

Drumbeats to Drumbytes: Globalizing Networked Aboriginal Art

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Everywhere, words are mixing. Words and lyrics and dialogue are mixing up in a soup that could trigger a chain reaction. Maybe acts of God are just the right combination of media junk thrown out into the air. The wrong words collide and call up an earthquake. The way rain dances called storms, the right combination of words might call down tornadoes. Too many advertising jingles commingling could be behind global warming. Too many television reruns bouncing around might cause hurricanes. Cancer. AIDS.¹

Drumbeats to Drumbytes: The Emergence of Networked Indigenous Art Practice

Rosemary Kuptana said that the effect of southern (urban) broadcasting on Native peoples is like a neutron bomb. “This is the bomb that kills people but leaves the buildings standing. Neutron bomb television is the kind of television that destroys the soul of a people but leaves the shell of a people walking around. This is television in which the tradition, the skills, the culture, the language count for nothing.”² Aboriginal linguist Eve Fesl described satellite television as a “cultural nerve gas,” harmful unless broadcasts are in community languages, helping to convey cultural and linguistic norms.³ The incredible success of the mass communications industry means that it now penetrates every aspect of our economic, cultural, political, social and personal lives. The social world created by the entertainment media has become the dominant reference point, and our social norms are both created and reinforced in the context of this medium.

Herbert I. Schiller describes how cultural industries in dominant U.S. markets are their strongest sector and carry a “virus of mindless consumerism” that is responsible for “a looming social disaster.” He reports on a symposium of 1991 “*Approaching the Year 2000*,” noting that, “20 per cent of the world's population consumes 80 per cent of its wealth and is responsible for 75 per cent of its pollution.” The symposium concluded that

the outcomes of this situation were “the cultural pollution and loss of tradition which have led to global rootlessness, leaving humans, through the intensity of mass-marketing, vulnerable to the pressures of economic and political totalitarianism and habits of mass-consumption and waste which imperil the earth.” Schiller describes “the powerful and deadly combination of media, technology, and the market” as the main perpetrators of our deepening global crisis.⁴

The Indigenous peoples’ ethnocides⁵ being brought about by international media, science, trade, colonialism and world religions—generating a “monoculture of the mind”⁶ are extensively documented in the United Nations Environmental Program’s publication *Cultural and Spiritual Values of Biodiversity*.⁷ Editor Darrell Posey summarizes the point made by many of the authors about the contested values of the term *traditional* in relation to Indigenous peoples, and the essential role creativity plays in living Indigenous cultures:

Glowka and Burhenne-Guilmin (1994) warn that ‘traditional’ can imply restriction of the CBD [Convention on Biological Diversity]⁸ only to those embodying traditional life-styles, keeping in mind that the concept can easily be misinterpreted to mean ‘frozen in time.’ But Pereira and Gupta (1993) claim, ‘it is the traditional methods of research and application,’ not just particular pieces of knowledge, that persist in a ‘tradition of invention and innovation.’

Posey determines that traditional cultures can successfully confront and incorporate technology and modernity through “vibrant, adaptive and adapting holistic systems of management and conservation.” He summarizes that traditional ecological knowledge “is holistic, inherently dynamic, and constantly evolving through experimentation and innovation, fresh insight and external stimuli (Knudtson and Suzuki 1992).”⁹

Ward Churchill places this analysis in a political context by examining humanity’s relationship with the natural world.

For the West ... the concept of nature is that of an enemy to be overcome, with man as boss on a cosmic scale. Man in the West believes he must dominate everything, including other [individuals]. The converse is true in Indian civilization, where [humans are] part of an indivisible cosmos and fully aware of [their] harmonious relationship with the universal order of nature. [S]he neither dominates nor tries to dominate. On the contrary, she exists within nature as a moment of it...

Churchill determines that this difference is an essential tool in the struggle against colonial domination.¹⁰

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 animist¹¹ 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.

Darrell Posey uses the term “cosmovision” to describe this interconnected perception of culture that “represents a view of the world as a living being, its totality including not only natural elements such as plants, animals and humans, but also spiritual elements such as spirits, ancestors and future generations.” He notes that within the Indigenous cultures, humans belong to nature. This essential point of Indigenous

cosmovision “guides and regulates a complex of socio-cultural phenomena such as the organization of the culture and the way of daily life, and determines to a large extent the way in which goals are achieved.”¹²

Extending (and to some extent diminishing) these Indigenous concepts of networked cosmovisions into cyberspace has been problematic. The development of digital networks and new media production has been accompanied by the sometimes controversial, divisive and often globalizing dominance of contemporary culture. But their openness and flexibility has also encouraged autonomous spaces and recognition for self-determined, culturally distinct and diverse sources of creativity, exchange and community building.¹³ Indigenous artists and communities are transforming these networks and digital spaces. They are participating—from a position of self-determined, collaborative reflection on their unique world views—in the international definition of a new set of cultural practices: those evolving within digital art and creative electronic networking. 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. Significantly, it is also the return of creative cultural voices to communities that have experienced the incarceration, starvation or murder of their creative leaders. Networked art practice is becoming a crucial framework for the emerging recognition and empowerment of Indigenous cultures around the globe.

An essential component of Indigenous digital arts development is a commitment to the progress of Indigenous youth in digital art practice as emerging artists and for the educational value of their participation in arts and cultural production. Important new

developments are taking place in the use of digital tools and networks in the fields of Indigenous government, education, health, social services, cultural preservation, languages, business and industry. These endeavours are crucial to the on-going vitality of many Indigenous communities worldwide and will be led by Indigenous youth. But the participation of Indigenous youth in learning and carrying on arts and cultural expression remains an often-neglected focus because other critical, often life-threatening, problems necessarily require immediate attention.

However, the crisis of cultural loss is increasing for Indigenous peoples. Indigenous youth must be supported in becoming artists and cultural producers to stem this tide. A significant and growing body of research also acknowledges that arts education for youth and their participation in, and awareness of the arts are significant contributors to the development of innovation, leadership, community engagement, critical thinking, self-discipline, self-motivated learning, teamwork and self-esteem.¹⁴ These skills are essential for the perceptive vision, adaptability, and intricate cultural negotiation that the rapidly rising demographic of Indigenous youth will require as future leaders of their communities—honouring the teachings of their Elders and celebrating their cultures in a world of increasing complexity, uncertainty and conflict.

Internationally recognized Okanagan writer, artist and community development leader Jeannette Armstrong has written:

I suggest that Aboriginal arts are a necessary facet of individual and community health, containing symbolic significance and relevance integral to the deconstruction of the effects of being colonized. Reinforcing the reconstruction of what is precious and strengthening the construction of new relationship beyond colonial thought and practice. I suggest also, that the ‘bridging-between-cultures’ voice using original language, symbol, metaphor and interdisciplinary arts mechanisms where words are not enough, surfacing in Aboriginal artistic practice

is an exciting potential and pathway to the exploration of a true multicultural discourse.¹⁵

Unbearable Whiteness: Globalized (Neo)Colonial Monoculture and the Silences of Poverty and Exploitation

The non-Aboriginal Canadian arts community continues an insecure insistence on self-referentiality that generally revolves around a comparative competition for higher standing on the world stage (read first-world Euro-American). In this competition, dominant Canadian culture can admit little or no influence from Aboriginal contemporary and pre-contact histories, for fear of being tainted by their own imposed images of Aboriginal inferiority and invalidity, or of having this delusional propensity exposed. For the most part though, this is not a consciously chosen failure of critical awareness, because few critical and historical resources are available to enable non-Aboriginal people understand its scope and mechanics—a systemic (and again often unconscious) neo-colonial strategy of non-Aboriginal cultural and educational institutions.

The historians and policy-makers who constructed it sought to create a condition of improbability—improbability that anyone educated in this way could ever develop the potential to honestly and critically analyze the relationship between Aboriginal Peoples and Canadians, i.e. the ‘real’ world around herself or himself. This condition of improbability is designed to prevent even the conceptualization of social change. It is meant to prevent any movement away from existing oppressive relationships and to unquestioningly sustain the current socio-political system of Euro-dominance.¹⁶

In the educational system, non-Aboriginal Canadian children are well protected from the evidence of complicity in colonial oppression. At the same time, they are equipped to carry on with it through overt, institutionalized, systemic and subliminal messages that maintain the image of Aboriginal culture as an unwelcome, uncooperative and disabled other—if they get any messages about Aboriginal people at all. An extensive analysis of how this phenomenon operates in Canada is provided in a report by the Coalition for the

Advancement of Aboriginal Studies (CAAS). It examines Paulo Freire's theory of the pedagogy of the oppressed (Freire, 1971) as a starting point.

...a pedagogy of oppression requires that both the young of the dominant social class and the young of the marginalized class must be indoctrinated with the same overall message. Using the politically charged Aboriginal Studies curriculum, policy-makers have striven to ensure that each class (dominant = Canadian settlers; marginalized = Aboriginal Peoples) is prepared, shaped, molded, for its role in the overall social structure. One social group in Canada must be taught superiority and the other inferiority, but both are taught from the same book. ... This is 'tough work' for the power elite, because of the contradiction between this hegemonic pedagogical goal and the fact that Canada is a social democracy that simultaneously advocates protection and recognition of human rights and freedom of opinion.¹⁷

This pedagogy of oppression is generally played out in the normative values of institutional structure rather than overt policy. What is not required for academic achievement is more revealing than what is required. Almost no non-Aboriginal institution of higher learning requires knowledge of Aboriginal culture or history for the acquisition of professional credentials for mainstream cultural practice. No major cultural institutions require it of them as a factor of professional standing, and Aboriginal professionals among their ranks are just barely emerging from positions of tokenism and transient, temporary employment in these contexts.

Artist, curator and writer Steven Loft determines that universities are the core site of this exclusionary stance and asks why the curriculum does "not reflect (or even include, in most cases) Aboriginal expression as an historical and contemporary art aesthetic. How do we expect significant change to occur at any level when our basic institutionalized education system refuses to acknowledge that any change is necessary, desirable or warranted?" He argues that "real and substantive recognition of Aboriginal art at all levels of arts discourse in Canada" cannot come about unless exclusionary and

racist systemic barriers are targeted for significant re-evaluation within “major public art institutions, the ones we would and should expect to be the centres of critical dialogue.”¹⁸

These constructs spread their cultural “neutron bombs” and “nerve gases” into the online arts realm, and not only for Aboriginal peoples—they are far more pervasive. In her article “The Unbearable Whiteness of Being: African American Critical Theory and Cyberculture,” Kalí Tal notes that:

In cyberspace, it is finally possible to completely and utterly disappear people of color. I have long suspected that the much vaunted “freedom” to shed the ‘limiting’ markers of race and gender on the Internet is illusory, and that in fact it masks a more disturbing phenomenon—the whitening of cyberspace... The irony of this invisibility is that African American critical theory provides very sophisticated tools for the analysis of cyberculture, since African American critics have been discussing the problem of multiple identities, fragmented personae, and liminality for over a hundred years.¹⁹

The failure of critical theory in academia to address cultures of colour arises from the exclusionary conditions that Steve Loft has described—conditions supported by a pedagogy of oppression that systemically submerges issues of race beneath a colourless version of liberal democracy. “Colourlessness” also has major implications for the creation and performance of identity, both individual and communal—aggressively limiting culturally specific dialogue. Lisa Nakamura maps out this point, starting with McKenzie Wark’s statement “We no longer have roots, we have aeriels.” She describes how the attempt to debase the foundations of cultures that use a sense of rootedness to oppose fragmentation and dissolution “seems an unequal, unreal proposition, considering the glaring inequities in access to the Internet, much less wireless communications, which apply to most people of color.” In opposing colourlessness, Nakamura determines that we must be attentive to “the ways in which racial, gendered, and cultural histories and the

identities conditioned by them in turn shape the discourses which are audible in and about cyberspace.”²⁰

The issues that require resistance and offer opportunities for collaborative action spread far beyond issues of race in the United States. They are situated in the realm of transnational activist movements. These issues are also crucial to an analysis of engaged, activist networked art practice—especially for Aboriginal peoples. “Global civil society, we both agree, is not really made up of single-issue actors (as old social movement theory has it), but rather of a more free-floating protest network potential (to paraphrase Heidegger and Dieter Rucht) that moves from issue to issue.”²¹ This is a computer-linked network of global social movements that are challenging capitalist policy-making institutions through diverse, guerilla-style projects that are self-determined and reject old ideas of a unified socialism. Harry Cleaver defines the threat and challenges these movements face.

In response to these struggles, the threatened institutions are responding in various ways, sometimes by military and paramilitary force, sometimes by co-optation aimed at reintegrating the antagonistic forces. The problem for us is finding ever new ways to defeat these responses and continue to build new worlds.²²

In her epic work of fiction *Almanac of the Dead*, Leslie Marmon Silko provides an analysis of many of the tides and actors at work in the globalization process. Bridget O’Meara traces the *Almanac*’s conflicted world, wherein she finds that capitalist production is a form of sacrificial violence protected by civil society and the state. Indigenous peoples and other marginalized groups must struggle against these processes for both social and ecological survival, through:

strategically transgressive networks that resist oppression, exploitation, and destruction along multiple axes. . . . Subaltern communities build complex movements that simultaneously address a wide range of issues, recognizing ‘their

multiple-identities and the various lines of power and domination that need to be resisted and challenged.’ In *Almanac of the Dead*, the reoccupation of land advances from various coexistent geopolitical, social, and spiritual locations.²³

In his discussion of women’s politics on the net, anthropologist and political ecologist Arturo Escobar provides another approach that can guide how Aboriginal networked artists engage in resistance in order to achieve self-determination or “self-government in art.” The struggle he describes is especially important in terms of defense of place and political ecology, two essential components of Indigenous self-determination.

...in feminist cybercultural politics, women struggle simultaneously against the control of cyberculture by male-dominant groups and against the restructuring of the world by the same technologies they seek to appropriate. To the extent that women’s cybercultural politics is linked to the defense of place, it is possible to suggest that it becomes a manifestation of feminist political ecology. This political ecology would similarly look at gendered knowledge; gendered rights and responsibilities concerning information and technology, and gendered organizations. It would examine, in short, the gendering of technoscience and cyberspace.²⁴

The environment of cyberculture is one of many nested, overlapping and interconnected cultures, repositories and processes with contested divisions and definitions. We each see it in terms of our local perceptions, the relationships that we carry out in cyberspace, and the ways it stimulates and limits our creativity. A networked art practice engaging with social justice must also take into consideration issues of globality, even, or especially, when local issues are at stake—global forces strike at home and everywhere.

The Animosphere: Reconstituting Globalization Through Networked Indigenities

Instead, indigenism 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.’²⁵

A useful term to begin navigating through communications and knowledge ecology with a global perspective is *noosphere*, which arises from *noogenesis*.

Noogenesis, from the Greek *noos* = psyche (soul, spirit, thought, mind, consciousness) and *genesis* = origin (formation, creation, such as “the creation of the world”), is a word which indicates the act of the creation of something psychic.

Noosphere, also from the Greek *noos* = psyche (soul, spirit, thought, mind, consciousness) and *sphere* (a body limited by a round surface), is a word which represents the psychic layer born of Noogenesis which is growing and enveloping our planet above the Biosphere (the mass of living beings which covers the globe).²⁶

The term noosphere was first popularized by Russian mineralogist and geochemist Vladimir Ivanovich Vernadsky²⁷ and elaborated by Pierre Teilhard de Chardin.²⁸ Teilhard de Chardin was a Sorbonne-educated Jesuit priest, geologist, paleontologist, philosopher and ardent evolutionist. The Catholic Church prohibited the publication of his writing in the early 1900s, and it was finally released posthumously in the 1950s and 1960s. He developed a theory of evolution that began with the geosphere and went on to the biosphere, out of which the greatest achievement was human-kind. As a Christian visionary futurist, he sought to reconcile the chaotic evidence of evolution with his deity’s grand human project. As part of his evolutionary theory, Teilhard de Chardin foresaw the rise of the noosphere, a globe-spanning unified sphere of human consciousness driven by social and spiritual energy and guided by morality and justice. He believed that love was the most important aspect of the noosphere and it would ultimately result in the omega point (the final letter of the Greek alphabet), a point of

perfect global unity and love that would signal the return of Christ, the ultimate goal of evolution and the focal point of his Christian mythology.

He identified emergent aspects of the noosphere in academic, scientific and theological communities and in the communications technology of his era. Teilhard de Chardin is also sometimes credited with foreseeing the rise of the Internet.

‘Here I am thinking,’ he writes in *Man’s Place in Nature* [ND. Pub. 1956.], ‘of those astonishing electronic machines (the starting-point and hope of the young science of cybernetics), by which our mental capacity to calculate and combine is reinforced and multiplied by a process and to a degree that heralds as astonishing advances in this direction as those that optical science has already produced for our power of vision.’²⁹

Ronfeldt and Aquilla of the RAND Institute, a policy think-tank for the U.S. Department of Defense, provide a contemporary breakdown of the noosphere into three realms—cyberspace, the infosphere, and the noosphere.³⁰ Cyberspace includes all of the information transmission and social connections made possible by the Internet and its associated communications systems. The infosphere expands to include cyberspace and all of the other information resources and transmissions of the world including libraries, media industries, corporations, institutions and government. The noosphere encompasses and extends these with a global space for shifting collaboration and negotiation for the development of new knowledge and strategy for issues of international justice, peace, human rights and the environment. Its primary actors are the NGOs (non-governmental organizations), the UN, and universities. Some of them operate from geoculturally specific strategy positions but all see advantage in targeted, issue-specific and shifting collaboration for strategy and knowledge development within international politics that also carry forward their own specific agendas.

The strategic interest for the RAND Institute arises from their recognition that cyberspace, and to a large extent the commercial and governmental infospheres, have been dominated by the U.S. in their contemporary development, in promoting U.S. interests, and in establishing a dominant market and cultural position for U.S. media and information products worldwide. The noosphere is emerging as a space for debate and collaboration in the philosophy and ethics of international statecraft, and for the innovative development of effective knowledge, strategy, networks and organization to effect and resist corporate and governmental practice. Harry Cleaver describes Ronfeldt and Aquilla as perceiving the noosphere to be based on openness, accessibility, equality and freedom—qualities that threaten U.S. domination and that expose its vulnerabilities.

Drawing on studies of the changing organization of business and the state, such as that of Walter Powell, they have taken over the juxtaposition of networks to markets and hierarchies and argued that contemporary social movements have been evolving into networked organizations capable of unleashing ‘transnational social networks.’³¹ They see emerging transnational networks of ‘information age activism’ based on associations among non-governmental organizations (NGOs) concerned with modern and postmodern issues such as the environment, human rights, immigration, indigenous peoples and freedom in cyberspace.³²

The RAND analysts work to devise strategies and enforcement tools whereby U.S. stature could be maintained within the noosphere dynamic. In essence, they advise that U.S. statecraft evolve negotiation and collaboration strategies similar to the NGOs to influence and shape international strategy in the noosphere—a noopolitik. This is a diplomatic strategy that, in many contexts in the past, has successfully destabilized and marginalized collaborative NGO strategy efforts, often invited by failures of self-critical analysis within NGOs themselves. Harry Cleaver describes how identifying some of the older notions and behaviours of NGOs that made them vulnerable has transformed the concept of civil society and opened the way for alternative ways of organizing.

One such critique has been of an observed tendency for NGOs to become bureaucratic and self-preserving institutions, increasingly operating above and independently from their supporters. This critique parallels similar ones that have been directed at traditional labor unions and political parties by the Zapatistas who have been unusually successful in articulating this critique in ways that have resonated widely through their networks. A second critique has been that such NGOs have cut deals with the state and with business in ways that have betrayed the purposes for which the organizations were formed. Here again, parallels can be drawn with the behavior of ‘business’ unions and political parties.³³

The concept of the noosphere is a good starting point to strengthen, strategize and engage civil society in the ecology of imperialist resistance and sustainable diversity, but it is critically handicapped when applied to unifying and understanding the Indigenous global mind. This handicap is a distortion that lies at the heart of the imperialist project, almost completely permeates the infosphere, and is made evident in the hierarchies and silences of cyberspace. The concept of Gaia³⁴ failed in its attempt to rehabilitate what is, in essence, an amputation of Indigenous spirituality and philosophy from the rest of the world. It did not reflect the diversity and cultural specificities of Indigenous concepts of animism³⁵ and retreated from its spiritual origin and potential, becoming a lay umbrella term for eco-sciences and the ecological movement. This failure is also reflected in the origins of the idea of the noosphere. It arose from an attempt to create a speciocentric³⁶ alliance between Christianity and scientific materialism—the foundations of western colonialism, imperialism and globalization.

There is an appropriate place for the noosphere and its constituents, but it is within an interconnected anti-speciocentric constellation of the cosmosphere (astronomic and electromagnetic realms), the geosphere, the atmosphere, the hydrosphere, and the biosphere. All of these are constituents of the Indigenous animasphere,³⁷ each with diverse and overlapping delegates shaping world views among Indigenous cultures and

that form the foundations of their languages and identities. The main project for networked Indigenous art is to reclaim and revision the animasphere with Elders and traditional knowledge in diverse and culturally specific creative action and production. This work must nourish strong networks of knowledge, strategy and life-ways that give Indigenous youth resources to engage with global encroachment from positions of safety, cultural autonomy, creative celebration, critical awareness and culture-affirming sustainable productivity.

The oppressive baggage in the etymologic development of the term noosphere must be critically exposed and transformed with creative examples that reveal the toxic fallacy of its background and the constructive vitality of Indigenous contributions to its definition. This is an essential, ongoing project alongside Indigenous use of deep alliances and shared resources within the noosphere to combat globalized capitalism—the main deterrent for the non-Indigenous world in engaging with the animasphere, and the central destructive force against Indigeneity in general.

Negotiating Between the Animasphere and the Noosphere: Exposing Internalized Colonialism With the Medicine of Networked Indigenous Art

Information technologies have already penetrated the lives and cultures of Indian people. The rise of the new digital economy is only complicating this penetration. Therefore, the question facing Indian people is not to reject or accept new information technologies—this decision has already been made. The real question that needs to be addressed is how can Indian people make these technologies fit the image of their culture, rather than make their culture fit the image of these technologies?³⁸

Most Aboriginal and Indigenous communities are defined as “at risk” in the digital divide, meaning that they have less opportunity to benefit from connectivity and realize huge disparity in their capacity to contribute self-determined and self-reflective content

for their own communities. An extensive list of Canadian federal departments in partnership with Assembly of First Nations, Congress of Aboriginal Peoples, Council for the Advancement of Native Development Officers (CANDO), Inuit Tapiriit Kanatami, Métis National Council, and Native Women's Association of Canada are actively striving to connect Canadian Aboriginal communities, and especially Aboriginal youth. This group is known as the Aboriginal Canada Portal Working Group; it is responsible for managing the Aboriginal Canada Portal at <http://aboriginalcanada.gc.ca>. Each year, beginning in 2002, it has hosted an international Indigenous connectivity forum to share best practices and forge new alliances among stakeholders, the private sector and communities. They also have an online virtual Aboriginal trade show to promote international trade. It includes an arts and culture section that features art dealers, commercial film, video and new media producers, among other commercial arts.³⁹ But they recognize that:

as the world goes on-line there is a definite dearth of Aboriginal content on-line. It is estimated that more than half of Canada's Aboriginal communities do not have a community home page. Unique opportunities to showcase, preserve and celebrate Canada's rich Aboriginal heritage, languages and culture are being lost. This is particularly true given the oral and visual tradition of Canada's Aboriginal people. However, with the rapid ascension and development of on-line multimedia technologies, such as flash animation and digital video capture, there exists a time sensitive opportunity to engage Aboriginal youth in visually and orally capturing the traditions and techniques of elders within each of their communities.⁴⁰

This statement is an example of a disappointingly rare and thinly constituted acknowledgement by Aboriginal representation and development organizations toward the potential of networked creative culture. I think I have intuited an explanation that arises from the success of the implementation of consumer culture, urbanization and international marketing within Indigenous leadership contexts under the premise of

economic development. It is no surprise that others believe this implementation arose from America but has spread everywhere. Robert N. St. Clair describes how consumer culture arose in modern America in the early part of the century and is now being exported globally through the creation and “higher education” of an international business class.

The managerial elite from foreign countries were encouraged to study in the United States and become enculturated. Upon their return, they would provide a special commercial link with their native lands. Business students were of special interest to this movement because they would learn the art of marketing in America and export it to their own countries. This ‘marketing of America’ means that the business culture is no longer limited to the United States. It is currently changing the way people feel, think, and live around the globe (Harris, 1980).⁴¹

This sounds uncomfortably similar to the following description of Aboriginal Economic Development Officers working for Aboriginal communities across Canada. This paper is by the Council for the Advancement of Native Development Officers (CANDO), who are one of the key stakeholders in the Aboriginal Canada Portal Working Group.

There are more than 2000 EDOs [Economic Development Officers] working in Canadian Aboriginal communities who are separated by vast distances, and who often live in geographically isolated and remote communities. Many EDOs are often the only individual responsible for promoting employment, helping community members draft business plans, negotiating resource and other arrangements with large corporations, and encouraging business development and tourism in their community. All this must occur while balancing the community’s cultural and spiritual needs. Most EDOs do their best to meet these demands with little education, and with few accessible resources...

The Harvard Project on American Indian Economic Development⁴² is a definitive study of American Indian economic development initiatives and analysis of what works and what doesn’t. Key ingredients for socio-economic success cited in *What Can Tribes Do? Strategies and Institutions in American Indian Economic Development*,⁴³ are ‘external assets’ (political sovereignty, market opportunity, access to financial capital), ‘internal assets’ (natural resources, human capital, institutions of governance, culture), and a clear ‘development strategy.’⁴⁴

Within this “business management” framework, it is important to note the shared corporate culture among almost all of North America’s Aboriginally self-determined representation organizations. Lobbying for land and resource rights and economic development are the primary elaborations above the prevailing subordinate administration of predetermined, inadequate, restrictive and paternalizing social services. With few exceptions (the Métis National Council in Canada being one), almost none have a coordinated policy or program framework acknowledging contemporary non-commercial Aboriginal fine arts, nor do they support, promote or educate about the innovative practices of networked Indigenous art.

Indigenous successes in navigating corporate culture have led to important gains in economic development and social self-esteem, but also to the rise of an imported class system and an internalization of corporate ethics and value systems. The imposition of business management culture on Aboriginal society (and now its self-generating adoption) presents the main barrier to an inclusive, mutually beneficial, and culturally distinct flow of ideas and approaches between the contemporary Indigenous arts and cultural theory communities, and those of Indigenous politics and corporate administration. As a result of incorporating (or being colonized by) non-Indigenous business management theory, much of the non-Indigenous business management perceptions of creativity and innovation (and by extension art) have also taken hold in Indigenous representation organizations and leadership.

There is a drive to incorporate, stimulate, measure and benefit from creativity (or innovation) within schools of contemporary business management thought and practice.

But there are some significant differences in the limits, roles and responsibilities placed around creativity in management practices as opposed to those at work in the arts.

Annick Bourguignon of the ESSEC Business School, France and Christopher Dorsett of the School of Art, University of Northumbria in the UK see the differences between creativity in arts and management as being primarily about freedom.

[T]he prominent difference between the two environments (art and management) is their orientation towards respectively, gratuity and utility. This divergence has important consequences regarding the degree of freedom⁴⁵ in the activity. It is much higher in art than in management where, given the utilitarian orientation, activity is framed, even forced. Furthermore, this divergence leads to opposing perceptions regarding the interaction of participants engaged in collective performance. Because management is utility orientated (thus also outcome-orientated), organisational interaction is, at best, perceived as a constraint, at worst, as a disturbing intrusion. Because art is gratuity-oriented (thus creator-orientated) artistic interaction is perceived as constructive. Finally, these differences have a direct impact on two aspects of creativity: namely the prevailing attitude towards the mysterious nature of the process and the time and space given to the creator to perform. In the arts there is little inclination to elucidate the process and to strive for a short-term outcome; whereas in management, there is a demand both for elucidation of the creative process and for a rapid return on the investment of creative energy.⁴⁶

Corporate practice demands that an efficient profit result from any action, generally in a rapidly disposable series. Creativity in this process seeks to improve efficiency—driving down costs and fine-tuning marketing objectives to gain greater profit. The blind nature of capital investment requires only the profit and pays little or no attention to the process of producing it unless forced to by negative social or political consequences that threaten future profit-making activity. This thoroughly de-humanizing and de-natured activity is reversed in art practice where human experience is placed at the forefront and the creative act is used to express the complex nature of ethos, pathos and relations between individual and social self-awareness in a continually re-defining communal historicization.

The struggle for networked Indigenous artists is the same as that for Indigenous peoples in a general sense: to negotiate the survival of the animasphere, to teach its values and to reverse the international drive toward mass suicidal ecologic destruction. Indigenous artists who delve deeply into their own cultures and, by necessity, the relationships they have with and against other cultures are often also social justice activists, compelled to use their communications skills to reveal what their explorations have laid bare about these cultural relationships. The notion of “microenvironments with global span” is well-suited to describe the activism of Indigenous artists.

The demonstrations by the anti-globalization network have signaled the potential for developing a politics centered on places understood as locations on global networks. This is a place-specific politics with global span. It is a type of political work deeply embedded in people’s actions and activities but made possible partly by the existence of global digital linkages. Further, it is a form of political and institution-building work centered in cities and networks of cities and in non-formal political actors. We see here the potential transformation of a whole range of ‘local’ conditions or institutional domains (such as the household, the community, the neighborhood, the local school and health care entities) where women ‘confined’ to domestic roles, for instance, remain the key actors. From being lived or experienced as non-political, or domestic, these places are transformed into ‘microenvironments with global span.’⁴⁷

Many Indigenous artists have little allegiance to the mainstream contemporary arts or to the labels and forms of stature awarded to non-Indigenous artists. Depending on the depth of reaction to what their creative explorations have revealed to them, contemporary art may be a useful and contingent vehicle for social change in the search for a stronger engagement with their own Indigeneity. It offers new tools appropriate to rapid change, and creative practices based on growing levels of intimacy with their cultures.

From Survival, Through Resistance, To Strategy: Honouring and Empowering Warriors In Art

While the English word ‘ART’ represents a compartmentalization of an aesthetic framework, Lakota world view represents an integration which is difficult to delineate into discrete entities.

I also asked an individual who might be viewed as a tradition bearer in my community. He defined art as *taku gaxape na ohola pe*, ‘What is made and cherished.’ This may include songs, beaded or quilted items, such mundane things as WASNA (pemmican) which when used in special contexts—naming ceremonies, the Sun Dance and adoption ceremonies as Hunka (making of relatives). Thus an ordinary food of survival becomes wakan (sacred) in a sacramental context. These things are WOLAKOTA, (honored by the Lakota). In order to obtain gender equality in elicitation, a female elder stated: *Taku waste’la ka pi na ga xapi*, whatever we (Lakota) make and admire. The integrative aspect of art in a Native perspective appears to negate segmentalized thinking in realms of arts and crafts.⁴⁸

General principles for the development of Indigenous networked art production were established at the *drumbeats to drumbytes* gathering that was held at The Banff Centre from March 12 to 15, 1994, coordinated by the Aboriginal Film and Video Art Alliance:

The structure and function of the network will be based on Aboriginal perspectives and values and the Alliance vision of Self Government in art. This vision is a commitment to honouring the diversity of perspectives, stories and experiences of Aboriginal peoples. It seeks to have the variety of forms and approaches in both traditional and contemporary voices, developed and shared. 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.⁴⁹

The legacy of *drumbeats to drumbytes* is about autonomy, sharing and respect. This requires a commitment to persist in the too often one-way process of cultural and etymological translations between colonized and colonizer—with its requirements to be bicultural and bilingual against and within a complacently monolingual cultural monolith.

One of the Aboriginal alumni of the 1994 *drumbeats to drumbytes* gathering is also recognized as a pioneer in digital creativity. Buffy Sainte-Marie was one of the first popular musicians to incorporate electronic synthesis and processing as a central musical

structure on her 1969 vanguard album *Illuminations*.⁵⁰ She was also an early adopter of the Macintosh computer and used its earliest imaging capabilities to produce large-scale digital prints. They have been exhibited at the Emily Carr College of Art and Design in Vancouver, the Glenbow Museum in Calgary, the McKenzie Gallery in Regina, and the Institute of American Indian Arts Museum in Santa Fe. Her one-woman show *Painting with Light* (curated by Linda Genereux, 1995) ran twice in Toronto: at the former Isaacs Gallery, and later at the Art and Events Gallery.⁵¹

I began music in my head. Then about age 3, I discovered the piano, and the world changed up for me, because I could express outside what I heard in my head. As a teenager, I wanted an instrument I could tune and I craved mobility, and I lived with a guitar and a mouthbow. In the sixties I was introduced to early electronic synthesizers, and in the seventies to the computer. Throughout my crayon days, my watercolors and oils days, and my eventual falling in love with digital painting on the Macintosh, one fact has made itself clear: an artist will make music on pots and pans, or an orchestra, and we'll make images in the sand with a finger, or whatever else is available, including the computer.⁵²

Another *drumbeats to drumbytes* alumni, who has also worked with Buffy in other contexts, is Cheryl L'Hirondelle Waynohtêw. She is an interdisciplinary artist working in performance, music, networked art and video.

In learning nêhiyawêwin (Cree), I have had the fortunate opportunity to spend several years visiting Elders and other Cree speakers and have noticed time and time again how conceptual the language is and how philosophical and what critical thinkers most Cree speaking people are. Rarely, have I witnessed a conversation where discussions of etymology were not part of the interchange.

As a contemporary artist, I am also constantly in a position of having to retranslate and investigate dominant/mainstream culture's terms and worldviews to better understand them from within this position of nêhiyawêwin. In my own work, I have observed that there are relationships that can be made between these mainstream trends/ideas and a Cree world view. ...

As Aboriginal artists we already work in so much isolation it makes little sense to enforce proprietary claims over that which creation has imbued us—the ability to be visionary and manifest the stuff of our dreams for others to be moved by, inspired and challenged with.

I propose instead that we look to the computer world and current discussions and writings about copyleft and open source. These two concepts are

perhaps the most influential concepts behind the dismantling of the international corporate stronghold of both Microsoft and Macintosh. At the root of these concepts is the sense of sharing of information, be it code, concepts, or the actual software that results.

Computer scientists and hackers work together to make the idea better, more useful, more accessible. Authorship takes on different forms. For some, the originator is always credited and subsequent contributors are noted and credited. In other instances, a set of distribution terms are specified as laid out by the originator, but at the core is the belief that it is better to share the information to encourage development for the betterment of the community, the users, the world.

Central to copyleft and open source is the fact that instead of enforcing copyright and intellectual property right... it is better to be productive and working. This approach has proven highly successful and many hackers who started out in the solitude of their home offices and garages are becoming gainfully employed and much sought after while the Linux operating system (the prime example of open source software) is quickly replacing Microsoft worldwide. Interestingly enough, Linus Torvalds (the Linux originator) receives no residuals or royalties from sales of Linux (it is available on the Internet), though he continues to be gainfully employed as he is much sought after for his innovations in the computer realm.

These trends could easily be applied to the art world and specifically to the Aboriginal art world and communities. We need only to look to our world views to see the relationships and to our languages to find the terms. Instead of asking Aboriginal artists and cultural beings to buy into yet another government system that I believe will only further enslave us and keep us from getting to the work of creative output and cultural expression, I propose we investigate other alternative models closer to our concepts of independence, collaboration, sharing, giving and ultimately... survival.⁵³

Archer Pechawis is co-curator with Skawennati Tricia Fragnito of *CyberWowWow*. He is also a performance artist, musician and net artist. In his email response to journalist Tim Robinson (2003) he describes a potent approach to media as a creative toolset.

Your Native culture is so old and so firmly rooted in tradition, why couple it with something as modern and ever-changing as New Media? (i.e. What exactly is the “new Native aesthetic” you are trying to achieve?)

<sigh>

“native culture” is often seen (by both native and non-native, sadly) as being some monolithic, non-changing thing, immutable and permanent. this is ridiculous. all cultures change and adapt. this is what makes them “culture”, and not “history”:

they live. my “native culture” is as “modern and everchanging” as quantum mechanics, which have been around for more than one hundred years.⁵⁴

Do you find there is a resistance to your use of technology as art form from those harboring a more traditionalist interpretation of art?

“what is traditional? using plant-based paints on bone-knife scraped hide to draw images of a buffalo hunt is using technology, and plenty of it. i respect all artist’s right to express themselves in whatever medium they choose, whether i like it or not.

Do you view your coupling of art and technology as possibly a step towards some new form of language/communication?

“the future is already here. digital media/digital media art IS a new form of language and communication, and artists working in digital media are a far more important force in this than most people think, including us artists.”

Jenny Fraser is a Bundjalung Australian Aboriginal artist, curator and writer who proves again and again the power of the Aboriginal “mob” in coming together to produce digital works of striking individuality, but of deep resonance in the community. She is curator online for CyberTribe.

CyberTribe wishes to acknowledge the traditional owners of the lands where this project has taken place—the Turrbal of Brisbane, the Yugambah of the Gold Coast in SE Queensland, and the Bundjalung of Northern New South Wales, the Kaurna of Adelaide—all in Australia, and the Blackfoot in Canada extra special thanks the artists and writers included in exhibitions and consultation and support from fineartforum.org, leonardo.org, the Aboriginal and Torres Strait Islander Arts Board of the Australia Council for the Arts, and RGAQ - the Regional Galleries Association of Queensland.

CyberTribe opened as an online gallery run through FineArt Forum in 2000 with the exhibition *Eyesee* and has produced regular national and international exhibitions since then. CyberTribe “aims to encourage the production and exhibition of Indigenous Art with a focus on the digital.”⁵⁵ Jenny is also a member of “blackout,” which features Australian Indigenous new media arts practitioners.⁵⁶

None of us exist outside of power, none of us exist outside of the military-media-industrial complex, none of us are free from the globalised economies of exploitation and oppression—there's no point in pretending that we are. For some of us, that inclusion is the only inclusion we ever experience. In problematising cultural politics as a 'zero-sum game,' Dorinne Kondo identifies that 'any oppositional gesture is inevitably recuperated in the juggernaut of commodity capitalism.' While opposition can be both 'contestatory and complicit', that opposition does 'constitute a subversion that matters.' As part of that subversion, Fraser makes a choice to push through the narrow focus of the polity and symbolic order. Among the subversions she enacts is to make art out of everyday life, to foreground other everyday lives—to appropriate, culture jam and offer alternatives—and to subsequently locate in everyday life so much that matters.⁵⁷

Mike MacDonald has been a video artist for many years and was the 2000 Aboriginal

Achievement Award winner for New Media for *Butterfly Garden*.⁵⁸

Known for the widely-shown work *Electronic Totem*, (1987) the artist has also documented the testimony of Elders for the Gitksan Wet'suwet'en land claim. For over a decade, MacDonald has meticulously explored the interdependence of migrating butterflies and traditional medicinal plants (the subject of his most recent exhibitions), building site-specific gardens at galleries across the continent. In 1994, he was presented with the Vancouver Institute for the Visual Arts (VIVA) award, founded by Jack and Doris Shadbolt, for outstanding contribution to the arts in British Columbia.⁵⁹

Mike MacDonald transforms his individual approach to his Mi'kmaq heritage into visual art. ...His video installations and photography are known widely, and he has planted butterfly gardens on the grounds of art galleries and museums across the country. A man who transcends the (far too sacred) boundary between arts and nature.

His delight and expression leads to a simple plea - give these messengers of beauty some living ground, in a western world that is losing wild spaces on the land and in our minds.⁶⁰

INDIANS IN CYBERSPACE

Recently I visited every web site by Aboriginal artists that I could find. The most interesting to me were sites where artists are using the web as a medium to produce new work rather than show more traditional art.

CYBER ARTISTS

Long before he had a web site Yuxweluptun, Lawrence Paul did a pioneer virtual reality work at the Banff Centre. The rest of that early VR work has disappeared, the equipment and software abandoned as obsolete and the programmers long gone.

“Inherent Rights, Vision Rights” still exists because it was installed in a large clear plastic case for a show in Paris:

<http://www3.bc.sympatico.ca/artist/virtual.htm>

A more recent performance work, An Indian Act, Shooting the Indian Act, was presented at two sites in Britain:

<http://www3.bc.sympatico.ca/artist/shooting.htm>⁶¹

nunatinnit – at our place was a streaming media web site from a remote outpost on

Baffin Island and perhaps one of the most stirring and inspiring projects I have yet seen.

Live from the Tundra: a streaming media website with the aid of the latest satellite telephone and mobile computing technologies, Arnait Video Productions has created a dynamic website which will permit a small team of Inuit and Quebecois participants at a remote outpost camp on Baffin Island to create a daily journal of their experiences, tell oral histories, host special events, and interact with the outside world via the Internet in August 2001.

During summer 2000, an Arnait Video Productions crew filmed the daily life and the stories of the Kunuk family for a documentary video entitled Anana (Mother). This program is being produced with the support of APTN, Telefilm Canada, and the Canada Council for the Arts, and will be released in August 2001.

Live from the Tundra jumps off where Anana left off, and allows internauts around the world to visit the Kunuk family at their outpost camp and learn about a culture and a lifestyle that is known to very few people on the planet. Not many people in Canada, or in the world for that matter, possess the knowledge, skills and experiences that Vivi and Enuki Kunuk have cultivated in the unique environment of Canada’s Eastern Arctic.

Inuit culture is profoundly tied to the land of its people: the stories and knowledge Vivi and Enuki Kunuk possess are completely unique to this region. The land—the tundra—is the source of Inuit people’s stories and history. Yet in their deep humanity, these stories are infused with universality.⁶²

The concept of life on the land, combined with the immense yet humble presence of Vivi

Phoebe Kunuk and her daughter Mary Kunuk, are at the origins of the Anana

documentary and the Live from the Tundra project.

My mother now lives most of the time in an outpost camp on Baffin Island with the two grandsons she adopted. Still managing on her own, still making caribou clothing or seal skins kamiks.

There is a lot more about my mother, Vivian Phoebe Kunuk. I find her to be a very powerful person who is still strong although she has now arthritis. She never stops.

I would like to ask my mother to tell her stories while she is still alive and active. I know I don't have much time anymore. I have been talking to my mother about this project for years. She agrees to make it with me. It is going to be the occasion to get to know each other in a different way. It's like a gift we are making to the audience who will watch it.⁶³

Finally, one of the most complex yet technically simple works is *In-X-Isle* by Edward Poitras, hosted by the Soil Digital Media Suite at the Neutral Ground Artist-Run Centre and Gallery in Regina, Saskatchewan. From the front, it is a dramatically rendered vision of the dark earth from space with glowing lakes as a single-image-map link, with an additional three overlaid Indian X mark treaty signature images for links.

One X leads to eight images of the hand-written treaties—a haunting series of images—almost illegible and certainly so for the signatories, one X to a long, excruciating, exasperating and fascinating series of accounts: “The negotiations and terms of the first seven treaties were published by Alexander Morris in *The Treaties of Canada with the Indians of Manitoba and the North-West Territories* (Toronto 1880). This publication reproduces material from Morris relating to Treaties three to seven, with the addition of the terms of Treaties eight and ten. Report of the Proceedings of the Conference Between the Honourable Alexander Morris, Lieutenant Governor of the North-West Territories, the Commissioners Appointed by Order in Council to Treat with the Indians Inhabiting the Country...” The third X points to the text of Treaty four.

The glowing lakes image-map link on the dark earth points to an audio project that is mystifying at first, then engages the listener in a realization of the experience of Babel

that was, for the Indians, much of the treaty-making process. Four simultaneous, audio files play. Together they create an amazing audio experience of rhythm and flow, almost ceremonial, even almost Cree at times—but completely unintelligible. When taken apart, the shock of realization steps you outside yourself for a moment—they are what seem to be a highly modified and distorted Italian, Spanish, or Portugese reading of a treaty document. When put back together, the first experience is completely transformed by the knowledge of what the out-of-sync audio files are (or might be).

Appendix One

- Effective participation in the information society and the mastery by everyone of information and communication technology constitutes a significant dimension of any cultural policy.
- Government should endeavour to achieve closer partnerships with civil society in the design and implementation of cultural policies that are integrated into development strategies.
- In an increasingly interdependent world, the renewal of cultural policies should be envisioned simultaneously at the local, national, regional and global levels.
- Cultural policies should place particular emphasis on promoting and strengthening ways and means of providing broader access to culture for all sectors of the population, combating exclusion and marginalization, and fostering all processes that favour cultural democratization

Among the relevant policy objectives recommended to UNESCO's member states, the conference proposed to 'intensify co-operation between government, the business sector and other civil society organizations in the field of culture by providing the latter with appropriate regulatory frameworks' (p. 5). A number of proposals then dealt specifically with media and communication technologies. The conference asked member states to:

- Promote communication networks, including radio, television and information technologies which serve the cultural and educational needs of the public; encourage the commitment of radio, television, the press and the other media to cultural development issues, while guaranteeing the editorial independence of the public service media.
- Consider providing public radio and television and promote space for community, linguistic and minority services.
- Adopt or reinforce national efforts that foster media pluralism and freedom of expression.
- Promote the development and use of new technologies and new communication and information services, stress the importance of access to information highways and services at affordable prices (p. 6).

In short, there is a need to marry mainstream and alternative media reform initiatives with policy intervention, research and education. Media democratization will be based on the extent to which there can be a successful blending of five types of intervention, led by five sets of actors:

- ongoing critical analysis of media issues (researchers);
 - media literacy efforts (educators);
 - building and operating of autonomous media (alternative media practitioners);
 - progressive practices within mainstream media (journalists, editors, publishers, etc.);
- and
- policy intervention (media policy activists).

WSIS presents an opportunity to work on the issues raised in this paper within an institutional framework, and keeping in mind this five-pronged approach.⁶⁴

Added to the declaration is an action plan for its implementation. It proposes among others:

- To preserve the linguistic heritage of humanity.
- To promote digital literacy and mastery of the new Information and Communication Technologies (ICTs).
- To promote access to new ICTs in developing countries and countries in transition.
- To support the presence of diverse contents in the media and emphasize the role of public broadcasting.
- To increase the mobility of creative artists.
- To help enable the cultural industries of developing countries.
- To involve civil society in the elaboration of social policies that aim at the preservation of cultural diversity.

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¹ Chuck Palahniuk, *Lullaby*, Anchor; 2003. <http://www.chuckpalahniuk.com>

² Gail Guthrie Valaskakis, *Telling Our Own Stories: The Role, Development and Future of Aboriginal Communications*, 1998. http://www.arts.uwaterloo.ca/ccm/ccrn/documents/colloq98_valaskakis.html
Quoted from: Brisebois, Debbie. 1983. "The Inuit Broadcasting Corporation." *Anthropologica*, Vol.25, no.1.

³ *Ideas from the Bush: Indigenous Television in Australia and Canada*, Michael Meadows, Queensland University of Technology. *Canadian Journal of Communications*, Volume 20, Number 2, 1995. <http://www.wlu.ca/~wwwpress/jrls/cjc/BackIssues/20.2/meadows.html>

⁴ Herbert I. Schiller, *Media, Technology, and the Market: The Interacting Dynamic*, in *Culture on the Brink: Ideologies of Technology*, eds. Gretchen Bender and Timothy Druckrey (Seattle: Bay Press, 1994), 31-46. <http://www.rochester.edu/College/FS/Publications/SchillerMedia.html> The Morelia Symposium Declaration, "Approaching the Year 2000," reprinted as an advertisement in the New York Times 1 November 1991. "Apparently, the newspaper did not consider the declaration a newsworthy item." <http://nativenet.uthscsa.edu/archive/nl/91d/0058.html>

⁵ Stuart D. Stein, *Ethnocide*, To be published in *Encyclopedia of Race and Ethnic Studies*, edited by Ellis Cashmore, Routledge, 2003. <http://www.ess.uwe.ac.uk/genocide/ethnocide.htm> "The term *ethnocide* is generally taken to refer to the destruction of members of a group, in whole or in part, identified in terms of their ethnicity. Its use is conceptually and theoretically closely linked with the term *genocide*." In relation to the destruction of Indigenous lands and peoples, *ecocide* might be a better term that reflects the close spiritual, cultural and linguistic relationships that Indigenous peoples have with their ecosystems. Destroying the life of their lands becomes a form of genocide of Indigenous peoples. <http://biologybooks.net/Ecocide.html>

⁶ Vandana Shiva, *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology*, London: Zed Books, 1993.

⁷ *Cultural and Spiritual Values of Biodiversity*, ed. Darrell Addison Posey, 1999. United Nations Environment Programme, Intermediate Technology Publications, London UK. <http://www.unep.org/Biodiversity>

⁸ Convention on Biological Diversity (CBD). "At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive strategy for "sustainable development" meeting our needs while ensuring that we leave a healthy and viable world for future generations. One of the key agreements adopted at Rio was the Convention on Biological Diversity. This pact among the vast majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings as we go about the business of economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources." <http://www.biodiv.org/doc/publications/guide.asp>

⁹ *Cultural and Spiritual Values of Biodiversity*, ed. Darrell Addison Posey. 1999. Introduction. p. 9. United Nations Environment Programme, Intermediate Technology Publications, London UK, UNEP.

<http://www.unep.org/Biodiversity/> Cited: Glowka, L., Burhenne-Guilmin, F., Synge, H, McNeely, J.A. and Gündling, L., 1994. *A Guide to the Convention on Biological Diversity*. Cambridge, UK: IUCN. Gupta, Anil K. and Periera, Winnin 1993. *A Dialogue on Indigenous Knowledge*, Honey Bee [periodical], 4(4):7-10, 1993. D. M. Warren, L. J. Slikkerveer, and D. Brokensha, eds. *The cultural dimension of development: Indigenous knowledge systems*. Intermediate Technology Publications, London, UK. Knudtson, Peter; Suzuki, David. 1992. *Wisdom of the Elders: Sacred Native Stories of Nature*. New York: Bantam Books.

¹⁰ Ward Churchill, *I Am Indigenist: Notes on the Ideology of the Fourth World*, Quoted: Guillermo Bonfil Batalla, *Utopía y Revolución: El Pensamiento Político Contemporáneo de los Indios en América Latina* (Mexico City: Editorial Nueva Imagen, 1981) p. 38; translation by Roxanne Dunbar Ortiz. Roxanne Dunbar Ortiz, *Indians of the Americas: Human Rights and Self-Determination* (London: Zed Books, 1984) p. 84. <http://www.zmag.org/chiapas1/wardindig.htm>

¹¹ Animism: The belief that all objects, and the universe itself, possess and are animated (given being) by souls. Often associated with Aristotle who held that all living things had a soul, or psyche, which was what made them alive. The vegetative soul was the capacity for nourishment and reproduction. The animal soul included these but in addition the capacities of sensation and movement. Humans had all the foregoing plus the capacity to reason. The idea of animism is rejected by those who support a mechanistic view of science. In the 20th century James Lovelock's Gaia—embodying the idea that the ecosystem as a whole can be viewed as a quasi-living thing—can be seen as an attempt to resuscitate animism, but this time with a scientific spin on it. *Minerva Dictionary of Concepts*, owned by John Clarke and maintained by Jonathan Irving, Kingston University. http://www.kingston.ac.uk/~gr_s005/dictionary/concepts/a/Animism.html

¹² Cultural and Spiritual Values of Biodiversity, ed. Darrell Addison Posey. 1999. Introduction to Chapter 5, *Ethnoscience, 'TEK' and its Application to Conservation* by L. Jan Slikkerveer, p. 171. United Nations Environment Programme, Intermediate Technology Publications, London UK, UNEP.

<http://www.unep.org/Biodiversity/>

¹³ *Shadows of Tender Fury, The Letters and Communiqués of Subcomandante Marcos and the Zapatista Army of National Liberation*. Trans. F. Fardacke, L. López, and the Watsonville, CA Human Rights Committee, 1995, Monthly Review Press, New York.

“In February of 1998, The CMP [Chiapas Media Project] began as a result of conversations with autonomous Zapatista communities who were requesting access to video and computer technology. The Zapatista's or Zapatista Army of National Liberation, are an Indigenous movement made of up Tzotzil, Chol, Tojolabal, Mum and Tzeltal Mayan Indians. They became known to the world via the Internet on January 1, 1994 when they staged an armed uprising and took over six towns in Chiapas demanding that Indigenous rights be recognized in the Mexican constitution. Another demand was the formation of Indigenous controlled TV and radio throughout Mexico. ... The Chiapas Media Project works with Indigenous and campesino communities in the southern Mexican states of Chiapas and Guerrero. The objective has been to provide these communities with the means to produce their own media and distribute it. The CMP looks for the funding necessary to buy equipment, train community members in video production, post-production and computers and distributes the videos they produce worldwide. Since 1998, the CMP has distributed close to 5,000 videos. The videos are distributed via the Internet, university and college presentations, museums and film and video festivals.” <http://promedios.org/eng/index.html>

“This seems to be a revolutionary state of affairs for, perhaps the first time, the Internet allowed members of the international community to comment and affect domestic, local legislation, a privilege once reserved for lobbyists or, at the very least, registered U.S. voters. This might be called “cyber-diplomacy.” ... in the cases we studied, the Internet's capabilities provided a new tool for grassroots activists to counter powerful forces of multinational corporations and the regime in Rangoon. Since the Burma campaign raged across phone lines and fiber optic cables, the use of the Internet to advance work on human rights and democracy has spread to Indonesia, Nigeria, Tibet and East Timor, and has taken up such subjects as global warming and East Asian teak forests.” *Networking Dissent: Cyber-Activists Use the Internet to Promote Democracy in Burma* Tiffany Danitz and Warren P. Strobe, 1999.

http://www.usip.org/virtualdiplomacy/publications/reports/vburma/vburma_three.html

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<http://www.aio.org/FinalRpt.htm>

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- ¹⁴ “*Highlights of Arts Education Research*”, 2002. “Art. Ask for More.” is a national arts education public awareness campaign by Americans for the Arts, The Ad Council, The Doris Duke Charitable Foundation, Old Navy, and hundreds of local, state, and national official campaign partners. Nina Ozlu, Vice President of Public and Private Sector Affairs. http://www.americansforthearts.org/public_awareness/facts
- ¹⁵ *National Gathering on Aboriginal Artistic Expression 2002 Reflection Papers*, Department of Canadian Heritage. http://www.expressions.gc.ca/reflexionpaper_e.htm
- ¹⁶ CAAS (Coalition for the Advancement of Aboriginal Studies). ND [2002]. *Learning About Walking in Beauty: Placing Aboriginal Perspectives in Canadian Classrooms*. Report prepared for the Canadian Race Relations Foundation (CRRF). <http://www.crr.ca/EN/Publications/ePubHome.htm>
- ¹⁷ CAAS (Coalition for the Advancement of Aboriginal Studies). ND [2002]. *Learning About Walking in Beauty: Placing Aboriginal Perspectives in Canadian Classrooms*. Report prepared for the Canadian Race Relations Foundation (CRRF). <http://www.crr.ca/EN/Publications/ePubHome.htm>
- ¹⁸ *National Gathering on Aboriginal Artistic Expression 2002 Reflection Papers*, Department of Canadian Heritage. http://www.expressions.gc.ca/reflexionpaper_e.htm
- ¹⁹ *The Unbearable Whiteness of Being: African American Critical Theory and Cyberculture* by Kali Tal [1996]. <http://www.freshmonsters.com/kalital/Text/Articles/whiteness.html>
- ²⁰ *Keeping it (Virtually) Real: The Discourse of Cyberspace as an Object of Knowledge in Cyberculture Studies as American Studies: Locating Design, Discourse, and Diversity in Cyberspace*, Lisa Nakamura, 2000. <http://epsilon3.georgetown.edu/%7Ecoventrm/asa2000/panel4/nakamura.html>
- ²¹ Dr. Richard Rogers, *A Narrative of the Software Project, IssueAtlas.net*. Downloaded from Govcom.org, January 20, 2005. Govcom.org is an Amsterdam-based foundation dedicated to creating and hosting political tools on the Web. Much of the work involves mapping issue networks on the Web, using the Issue Crawler software. http://govcom.org/ia_ontheweb.html
- ²² *Computer-linked Social Movements and the Global Threat to Capitalism*, Harry Cleaver, 1999. <http://www.eco.utexas.edu/homepages/faculty/Cleaver/polnet.html>
- ²³ *The Ecological Politics of Leslie Silko's Almanac of the Dead*, Bridget O'Meara, *Wicazo Sa Review*, Fall 2000. Quoted: Laura Pulido, *Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest*, Tucson: U. of Arizona Press, 1996. See also Stuart Hall's formulation of “New Ethnicities,” which rather than being fixed and stable are constituted in relation to multiple discursive and material formations, in *Stuart Hall: Critical Dialogues in Cultural Studies*, ed. David Morley and Kuan-Hsing Chen, New York: Routledge, 1996.
- ²⁴ *Gender, place and networks: A political ecology of cyberculture*, by Arturo Escobar in *women@internet: Creating New Cultures in Cyberspace*, Wendy Harcourt, ed., London: Zed Books, 1999. Quoted in review by Kali Tal, 2001, Resource Center for Cyberculture Studies. <http://www.com.washington.edu/rccs/bookinfo.asp?ReviewID=106&BookID=98>
- ²⁵ Ward Churchill, *I Am Indigenist: Notes on the Ideology of the Fourth World*, Quoted: Winona LaDuke's “*Natural to Synthetic and Back Again*,” the preface to *Marxism and Native Americans*, op. cit., pp. i-viii. <http://www.zmag.org/chiapas1/wardindig.htm>
- ²⁶ *Is Noogenesis Progressing?* By Maria Luiza Glycerio and Janice B. Paulsen, 2002. <http://www.richmond.edu/~jpaulsen/teihard/isnoogen.html>
- ²⁷ *Vladimir I. Vernadsky*, Wikipedia, 2003. http://en.wikipedia.org/wiki/Vladimir_I._Vernadsky
- ²⁸ *Pierre Teilhard de Chardin*, Wikipedia, 2004. http://en.wikipedia.org/wiki/Pierre_Teilhard_de_Chardin
- ²⁹ *Cyberspace and the Dream of Teilhard de Chardin*, John R. Mabry, 1994. <http://theoblogical.org/dlature/united/ph2paper/noosph.html>
- ³⁰ *The Emergence of Noopolitik: Toward An American Information Strategy*, John Arquilla and David Ronfeldt (eds.), 1999, RAND. <http://www.rand.org/publications/MR/MR1033/>
- ³¹ *Networks and Netwars: The Future of Terror, Crime, and Militancy*, John Arquilla, David Ronfeldt (eds.), 2001, RAND. <http://www.rand.org/publications/MR/MR1382/>
- ³² *Computer-linked Social Movements and the Global Threat to Capitalism*, Harry Cleaver, 1999. <http://www.eco.utexas.edu/homepages/faculty/Cleaver/polnet.html>
Quoted: Francis Fukuyama, *Review of Activists Beyond Borders: Advocacy Networks in International Politics*, in *Foreign Affairs*, Vol. 77, no. 4, July-August 1998, p. 123.
- ³³ *Ibid.*

³⁴ The Gaia Hypothesis proposes that our planet functions as a single organism that maintains conditions necessary for its survival. Formulated by James Lovelock in the mid-1960s and published in a book in 1979, this controversial idea has spawned several interesting ideas and many new areas of research. While this hypothesis is by no means substantiated, it provides many useful lessons about the interaction of physical, chemical, geological, and biological processes on Earth. *The Gaia Hypothesis*, Sean Chamberlin (ed). <http://www.oceansonline.com/gaiaho.htm> *Marking Territories*, Claire Molloy, 2001 in *Limn: Journal for Theory and Practice of Liminal Phenomena*, vol. 1. http://limen.mi2.hr/limen1-2001/clair_molloy.html

³⁵ See note 11.

³⁶ “Speciesism is now a widely accepted term that articulates a prejudicial attitude toward nonhuman animals in the same way that racism and sexism indicate subordination of particular groups on the basis of race or gender. Richard Ryder (1989) explains “Using the word ‘animal’ in opposition to the word ‘human’ is clearly an expression of prejudice” (p.2). Ryder also explains that the term ‘nonhuman animal’ is appropriate as it expresses a kinship between ‘those of my species and others’ (p.2).” *Marking Territories*, Claire Molloy, 2001, Note #5, in *Limn: Journal for Theory and Practice of Liminal Phenomena*, vol. 1. http://limen.mi2.hr/limen1-2001/clair_molloy.html Quoted: Ryder, R. (1989) *Animal Revolution: Changing Attitudes Towards Speciesism*, Blackwell, Oxford.

³⁷ Unrelated to the design demonstration portfolio site ‘AnimaSphere’ by Kiven at <http://www.geocities.com/kiven96/dragonballz/>

³⁸ *Four Directions to Making the Internet Indian*, Kade Twist, Benton Foundation, 2000. <http://www.digitaldividenetwork.org/content/stories/index.cfm?key=1>

³⁹ Aboriginal Canada Portal Working Group <http://www.aboriginalcanada.gc.ca>

⁴⁰ *National Connecting Aboriginal Canadians Forum Report* Department of Indian and Northern Affairs, Ottawa, May 9, 2002. <http://www.aboriginalcanada.gc.ca/abdt/cac/cacwebsite.nsf/engdocBasic/0.html>

⁴¹ *The Invisible Doors Between Cultures*, Robert N. St. Clair in *Teaching Indigenous Languages*, ed. Jon Reyhner, Ch. 23 (pp. 287-291). Flagstaff, AZ: Northern Arizona University. Copyright 1997 by Northern Arizona University. http://jan.ucc.nau.edu/~jar/TIL_23.html Cited: Harris, Marvin. (1980). *Cultural materialism: The struggle for a science of culture*. New York: Vintage Books/Random House.

⁴² <http://www.ksg.harvard.edu/hpaied/overview.htm>

⁴³ <http://www.ksg.harvard.edu/hpaied/docs/reloading%20the%20dice.pdf> Vol. II: http://www.ksg.harvard.edu/hpaied/pubs/pub_152.htm

⁴⁴ Submission—CANDO (Canadian Association of Native Development Officers) Response to the Government of Canada Innovation Strategy [2002] <http://www.innovationstrategy.gc.ca/gol/innovation/interface.nsf/vSSGBasic/in02257e.htm> “Economic Development Officers (EDOs) are involved in, or have direct responsibility for each of the aspects of successful development cited above. The important role the EDO plays in Aboriginal communities cannot be overstated. They are responsible for working with the Band Council or local government on economic development strategies, policies, and initiatives. They are responsible for working with the private sector to establish business and promote entrepreneurship, or to invite corporations to invest in their community and their membership. They also hold the very important responsibility of working with other members of the community to develop education and training targets that will increase employment levels in their community. Finally, they are holding increasing responsibility for stewardship of natural resources, and ensuring that their environment remains healthy and productive for future generations.”

⁴⁵ “The parallel between gratuity and freedom is embodied in common language. Despite its negative connotations in English (a *gratuitous insult* is an uncalled-for slander) the primary meaning of the word is something given free of charge.”

⁴⁶ *Creativity: Can Artistic Perspectives Contribute to Management Questions?* Annick Bourguignon and Christopher Dorsett, 2002. ESSEC Research Center <http://www.essec.com/research/us/wp.html>

⁴⁷ Saskia Sassen, *Countergeography of Globalization*, [2001]. Absolute One Project <http://absoluteone.ljudmila.org/globalisation.php>

⁴⁸ *Lakota Views of “Art” and Artistic Expression*, Bea Medicine, Ph.D. 1999. Essay for the performance art work *Ablakela* by Dana Claxton presented at the *grunt gallery*, Vancouver 1999.

⁴⁹ *drum beats to drum bytes* report, prepared by Ahasiw Maskegon-Iskwew Aboriginal Arts Alliance, Banff Centre for the Arts, 1994. “*The gathering was coordinated by the Aboriginal Film and Video Art Alliance*

with the assistance of the Banff Centre for the Arts, the Canada Council and the Department of Canadian Heritage.” http://www.drumbytes.org/articles/DrumBeatstoDrumBytes_pdf

⁵⁰ *100 Records that Set the World on Fire*, Wire Magazine, Steve Barker et al. #175, September 1998.

Illuminations includes collaborations with Peter Schickele, scoring by Michael Czajkowski, and songs by Leonard Cohen, Ritchie Havens and Buffy Sainte-Marie herself.

⁵¹ Keynote speaker bio, Canadian Aboriginal Sciences and Technology Society (CASTS) conference: *Integration of Science, Technology, and Traditional Knowledge in Today's Environment*, 2003 Saskatoon. <http://www.usask.ca/casts2003/pdf/bios.pdf>, Cradleboard Teaching Project, <http://www.cradleboard.org/press/bio.html>, her Nihewan Foundation for Native American students and studies programs <http://www.nihewan.org/founder.html> and her site at <http://www.creative-native.com/biograf.htm>

⁵² *Painting with Light... Playing with Sound* (From a speech given at the Institute for American Indian Arts, Santa Fe), Buffy Sainte-Marie, ND. <http://www.creative-native.com/bsmpaintlight.html>

⁵³ Email, 2003. See <http://ndnrkey.net> for Waynohtêw's curriculum vitae and her notes and commentaries on all of her current and recent projects.

⁵⁴ See http://www-gap.dcs.st-and.ac.uk/~history/HistTopics/The_Quantum_age_begins.html, <http://www.cyberpowwow.net/archerweb/index.html>, and <http://www.cyberpowwow.net>

⁵⁵ CyberTribe <http://www.fineartforum.org/Gallery/cybertribe/>

⁵⁶ blackout <http://www.fineartforum.org/Gallery/cybertribe/blackout/index.html>

⁵⁷ From *not really queenz'land*, exhibition catalogue. Linda Carroli, 2003.

<http://www.fineartforum.org/Gallery/cybertribe/spirit+vision/lc+cn.htm>

⁵⁸ http://snac.mb.ca/projects/butterfly_garden/

⁵⁹ First Nations Art, An Introduction to First Nations Artists in Canada.

http://collections.ic.gc.ca/artists/macdonald_m.html

⁶⁰ *Butterfly Garden: Dream about it. Indulge in the art. Do It*. Christoph Rohner, [2002] wildbeauty online magazine <http://www.wildbeauty.net/livingspace.htm>

⁶¹ *Indians in Cyberspace*, Mike MacDonald, [Bridges Consortium II, Banff New Media Institute, 2002] <http://www.banffcentre.ca/bnmi/bridges/mike.html>

⁶² <http://nunatinnit.net/en/about/index.html>, link under 'about' > 'projects'

⁶³ Mary Kunuk, 2001. <http://nunatinnit.net/en/about/index.html>, link under 'people' > 'Mary Kunuk'

⁶⁴ *Media and Democratization in the Information Society*, Marc Raboy in *Communicating in the Information Society*, eds. Sean O'Siochru and Bruce Girard, 2003.

<http://www.crisinfo.org/content/view/full/231/>