Friere defined dialogue in his book *Pedagogy of the Oppressed* as the 'encounter between men, mediated by the world, in order to name the world.' The tenets of dialogue, according to Freire, are the reflection for understanding and the commitment to act on the understanding. In hindsight, the evenings with the Old People were actually a continuing process of naming the world . . . for understanding and [a] commitment to act." Willie Ermine, "Pedagogy from the Ethos: An Interview with Elder Ermine on Language," in *As We See . . . Aboriginal Pedagogy*, ed. Lenore A. Stiffarm (Saskatoon: University Extension Press, 1998), 11; Paolo Freire, *Pedagogy of the Oppressed* (New York: Herder and Herder, 1970), 76.

12 My ancestor's Indian name is "*wâyinohtêw*," which refers to one who is returning.

13 I was commissioned in 2012 by grunt gallery to revisit the project, where I added the original audio that never was included in Ahasiw's exhibited version. http://www.spiderlanguage.net.

14 An early search engine whose name was derived from the Lakota spider-trickster Iktomi. "Inktomi," http://en.wikipedia.org/wiki/Inktomi (accessed April 1, 2012).

15 "Since 1995, the Community Access Program has brought computer and Internet technologies to Canadians across the country and . . . federal funding . . . ended on March 31, 2012." Industry Canada, "Community Access Program," *Industry Canada*, http://www.ic.gc.ca/eic/site/cap-pac.nsf/eng/home (accessed February 22, 2012).

16 The original site is still on the Internet but has many broken links and much outdated code. In 2004, while I was the guest of the artistic director of Horizon Zero's issue on Aboriginal digital storytelling, I was able to have the site remade. http://www.horizonzero.ca/elderspeak.

17 Candice Hopkins, "Making Things Our Own," *Horizon Zero*, *Tell: 17* (2004), http://www.horizonzero.ca/textsite/tell.php?is=17&file=4&tlang=0 (accessed June 21, 2009).

18 The early work of Cherokee technologist Randy Ross and Osage academic George Baldwin in their contribution towards the creation of IndianNet — one of the first Indigenous bulletin board systems created in the early 1990s — used this as their motto in convincing Native people to take up this new communications system by saying that we shouldn't be left behind and become "roadkill on the information superhighway."

19 Glyn Moody discusses ARPAnet, Unix, Delivermail, Sendmail, and "the creation of a network that would eventually become the Internet" in Glyn Moody, *Rebel Code: Linux and the Open Source Revolution* (London: Penguin, 2001), 120.

20 Though I am known for using this phrase when presenting, Janice previously wrote, "During the early history of this developing nation now known as Canada . . ." Janice Acoose, *Iskwewak: Kah'Ki Yaw Ni Wahkomakanak / Neither Indian Princesses Nor Easy Squaws* (Toronto: Women's Press, 1995),≈40.

21 "The animals, plants, waters and the sky participated in teaching the people how to read signs accurately as a means of survival." Ida Swan, "Modeling: An Aboriginal Approach," in *As We See . . . Aboriginal Pedagogy*, ed. Lenore A. Stiffarm (Saskatoon: University Extension Press, 1998), 49.

22 Vine Deloria Jr., *The World We Used to Live In: Remembering the Powers of the Medicine Men* (Golden: Fulcrum, 2006), 125.

23 My retelling of this is both a subversive act, or a sneak-up, and a natural assertion of my freedom, my ability to own myself. In Cree language, one term to refer to the misnomer of being without "treaty" (hence not having an Indian agent) is "*ka-tipêyimisohcik*" — it roughly translates to "they have ownership of themselves."

24 Rodney Bobiwash, "The History of Native People in the Toronto Area," in *The Meeting Place: Aboriginal Life in Toronto*, ed. Frances Sanderson and Heather Howard-Bobiwash (Toronto: Native Canadian Centre of Toronto, 1997), 9.

25 Jonas Larivierre refers to his family's choice in distinguishing between being considered Métis or Cree, inferring that by following the world view as opposed to treaty status is the grounds for the distinction. Jonas Larivierre, "Elderspeak — Wisdom," *Horizon Zero Tell*: 17 (2004), http://www.horizonzero.ca/elderspeak/stories/wisdom.html (accessed March 25, 2012).

26 McLeod, *Cree Narrative Memory*, 70.

27 Louise Erdrich, *Books and Island in Ojibwe Country* (Washington, DC: National Geographic Society, 2003), 62.

28 Christina E. Burke, "Waniyetu Wówapi: An Introduction to the Lakota Winter Count Tradition," in *The Years the Stars Fell: Lakota Winter Counts at the*

Smithsonian, ed. Candace S. Greene and Russell Thornton (Washington, DC: Smithsonian Institution, 2007), 2.

29 Linea Sundstrom, *Storied Stone: Indian Rock Art in the Black Hills Country* (Norman: University of Oklahoma Press, 2004), 99.

30 Erdrich, *Books and Island*, 62.

31 "Fibonacci numbers . . . are intimately connected with the golden ratio.. . . Applications include computer algorithms such as the Fibonacci search technique and the Fibonacci heap data structure.. . . They also appear in biological settings, such as branching in trees, arrangement of leaves on a stem, the fruit spouts of a pineapple, the flowering of artichoke, an uncurling fern and the arrangement of a pine cone." "Fibonacci number," *Wikipedia*, http://en.wikipedia.org/wiki/Fibonacci_number (accessed March 25, 2012).

32 Peter M. Higgins, *Numbers: A Very Short Introduction* (New York: Oxford University Press, 2011), 59.

33 Also phrased, "if you don't know who you are, how will you know where you're going?".

34 Leory Little Bear, Talk at Banff Centre artist's residency, *Towards Language*, February 2010.

35 Daniel M. Wegner, "A Computer Network Model of Human Transactive Memory," *Social Cognition* 13, no. 3 (1995): 319–39.

36 Joseph Naytowhow, translation source.

37 McLeod, *Cree Narrative Memory*, 30.

38 Norval Morriseau, *Return to the House of Invention* (Toronto: Key Porter, 2005), 94. Earlier in the book (14–15), he relates a longer story about one such trip to the House of Invention that had computer keyboards and screens.

39 The superscript refers to a dimensional amplification of the resounding nature of the repeating signal. It is to the power of three, mathematically speaking.

40 Robert Graves, *The White Goddess: A Historical Grammar of Poetic Myth* (New York: Farrar, Strauss and Giroux, 1948), 251.

41 Dr. Leroy Little Bear, "Native Science and Western Science: Possibilities for a Powerful Collaboration," lecture delivered at Simon Ortiz and Labriola Center Lecture on Indigenous Land, Culture and Community, 2011, http://www.youtube.com/watch?v=ycQtQZ9y3lc (accessed May 16, 2011).

42 Ibid.

43 The documentary video entitled *The Language of Spirituality*, directed by Anthony DellaFlora, as well as the book *Blackfoot Physics*, by F. David Pea, discuss the influence that Dr. Leroy Little Bear and other Native thinkers and elders had on David Bohm and his contemporaries in furthering their concepts of quantum physics.

44 Hakim Bey, "Chaos," *T.A.Z.: The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism* (Brooklyn: Autonomedia, 1985), 4.
45 Victor Masayesva, "Indigenous Experimentalism," in *Magnetic North*, ed. Jenny Lion (Minneapolis: University of Minnesota Press, 2000), 232.
46 Like many of my Indigenous contemporaries internationally, I utilize an age-old musical and mapping songwriting methodology of "singing the land" by following via line of sight the contours of the horizon line plus noting the rhythms inherent in a landscape to inform the shape of a melody and the meaning of the lyric.
47 My first computer was an Atari 1020 that had MIDI sequencing capabilities. This very quickly turned me from a Luddite into a zealot due to the amount of time saved in hand notating or scoring compositions.
48 "In the settlement period (1896–1929), many . . . Métis persisted as squatters on Crown land and were known as "Road Allowance People." Warren Carriou, "Metis Communities," in *The Encyclopedia of Saskatchewan: A Living Legacy*, http://esask.uregina.ca/entry/metis_communities.html (accessed March 25, 2012).
49 Excerpt from Modoc Dream Song, Alfred L. Kroeber, trans., *The Sacred Path: Spells, Prayers and Power Songs of the American Indians*, ed. John Bierhorst (New York: William Morrow, 1983), 87.
50 I have made many works that are using the values ascribed to each of the fifteen tipi poles of a Cree lodge. The first three are the tripod that is erected on which to rest the remaining poles against. For a list and explanation of the values, see my net.art project, http://vancouversonglines.ca. An audio version and a longer textual version from Elder Mary Lee can be found at http://www.fourdirectionsteachings.com/transcripts/cree.html (accessed June 21, 2009).

steven Loft

As we develop a new language of art history that is located in Indigenous cultures, we must create radical, critical, and culturally dynamic discourses that respond to, and engage with, an Indigenous cultural sovereignty.

Steven Loft is a Mohawk of the Six Nations with Jewish heritage. He is a curator, scholar, writer, and media artist. In 2010, he was named Trudeau National Visiting Fellow at Ryerson University in Toronto, where he is continuing his research in Indigenous art and aesthetics. Formerly, he was curator-in-residence, Indigenous art, at the National Gallery of Canada. Prior to that, he was the director/curator of the Urban Shaman Gallery (Winnipeg), Canada's largest Aboriginal artist-run public gallery; Aboriginal curator at the Art Gallery of Hamilton; and artistic director of the Native Indian/Inuit Photographers' Association. He has curated exhibitions across Canada and internationally and is a sought-after speaker and lecturer. He has written extensively on Indigenous art and aesthetics for various books, magazines, catalogues, and arts publications. Loft co-edited *Transference, Technology, Tradition: Aboriginal Media and New Media Art*, published by the Banff Centre Press in 2005. This book of essays by artists, curators, and scholars frames the landscape of contemporary Aboriginal art, the influence of Western criticism and standards, and the liberating advent of inexpensive technologies, including video and online media. His video works, which include *A History in Two Parts*, *2510037901*, *TAX THIS!*, and *Out of the Darkness*, have been screened at festivals and galleries across Canada and internationally.

7 Mediacosmology

STEVEN LOFT

The old grandmother coughed and wheezed again. Her eyes moved under her eyelids.

> And then, we will change. It will be a change not like before. Things will be the same, but they will not. We will forget much after that. We will be here, but we will be not. We will survive, but it will take us a long time to thrive again. To live with a completeness and wholeness that we are now used to. But we will.

The old turtle struggled to take a breath.

> These things will happen all at once and over a long time. So long that time will pass without notice. So long that the change will be always. Just as it has always been. We will simply notice it more.[1]

In his essay *From Cliché to Archetype*, Marshall McLuhan writes:

> For archaic, or tribal man there was no past, no history. Always present. Today we experience a return to that outlook when

> technological breakthroughs have become so massive as to create one environment upon another, from telegraph to radio to TV to satellite. These forms give us instant access to all pasts. As for tribal man there is for us, no history. All is present, including the tribal man studied by Eliade.[2]

How, then, do we negotiate the views of McLuhan and Eliade from an Indigenous cosmological perspective? We can, of course, negate the use of certain language (racist as it may be) by locating it in the time it was written. But as we delve deeper, we can see an evolving understanding of fundamental ontological difference between Indigenous thought and McLuhan and Eliade's attempts to place it (without fully understanding it) within the framework of new media ecologies.

Mohawk scholar Deborah Doxtator has noted: "The legacy of past definitions of difference as separate and exclusionary, instead of as interconnecting and inclusive, requiring incorporation into a whole, may have helped to obscure points of possible rapprochement between two different ways of ordering knowledge and conceptualizing the past."[3]

McLuhan seems to be reaching for this realization but must ultimately frame it within what he knows, the Western construction of thought: "The quality of past homogeneity has now acquired archetypal status, thanks to the powerful electric environment of retribalized man. This new electric service environment of oral culture enables us to perceive value in archaic communities where everybody shares a large body of traditional lore and experience."[4]

For him, this movement toward "retribalizing" is an antecedent to participation in a truly communicative media environment. He doesn't quite get it, as he falls into the Western theoretical trap of inscribing a romantic ideal of the "noble savage"[5] onto some newfound Western experience, but it is instructive nonetheless. For us, this relationship to oral culture, technology, and communicative

agency is nothing new. A cosmological model of communicative agency, then, transcends the simplistic notions of "romance" offered by anthropologists, ethnologists, art historians, and media theorists. There is no "re" for us.

If we, as Aboriginal people, see the "Internet" as a space populated by our ancestors, our stories, and, in a wider way, ourselves, then we must believe it existed before the actual realization of the technology. It is then, indeed, a "cyberspace," attuned to, and inclusive of, our past memories, our epistemological concerns, and the culmination of lived experience.

WAMPUM AS HYPERTEXT

Aboriginal intellectual, communication, and aesthetic traditions contain clues to a long regard of a multiplicity of forms of societal engagement and communicative strategies. These Indigenous sign technologies (such as winter counts, birch bark scrolls, and the Aztec codices, among others) are complex information systems with layers of meaning, memory, and interaction, but here I will concentrate on the customary function of wampum, used by First Nations peoples of the Eastern Woodlands (most notably the Iroquois Nations).

Wampum is a tubular bead of purple and white, made from the quahog clam shell formed with other material components (bark fibres, sinew, hemp fibres, string, or other weaving materials) into individual strands or woven into belts, and has been used by First nations of the Eastern Woodlands for ceremony and as records of important civil affairs for at least a thousand years.[6]

Wampum serves as a mnemonic sign technology that has been used to record hundreds of years of alliances within tribes, between tribes, and between the tribal governments and colonial government, as well as important social contracts between individuals, communities, and societies.

In her analysis *Wampum as Hypertext: An American Indian Intellectual Tradition of Multimedia Theory and Practice*, Angela Haas writes:

> In order for wampum to be communicative, a hybridization of the oral tradition and symbolism is woven into the material rhetoric. Furthermore the technologies woven into the belt have communicative agency, as with the colors of the shells and the design patterns. The cultural context and community where the wampum resides is yet another source of meaning that gets encoded into the wampum. Thus wampum is a hypertext of communicative modes — all of which contribute to cultural knowledge production and preservation.[7]

Thus, wampum and wampum belts in particular exist as contract, as acknowledgment of important social bonds, and as communal memory. They ensure communally shared history linked via mnemonic and transferable knowledge through(out) history.

Wampum belts and strings constitute a "living" material connection to the stories, treaties, alliances, and social interactions that define (in this case, Iroquois) media cosmologies. They are the embodiment of a particular culture, metaphorically and literally woven into the cultural, social, and political life of the nations. Recited, remembered, renewed, and performed, they memorialize the "peoples" in a non-linear, user-generated, and "hypertextual"[8] way. And as Haas states:

> The same is not true of Western hypertexts, where changes can be made in a moment — or no changes are ever made, and the links therein are broken. Thus while all affected parties need to tend to the links to ensure the alliances survive, tribal memory keeps the wampum rhetoric alive while individuals need to continuously update hypertexts and their content to keep them

> relevant. Unless the author notes the latest revision date, we cannot be certain when the hypertext is "dead" — until we use it. On the contrary, using the wampum belt in the way it is intended keeps it alive.[9]

Jackson 2bears makes much the same argument concerning the use of the Iroquois False Face masks in his chapter of this book: "To my ancestors, these masks were considered to be *living* entities, animate artifacts, and *sacred technologies* that we used to access the spirit world for the purpose of healing and to ask for guidance." And Cheryl L'Hirondelle adds in her chapter for this book:

> What these historical Indigenous practices and knowledge of numbers and counting suggest is our ability to take account of vital information with the creation of a physical object and move beyond what has been oversimplified as solely orally centred transmission processes. The "object" is charged and embodies the interplay of processes between the oral and the written (notched/drawn) used to aid in its own retelling. The combination of the oral testimony and the interaction with the object created becomes multimedia and/or an event. The object then, from the perspective of many Indigenous world views, literally becomes *animate* and alive.

Together, these various sign technologies represent a method of recording and an aid in narrating a specific Indigenous intellectual environment politically, socially, and culturally. Wampum, "counting objects," and False Face masks (among others) all portray an innate media ecology akin to contemporary notions of interconnectivity, hypertext, and cosmological imperative, creating communicative as well as spiritual agency. This reinforces not only the significance of shared responsibility for cultural transfer but also its multifaceted and multilayered technological instruments. They are part of a visual language, conceptual and mystical, transcending the temporality of the written word: a language for the

ages, to be constantly recounted and re-inscribed for the generations past, present, and into the future. In Doxtator's view, "The descriptive, visual nature of the languages, the evocative power of the multiple meanings of concrete metaphors, and the means of recording knowledge (such as wampum belts) all support this kind of concrete, experientially based knowledge."[10]

CYBERSPACE AS NETWORKED TERRITORY

From this vantage point, "cyberspace" is a networked territory, a shared space defined and articulated through the connections we have with it. Thus, it has always existed for Aboriginal people as the repository of our collected and shared memory. That hardware technology has made it accessible through a tactile regime in no way diminishes its power as a spiritual, cosmological, and mythical "realm." The mere fact that it also holds an overabundance of porn, gimmickry, advertisements, and even hateful propaganda takes nothing from its place as mystical space (it is, after all, a shared territory, with all the attendant colonial baggage that brings along).

Cyberspace as cosmological territory is not proprietary and, like the earth, the galaxy, and the universe, is a space and a place of inquiry, interaction, and life. As Vine Deloria puts it, "in a world in which communications are nearly instantaneous and simultaneous experiences are possible, it must be spaces and places that distinguish us from one another, not time nor history."[11]

Cyberspace connects the past to the present and the spiritual to the material in ways that would make our elders laugh. They've always known this. It's in our stories and it's in our ways of communicating and remembering. In much of his writing, Ahasiw Maskegon-Iskwew would reiterate this point. For him, as animist cultures, Indigenous peoples had an innate relationship with the ebb and flow of life:

> Animism is the belief that all natural phenomena have spiritual essences that are subject to very little human intervention,

> and in most cases, beyond much more than a very limited and contingent understanding by humans. Human spirits are only a small part of this spiritual community, participating in a wide variety of relationships, alliances, conflicts, and temporal frameworks within it.[12]

In a sense, Native cultures with their particular conceptualization of difference solved this problem of communication across different cultures a long time ago. One of the strengths of a "writing" system without words is that it can confer concepts and information without the participants having to share the same spoken language.[13]

My point here is to provide a broader Indigenous media theory attuned to Indigenous thought and communicative practice that conflate the material/virtual divide. For Dot Tuer, "it seems all the more imperative to think about cyberspace as a product of human labour and a projection of human consciousness that demands a rethinking of the boundaries between the two."[14] A cosmological, adaptive, and decolonized cyberspace that presages its own development . . . a full circle, if you will. And, it is entirely consistent with our ways of transferring knowledge and culture. What Indigenous new media artists are doing is creating what Tuer has termed a "hybrid subjectivity"[15] that navigates the virtual in a fashion that overlays (thus disrupting) the colonial narrative of the World Wide Web. This is not to portray cybersapce as some pan-Indian utopia but to posit a syncretic Indigenous ontology that is material and virtual.

As Deborah Doxtator clarifies, "Native concepts of history find no gulf between different segments of time. Each time is different, but it does not mean that there is an impenetrable wall because of that difference."[16] She goes on to relate a Seneca story:

> An old man from the world of the ancients comes to visit a boy who is hunting birds. He explains that the boy must come back

> to the same place by a large rock every night to hear the stories. Every night the boy returns and brings with him more and more people to listen until there is a great crowd. Ostensibly, some of the people have arrived at different times but they are nonetheless all part of the assembled crowd. The man who tells the stories explains that he and others like him have "remained at home in the world that was" but can visit the world that is. There is little if any actual physical distance between the two worlds of what is and what was. They are different and distinct, yet rather than being separated by a gulf, they are in essence part of the same incorporated universe.[17]

In this, the "old man" instructs us to see time, history, and our place in a mystical (and concrete) universe as a constant, although evolving, point in time. It is a rejection of linearity of thought, and an espousal of the interconnectedness between time and place.

This kind of oral storytelling and mnemonic cultural transfer can be applied to other, newer mediated environments without any disjuncture of meaning or intent. In other words, it is as it has ever been.

THE NETWORKED INDIAN

For Indigenous people, interconnectedness is a key principle underpinning our cosmological understanding of life. The episodic nature of the World Wide Web and of cyberspace, which Jason Lewis alludes to in his chapter earlier in this book, is clearly at odds with a Western, linear-focussed narrative trajectory. Lewis writes:

> The structures and systems that instantiate that virtual network reify particular notions about what it means to be a social actor, what sorts of relationships one has, and how one communicates with one's friends. No matter how one might choose to define Indigeneity, it is a safe bet that a designer working within an

> Indigenous world view would define some of those notions differently than a peer working solely from within a Western frame of reference.

For Aboriginal people, circularity of thinking and concepts of time/space and continuity are intrinsic to the way we see the world and behave toward it. It speaks to a horizontality of thinking that eschews hierarchy. As Métis scholar David Garneau states:

> We must recognize Indigeneity's dual nature. On one hand, formation as 'Indigenous' is political, strategic; a collective act of will, driven by necessity. On the other hand, this globalizing name also acts as a blanket that covers real analogous histories and ways-of-being that Aboriginal peoples recognize in each other when they meet and share stories; elements that are different from the Settler imaginary. They are a combination of the legacy of colonial oppression combined with what Gerald McMaster, Clifford E. Trafzer and the NMAI call the "Native Universe." This shared perspective or universe, one song, is our *essential* collective condition. How we conduct ourselves following this common source is strategic, a *necessary* condition of our solidarity.[18]

A networked Indigenous exceptionalism, then, would incorporate this multiplicity of voices and philosophies as well as artistic practices into an expanded and expanding information structure. We have always "mapped" our environments. From the routes that crisscross the vast expanses of Turtle Island, to our stories, rituals, and ceremonies, to our various sign technologies, these conceptual maps have provided a direct link between the past, present, and future.

For example, Renaissance explorers such as Champlain relied heavily upon Montagnais and Huron conceptual maps and geopolitical interpretations of their territories to make their own maps.

Appropriately, Deborah Doxtator asks: "Why is it that attempts to incorporate Native versions of seventeenth century events by attending to Native oral traditions and stories have proved to be so frustrating to scholars who seek to write within the western traditions of historical writing?"[19] The same could be asked of media scholars today.

Cheryl L'Hirondelle takes up this theme of mapping in her chapter of this book:

> Our connection to the land is what makes us Indigenous, and yet as we move forward into virtual domains we too are sneaking up and setting up camp — making this virtual and technologically mediated domain our own. However, we stake a claim here too as being an intrinsic part of this place — the very roots, or more appropriately *routes*. So let's use our collective Indigenous unconscious to remember our contributions and the physical beginnings that were pivotal in how this virtual reality was constructed.

Two examples of networks created by Indigenous media producers and networked in a "cosmological" model are CyberPowWow (1996–2004) and drumbytes.org (2003).

Produced by the artist collective Nation to Nation, the CyberPowWow project was a series of interconnected, graphical chatrooms that allowed visitors to interact with one another in real time. An important aspect of the project was the "mixed reality" openings, which took place simultaneously in real-world galleries and the virtual chatspace. It formed a virtual gallery with digital (and digitized) artworks and a library of texts. The works were created specifically for CyberPowWow by emerging and established Aboriginal artists and writers.

> The CyberPowWow series curated by Skawennati and Archer Pechawis, among others (www.cyberpowwow.net), was a pion-

eering, Aboriginally determined website and chatspace which together formed an online gallery of commissioned digital artworks and texts.

What distinguished CyberPowwow from previous projects, such as the Native Net, was its understanding of the Internet as a territory that could be claimed and appropriated by the community, as the project's identification as an "Aboriginally determined territory in cyberspace" suggests. The imagination of cyberspace as a social space, and the community as online performance model that evolved from it, would have a lasting influence on the Aboriginal new media art world.[20]

The website drumbytes.org, created by Ahasiw Maskegon-Iskwew in 2003, was a portal for the dissemination of Aboriginal media-based art. By creating an open, accessible, and interactive site, Ahasiw provided, in drumbytes.org, a space to examine issues of access to technology and communications; issues of colonialism and globalization in relation to Aboriginal arts, cultures, and languages; and critical dialogue about digital media aesthetics, process, and context. Ahasiw wrote:

> New media is both an outcome and a facilitator of major cultural and social shifts, not merely an additional creative tool. While media art already has well-established critiques closely aligned to cultural self-determination and social change, the apparatus of media arts production and presentation has often been institutionally prescribed, inequitably distributed, and Indigenous access to it tenuous and temporary. New media, while still far from meeting standards of equitable access to production and presentation, is providing many more communities world-wide with tools for international expression, activism, recognition, and networking.[21]

Drumbytes.org succeeded in creating a networked space for artists, individuals, and communities, not unlike the social media

sites we know so well today. Ahasiw was a harbinger of this kind of collective interconnectivity in an ever-expanding cyber-universe. As usual, he was ahead of his time.

These Aboriginal artists and producers used new technologies to support, strengthen, and enrich Native cultural communities by establishing a nation-wide, computer-based multimedia telecommunications network for Aboriginal and Indigenous artists working in digital media. They transformed (perhaps even "shape-shifted") community networks into digital spaces. They were self-determined, collaborative reflections of Indigenous self-representation and communality. And as Ahasiw himself put it, "For some, this is the first time since contact and submergence within dominant, pre-existing European cultural practices that their voices and images are being heard, seen, respected and celebrated outside of their own communities."[22]

WORD-WARRIORS TO CYBER-WARRIORS

I have referred to the work of Marshall McLuhan several times in this article, partly to show the difference between Western conceptual/rational thought and Indigenous cosmological thought, and partly because McLuhan was a brilliant thinker and has had, as we all know, an undeniable influence on contemporary thinking about media and culture. He is indeed one of the truly visionary thinkers of the twentieth century. But there is another reason I have continued to return to him. He seems to have had a truly innate sense of what we might call "the Indigenous imagination." So, as much as I object to McLuhan's "Tribal man," I am still amazed by his insight into an area into which other Western theorists fear to tread. And sometimes he just nails it. When he writes, "The function of art in a tribal society is not to orient the population to novelty but to merge it with the cosmos. Value does not inhere in art as object but in its power to educate the perceptions."[23] "[I]n a homogenous mechanized society, the individualist role of the training of perception scarcely exists. The primitive role of art serving as consolidator

and as a liaison with the hidden cosmic powers again comes to the fore,"[24] I think, wow . . . now you're seeing like we see.

The distinctions he makes here are far from inconsequential. McLuhan distinguishes an epistemological concern that I would argue can be attributed to a North American Indigenous cosmology — an Indigenous cosmology that incorporates and integrates Indigenous philosophies, epistemologies, histories, traditions, ritual, ceremony, spiritual practices, and stories in ways of thought, of being, and of artistic and intellectual practice. Archer Pechawis has articulated this cosmology in his essay for this volume: "I am not speaking of grafting Aboriginal protocols onto existing methodologies. I am looking to a future in which Indigenism *is* the protocol, an all-encompassing embrace of creation: the realms of earth, sky, water, plant, animal, human, spirit, and, most importantly, a profound humility with regards to our position as humans within that constellation."

Scholar Dale Turner has a term for those Indigenous intellectuals who "engage European ideas as both a philosophical exercise and political activity." For him, these "word-warriors" are intellectuals who "critically engage European ideas, methodologies, and theories to show how they have marginalized, distorted, and ignored Indigenous voices."[25] I would like to add another term to Turner's formulation of philosophical sovereignty — "cyber-warrior" (an overused term, I know, but one that seems to me to fit perfectly): those artists, scholars, curators, and intellectual practitioners who expand the realms of Indigenous media cosmology in respect of and with "all our relations." Indigenous new media art production constitutes an Indigenous media ecology. Jimmie Durham once wrote, "traditions exist and are guarded by Indian communities. One of the most important of these is dynamism. Constant change-adaptability — the inclusion of new ways and new materials — is a tradition that our artists have particularly celebrated and have used to move and strengthen our societies."[26] Projects such as CyberPowWow, drumbeats.org, and many others (some referenced

in this volume) constitute a contemporary manifestation of a centuries-old customary practice and cosmological integrity. Together, they continue to add to, form, and expand what David Garneau (citing Gerald McMaster and others) refers to as "the Native Universe."[27] It is woven into our sense of being and our relationship with all things. It is articulated in the works of our artists, our thinkers, our elders, and our ancestors.

Finally, I will return to the words of Ahasiw Maskegon-Iskwew, to whom this book is dedicated:

> Stories of and by these communities must be told and preserved, new artworks made and seen, and our dynamic in this great storm described in every way possible. If we are favoured to survive it, future generations may have some of our stories to help them understand reverence, learning and the cycles of generations that originate beyond scientific materialism that support and seek guidance from self-determined natural ecologies.[28]

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1 Niigaanwewidam James Sinclair, "Oshki Bimaadiziwin, New Life," in *Close Encounters: The Next 500 Years*, ed. Sherry Farrell Racette (Winnipeg: Plug-In Editions, 2011), 46.

2 Earlier in the essay, McLuhan recounts that Mircea Eliade, in *Cosmos and History*, states: "In the particulars of his conscious behaviour, the 'primitive,' the archaic man, acknowledges no act which has not been previously posited and lived by someone else, some other being who was not a man. What he does has been done before. His life is the ceaseless repetition of gestures initiated by others." Marshall McLuhan, "From Cliché to Archetype," in *Essential McLuhan*, ed. Eric McLuhan and Frank Zingrone (Concord, ON: Anansi, 1995), 325.

3 Deborah Doxtator, "Inclusive and Exclusive Perceptions of Difference: Native and Euro Based Concepts of Time, History, Change," in *Decentring the Renaissance: Canada and Europe in Multidisciplinary Perspective, 1500–1700*, ed. Germaine Warkentin and Carolyn Podruchny (Toronto: University of Toronto Press, 2001), 34.

4 McLuhan, "From Cliché to Archetype," 337.

5 This attitude is also reflected in his 1964 quote from "Understanding Media": "A new medium is never an addition to an old one, nor does it leave the old one in peace. It never ceases to oppress the older media until it finds new shapes and positions for them." Quoted in *Essential McLuhan*, 278. His use of the term "oppress" in this context also places his thought process as distinctly guided by a colonial mentality.

6 Angela M. Haas, "Wampum as Hypertext: An American Indian Intellectual Tradition of Multimedia Theory and Practice," *Studies in American Indian Literatures* 19, no. 4 (2007): 78–80.

7 Ibid., 91.

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Coded Territories is a fresh new collection that explores the historical context for Indigenous new media arts practice in Canada while at the same time illuminating the contemporary landscape. The contributors are established artists, scholars, and curators who cover thematic concepts and underlying approaches to new media from a distinctly Indigenous perspective. Through discourse and narrative analysis, the writers discuss topics ranging from how Indigenous worldviews inform new media arts practice to Aboriginal video game design to the spiritual potential of the World Wide Web. Contributors include Archer Pechawis, Jackson 2Bears, Jason Edward Lewis, Steven Foster, Candice Hopkins, and Cheryl L'Hirondelle.

Steven Loft is a Trudeau Fellow and was recently the National Visiting Trudeau Fellow at Ryerson University. Previously, he was the Curator-in-Residence of Indigenous Art at the National Gallery of Canada and Director/Curator of the Urban Shaman Gallery in Winnipeg. He co-edited *Transference, Technology, Tradition: Aboriginal Media and New Media Art*, published by the Banff Centre Press in 2005.

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