

Reference: Philpot, D., Beaton, B., Whiteduck, T. (2014) First Mile Challenges to Last Mile Rhetoric: Exploring the Discourse between Remote and Rural First Nations and the Telecom Industry. *Journal of Community Informatics*, 10 (2).

First Mile challenges to last mile rhetoric: Exploring the Discourse between Remote and Rural First Nations and the Telecom Industry

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Abstract

Solving Canada's digital divide remains a significant issue, particularly considering how broadband networks have become an essential utility in remote and rural First Nations in all areas political, economic, social, and cultural. Attached to this are the politics of the historical relationship between remote and rural First Nations communities and urban-based telecom corporations, institutions, and the government. The way in which the relationship between remote and rural First Nations, the federal and provincial governments, and the telecommunications industries is reproduced is largely through their discourse with the public. One of the consequences of this is that many outsiders to this issue are largely misinformed through industry and government documents and press releases. These documents largely framed for urban mainstream media often present remote and rural First Nations as helpless and dependent upon government and telecom industry intervention. Both industry and government use this language to continue their settler colonialism rhetoric and create the perceived need for dependence upon their services. We argue that this is another form of settler colonialism; a form of colonialism which seeks to create dependence upon the service economy for its own survival. Adopting a critical discourse analysis approach, we examine how the discourse of dependency by industry and government surrounding First Nations in Canada has shaped the issue of remote and rural broadband connectivity. We also explore how First Nations use websites and documents of their own to counter these portrayals of their subjected 'plight' by emphasising their capacity and desire to own and operate both the infrastructure and the ICT services in their communities with local members. We conclude that there is a significant challenge that remote and rural First Nations face, but that the steps that have been taken are towards escaping the cycle of dependency while creating an environment of self-determination for future generations.

Introduction

Although a great deal of hard work has accomplished much in terms of connecting remote and rural First Nations to the internet, there remains a significant hurdle still to be surmounted. This hurdle refers to is the discursively constructed and reinforced relationship between First Nations in Canada and the Canadian state. This discourse, which portrays First Nations as needful surrogates to the Canadian government and the telecommunications industry, has influenced and reinforced the information and communication technologies (ICT) divide challenging these communities. This digital divide refers to the disparity among different people and communities in their efforts to achieve equitable and affordable access, ownership, control and use of digital infrastructure and ICT applications. Canada's digital divide reflects the considerable political, economic, social, and cultural challenges facing remote and rural First Nations and citizens (see: McMahon, O'Donnell, Smith, Walmark, Beaton, & Simmons, 2011; Fiser, 2010). These challenges also characterize the relations between First Nations and the Canadian state. For remote and rural First Nations, surmounting the digital divide entails dealing with at least two challenges.

The first challenge is that, due to treaties, First Nation groups and the government of Canada are constantly struggling to define their complicated relationship. Though they are able to share land under the treaty agreements, First Nations also have to deal with the Canadian government's expensive, urban-based bureaucracy. For the federal government, this has often resulted in a perceived dependency on their services and programs that are too often structured and delivered from a foreign, urban-based perspective. Often, this relationship has meant that the government has not recognized First Nation autonomy or honoured treaty obligations (the recent Idle No More protest has drawn significant attention to this issue. For example: Dru Oja Jay, 2013). This has made it difficult for the Canadian government and First Nations groups to develop an Aboriginal digital strategy that will benefit both groups. Rather, the government has relied on large telecommunication carriers and other private sector, urban-based telecom providers to deliver its information society agenda using millions of dollars of public funds that now flows directly to the private sector instead of to the First Nations communities.

The second challenge is that First Nations are often forced to partner with corporate institutions and private sector providers to develop their broadband infrastructure and ICT due to urban-centric government funding programs and requirements that are often created with corporate input. The relationship between the First Nations and the state has been forced to become a relationship between First Nations and the telecommunications industry, and too often these partnership relationships limit local community economic development in favour of corporate needs. What we argue is that this is a result of a discursive environment in which First Nations broadband issues are dealt with within a discourse of dependency benefitting only the telecom service industry and governments.

In this paper, we examine the development of broadband expansions into Northern Ontario, Canada as a means to exploring this relationship between First Nations, the government of

Canada, and the telecommunications industry. Using this case, we argue that the discourse surrounding First Nations telecom development dependency has been broadly influenced by the decisions, programs and services involved in this project. By showing how it has been influenced thus far, we also provide examples of how First Nations in Canada are resisting these challenges to dependent relationships by taking control of their telecommunication infrastructure and the applications they require to support their local economy, appropriately labelled as First Mile development. This is in contrast to how the rhetoric of government of Canada and the telecommunications industry reconstructs a dependency model under the guise of aid.

Previous research has focused on a discussion surrounding Canada's broadband development policy and the need to frame it in relation to the specific needs of First Nations (McMahon et al., 2011). This present paper focuses specifically on the discourse of Canada's broadband development policy to answer two central research questions: 1) How is the discourse established by the government and telecoms, and 2) how is this dependent service relationship challenged and reshaped by remote and rural First Nations?

Background: Colonisation and Dependency

Dependency, we suggest, applies to the dysfunctional relationship between groups which involves one party attempting to force another party to focus on and utilize their services and structures at the neglect of their own needs (McKnight, 1995). While the concept of dependency is often associated with individual behaviour, we suggest that the practice of dependency is so widespread that it has become the norm for corporations, governments, and institutions to adopt similar practices to protect and maintain their own existence at the expense of the people and the communities they claim to be serving. In this case, the telecommunications industry works to obtain a client-base for the sake of its own survival. Protecting their monopoly control of telecom services in remote and rural First Nations using a variety of legislated policies, pricing and transport strategies becomes acceptable business practices to government control agencies and the corporations. The communities are able to access the required services but are forever using their scarce resources to innovate and use these communication tools without the economic and social benefits that come from owning and controlling the infrastructure themselves.

The grammatical justification of today's version of dependency between First Nations in Canada and their relationship to the Canadian government and their corporate sponsors has its roots in the historical colonization of Canada. The first aspect was fundamentally economic and political, with many of the current issues rooted in the Indian Act of 1876. This act was a means for the European colonists to define First Nations, who were occupying lands that colonists wished to take possession of, as a distinct population. The act attempted to legalise the assimilation of First Nations into the developing Canadian society, characterised by the use of residential schools that required children to renounce their own languages, regulating First Nations to reserve lands, and by making First Nations identity a legal issue (Coulthard, 2007; Palmater, 2011). As the new settlers freed themselves of their European colonial masters, they

became the settler colonizers who were required to honour and protect the binding treaties with the original peoples, now referred to as First Nations. With these acts, the state of Canada had secured power, or biopower (Foucault, 1980), over the newly defined First Nations population. Within these new definitions, the Canadian state has attempted to develop a cohesive discourse within which First Nations issues are determined. First Nations on the other hand, continue to successfully assert their right to self-determination based on the treaties entered into with the federal government and the original colonial powers that began settling in Canada with the assistance of the First Nations.

Recent developments come from the services industry. John McKnight (1995) argues that vast industries have developed to assist people who have been marginalized from the wealth generated by capitalism. Services originally established to assist “the poor” have transformed the poor and those in need of these services into “clients.” Systems that provide social services (counselling, financial, etc), criminal justice and health and medicine have undermined the confidence of people and communities to address their own problems by promising to provide more professional and knowledgeable substitutes (McKnight, 1995). McKnight argues that these institutions have created a “serviced society” in which service industries feed on the very disempowerment they purport to address. As a consequence, the telecommunications industry is dependent upon needy groups, while remote and rural First Nations have been forced to depend on that industry for its communications issues as a result of government policies and programs that support the telecom industry using public funds instead of funding the communities directly to build and control the telecom services they require.

We suggest that service industries, such as Bell Aliant, have colonized First Nations into the serviced society due to the narrative which frames possible interactions. These colonizing industries have made First Nations communities their clients and customers through the constructed surrogate identity within the discourse surrounding remote and rural First Nations.

We argue that First Nation community members are perfectly capable of building, owning and controlling these essential services to their own economic and social benefit. As a result of this conflict, it is the telecom service providers that benefit from the federal government programs that result in First Nations being their customers. The grammar which frames this situation portrays First Nations as a population that needs to be processed into a serviced product. These telecommunication activities have become a service someone else provides for a fee. As communities evolve from self-sufficient environments to dependent environments, service industries have grown dependent on marginalized communities to support their infrastructure and access to public funding opportunities.

Many service industries are now dependent on groups like remote and rural First Nations to provide them with their rationale to exist. When First Nations attempt to provide the services themselves in their communities, the service industries resist these attempts because depriving them of the resources they have become dependent upon challenges their own existence. Local ICT developments made by remote and rural First Nations are now being described as First Mile initiatives.

A community which adopts a First Mile approach does so through the development and maintenance of both an ideology of local economic, social, and cultural development, and a practice of pushing for local ownership of ICT infrastructure (Paisley and Richardson, 1998). Often the adoption of a First Mile development strategy by these remote and rural communities is a result of the telecommunication industry being focussed on using their own resources to develop the competitive urban environments and unattractive government programs to develop their infrastructure in these regions.

First Nations ICT developments have occurred since the 1970s in the remote First Nations across northwestern Ontario, with the most commonly used technologies being radio, television, and telephony (O'Donnell, Miliken, Chong, and Walmark, 2010). Prioritising broadband connectivity occurred in the mid-1990s, when several First Nations began to expand their presence to the internet. At the national level, the Assembly of First Nations (AFN) – the national organisation representing First Nations across Canada – passed five resolutions at their annual general assembly in 2009 with regard to the need for adequate broadband connectivity and access to ICT. They later outlined an e-Community strategy for a First Nations broadband network at another meeting (O'Donnell et al., 2010). This e-Community model is focused on bringing affordable, sustainable, and adequate broadband networks to First Nations and ensuring that the communities can manage their networks effectively, including training and employing local IT support staff. The model ensures that the infrastructure development is driven, owned, and controlled by First Nations, meaning the revenue generated by using these technologies and the local employment created to support their use will benefit the local economy. The AFN has recently solidified their resolution regarding this position (Assembly of First Nations, 2011). Several policy suggestions have been introduced to deal with supporting local and regional telecom developments, such as funding appropriate RMOs and building local capacity through local and regional ICT skills development (see: Whiteduck, T., 2010), but these have yet to see fruition.

The close links between the federal government and the telecommunications industry is an example of how such a policy imbalance appears and is maintained through the maintenance of particular discourses: in this case, one of dependency. As we allude to above, the grammar of the relationship between the First Nations as a distinct group and the state did not always exist. Rather, it was molded through an emergent discourse which had to be crafted through various legislative acts. This serves to attempt to assimilate First Nations culture into the values and practices of Canadian culture (Kulchyski, 1995). With regard to telecommunications infrastructure, this imbalance as the status quo has put many groups in the position of being forced to rely on outside expertise and external service providers (Alexander, 2005; McMahon, 2011).

Gramsci (1971) argues that for true democracy to flourish, such ideology must be completely eradicated and replaced by a counter-hegemony, developed by people within the oppressed group. These people confront the discursive suppositions, theories, and analyses of the ruling group's intermediaries through the common senses of the oppressed group. We show how a

counter-hegemony, through previously subjugated knowledge, is being developed through the work of the First Nations community members using First Mile concepts today. The dialectic of the AFN's e-Community model is vital to development of a new common sense rooted in the remote and rural First Nations' experiences of broadband development. This present study shows how several developments by remote and rural First Nations, the AFN and their partner organizations work to confront the corporate and government ideology.

Methodology

One of our goals is to assess where the Canadian government, telecommunication companies, and First Nations using First Mile concepts, currently stand on the benefits of remote and rural First Nations broadband development. We have chosen to examine the discourse in their reports and documents. The message of the dependency over broadband development is characterised by how these documents frame the imbalances as natural. Examining the discourse in these documents enables us to explore the (re)production of the dominant telecommunication ideology as well as the resistance from the First Nations. Our case study is isolated to the expansion of broadband coverage in Northwestern Ontario, as the most data available was in reference to this situation.

This study uses critical discourse analysis (CDA) to examine historical development of the Northwestern Ontario Broadband Expansion project. We focus on three dependent parties: 1) First Nations organizations using First Mile concepts (Keewatinook Okimakanak (KO) in Ontario); 2) the federal government (specifically Industry Canada and AANDC); and 3) corporate companies (represented here by Bell Aliant, the company that partnered with KO to apply to the government program for the fibre network construction funding).

Our application of CDA draws upon the work of Michel Foucault (1979; 1980), whose work intended to show the applications of power through the discursive construction of a social group (i.e. criminals, homosexuals, workers, etc.). The goal of CDA is to conduct a description, explanation, and critique of "the ways dominant discourses (indirectly) influence such socially shared knowledge, attitudes and ideologies, namely through their role in the manufacture of concrete models" (van Dijk, 1993, p. 258-259. See also: Fairclough and Wodak, 1997; van Dijk, 1985; Wodak and Meyer, 2001).

This work is a part of a larger project in association with remote and rural First Nations communities. The First Nations Innovation project contributes to and learns from these wider networks. We acknowledge the contributions of our collaborators and partners across Canada working on broadband development in remote and rural communities. Together we are building understanding about the many issues involved in developing and using broadband networks and applications in these unique community environments. The three First Nation organization partners in this research project are First Nation owned and controlled organizations at the regional level. These three organizations - Keewatinook Okimakanak (KO), First Nations Education Council (FNEC) and Atlantic Canada's First Nation Help Desk (ACFNHD) - are supporting the rural and remote First Nations in their respective regions on their networks

to develop and use broadband infrastructure, networks and applications for community, social and economic development (First Nations Innovation, 2013). As mentioned, based on the data we analyzed, we focused exclusively on the situation in Northern Ontario working with Keewaytinook Okimakanak.

Analysis and discussion

This analysis explores publically available documents of Industry Canada's Broadband Canada Program and AANDC's First Nations Infrastructure Fund, which is part of a recent expansion of broadband services into rural areas. The project we focus on in particular is the Northwestern Ontario Broadband Expansion project. The history of this project was gathered through reports from the KO First Nations, Bell Aliant, and the governments of Canada and Ontario. The documents discussed below are ones which had discussion related to the Northwestern Ontario Broadband Expansion Initiative. We were forced to exclude some other documents from Bell Aliant simply because there was no mention of First Nations. Highlighted are the main features found in the public discourse of their publically available documents, press releases, and websites. Upon analysis, the framing of First Nations identity was identified as a central concern based on the framing of First Nations in Bell Aliant and governmental documents. Neglect of discussion regarding the issue was also recognised as a concern.

Background

Industry Canada's Broadband Canada program was intended to expand broadband service into remote and rural areas of Canada. One of the funded projects is the Northwestern Ontario Broadband Expansion Initiative, a "state of the art backbone fiber optic network to 26 First Nations by laying 2300 kilometers of fiber optic cable across the Far North" (Nishnawbe Aski Nation, 2012). A key partner in this development was KO-KNET, the group who supports many First Nations in the region to develop their broadband infrastructure and services (Keewaytinook Okimakanak, 2012). Other funding partners in this initiative include the province of Ontario, Aboriginal Affairs and Northern Affairs Canada (AANDC), Health Canada, Northern Ontario Heritage Fund Corporation (NOHFC) and Bell Aliant. Although the Industry Canada program had the broadband mandate for Canada, AANDC is actually leading the roll out of the project on behalf of the other project partners. KO-KNET led the Request for Proposals (RFP) from providers and invited the Nishnawbe Aski Nation (NAN), which is the regional political territorial organization, to work together to ensure the project was successfully supported by all governments. When Bell Aliant responded to the RFP, KO-KNET worked with NAN and Bell Aliant to complete the business case and funding submissions. In the end NAN took the administrative lead for some of the project roll-out, with the majority of public funds being contracted directly to Bell Aliant and KO-KNET's formal role was removed from the project planning.

Prior to the development of this project, KO-KNET had been supporting the ICT needs of many communities in Northern Ontario since 1994 (see <http://knet.ca/info/history> for an abridged history). Amidst their work, they have brought e-health and e-education to remote areas of

Canada, utilizing the latest technology available. While the introduction of broadband and fibre technologies occurred in the early 2000s, it is only just recently that these technologies are making their way into the north of Canada. Since 2001, KO-KNET saw broadband and fibre as necessary to continue to serve the population of northern Ontario. It has only been just recently that the Canadian government's renewed focus on northern development has allowed more progress to be made.

The result was a call for applications by Industry Canada in 2009 for a variety of companies to compete for funding which would cover 50% of eligible project costs (see: http://www.ic.gc.ca/eic/site/719.nsf/eng/h_00001.html). In the case of groups providing services to First Nations communities, their funding opportunities would cover more than 50% of eligible project costs. KO-KNET was the initial First Nations project technical lead in the development of the fibre construction project. This 82 million dollar project was ultimately one of the 84 that received funding assistance. Bell Aliant was the telecommunications company selected by the First Nations in northern Ontario through their RFP process to partner with to complete the broadband infrastructure development project. Bell Aliant is required by the Canadian Radio-television and Telecommunications Commission (CRTC) to provide telephone service across the region. They also have ongoing contractual relationships to provide broadband connectivity in the First Nations across Ontario, Quebec, and Atlantic regions with organizations including KO-KNET.

Bell Aliant

Annual reports from Bell Aliant (BA), a subsidiary of Bell Canada, as well as Bell Canada Enterprise Inc. (BCE) were used to understand the telecommunications' industry's discourse regarding the broadband expansion project and perception of their partners. Reports were taken from 2006 (when the merger of Aliant's operations with Bell occurred) to the latest available report in 2011. This covered the period of time when negotiations were made with Keewatinook Okimakanak, Nishnawbe Aski Nation (NAN), Bell Aliant, and the governments of Canada and Ontario. The presumable audience for these reports is likely potential/current investors and interested customers. The language of these reports reflects both an attempt to appease potential customers and investors of the company's future plans, but also reflects the non-importance of First Nations as people and community to Canada's economy. Their discussion, or rather the lack of it, renders First Nations invisible and continues the colonialism efforts to own and control telecommunication infrastructure across the north.

Bell Canada has offered telephone service to remote and rural communities in Northwestern Ontario since the 1970s, long before their acquisition of the former Aliant Inc, but noted the high costs associated with connecting such groups. Before 2009, no mention of First Nations as a specific group was observed in BA or BCE reports. However, this is also indicative of the telecom paradigm regarding serviceable areas as well as those high cost service areas (HCSA). In 2010, due to the developing partnerships, their language briefly changes. They specify that the Northwestern development is in partnership with the governments of Ontario, Canada, and the Nishnawbe Aski Nation (NAN). This is the only time NAN is mentioned in their reports as of this

time. Prior to this, discussion regarding remote and rural communities in northern Ontario and Quebec are subsumed into the broad categories of “rural” or “regions.”

Discursively, the language in BA’s reports switch between “rural and remote”, “rural and regional”, “rural”, or “high-cost serving area”, and often appear to mean the same groups. BA and BCE’s non-specific language demonstrates how telecoms reports reinforce the invisibility of the remote and rural development issue and First Nations in general. Their language does, unintentionally or not, neglect the identity of their partners and depowers the partner groups while reinforcing their position as benevolent aid.

In the 2010 report, BA is more careful to note that \$55 million of the \$81 million estimated cost will be jointly funded by the Ontario and Canadian governments for the Northwestern development (Bell Aliant 2010 Annual Report, 2010, p. 66). BA freely admits that these partnerships make this possible as they would “not normally be able to [expand our telecommunication infrastructure] given that they are remote, complex, and costly to service” (Ibid., p. 66). As of the end of 2011, BA had received \$47.5 million in government assistance. The project’s end was slated for late 2012 but has since been extended to 2014, with one major component (Project #5 – the Matawa First Nation region) being deferred and the millions allotted to that portion of the project being re-allocated to the other portions of the project to cover BA construction cost over-runs (Beaton, interview).

Regarding the discourse of dependency, this is demonstrated by BA in their 2011 annual report when they discuss how the benefits of connecting remote and rural First Nations is to obtain more potential customers. BA expects that “[the project] will provide more customers access to our broadband Internet service than the current infrastructure permits. These partnerships allow us to expand our telecommunications infrastructure to areas where it would not otherwise be economically feasible for us to do so” (Bell Aliant 2011 Annual Report, 2011, p. 56). As noted above, corporate service colonialism cannot co-exist with the First Mile self-sufficiently motive because telecoms cannot survive without dependent customers. The language of their reports reflects both this and their desire to reinforce the hegemonic notions of capitalist business ventures.

The lone mention of NAN in the 2010 report highlights BA’s reproduction of First Nations as dependents while reinforcing their service agenda. These reports also fail to address that KO-KNET played a significant role in developing the proposal for the fibre development from which BA benefited. The very lack of discussion discursively reproduces the notion of dependence on the telecommunications industry to serve the First Nations rather than working with them to operate their own infrastructure. This is an outward appearance of sensitivity, as BA later reverts to the non-descript language. Their reports deny First Nations their identity as partners to BA and demonstrate how the hegemony of BA as the main participant in this endeavour is reproduced through the omission of their First Nations partners.

Government of Canada

Samples from the government of Canada were taken from specialty documents, press releases, and reports from Aboriginal Affairs and Northern Development Canada (AANDC), Industry Canada, and the Digital Economy Consultation paper. Reports and press releases from the Ontario provincial government and Ministry of Aboriginal Affairs were also examined for a provincial example. Searches were conducted on each government program's website using the search terms "First Nations" or "First Nations and Broadband". Articles were selected for their relation to broadband development, particularly in Ontario for example purposes. Keyword searches were again conducted regarding broadband development.

In AANDC's six reports on the implementation of Canada's Economic Action Plan, rural broadband is mentioned in four of them, from the December 2009 update to June 2011. The sixth report features four paragraphs on broadband projects in a feature called "South of the 60th Parallel" in the section titled "Other Initiatives of Importance to Aboriginal People" (June 2011). It features little else other than a small description of the broadband infrastructure development program, specifying whom it will "serve." It also specifies, or admits, that the program is a "one-time incentive for the expansion of infrastructure in areas where there currently is no business case for the private sector to deploy on its own," which assumes that telecom industry interventions are the default solution. \$185 million in grants and contribution funds from Industry Canada to "develop and implement a strategy to extend broadband coverage to as many un-served and underserved households as possible" (Ibid.). The June 2011 update is about 11,000 words in length and discussion regarding remote and rural broadband development amounts to 184 words (~0.02%) of the total count. Many other issues are given equally little attention in the report, which is indicative of how the remote and rural First Nations broadband situation gets little attention within the discourse even when the discussion focuses centrally on First Nations issues.

Industry Canada's press releases broadly discuss how remote and rural broadband development is important for economic and business development as well as telehealth, distance learning, and quality of life. The Ontario provincial government's few press releases emphasize similar projected outcomes. Outwardly these appear promising because these developments agree with what First Mile groups emphasize as needed improvements. But, likely without the pressure placed upon the government and the telecommunications industry by the people of Keewatinook Okimakanak and other First Nation organizations, this situation would be non-existent.

The Digital Economy Consultation Paper (Government of Canada, 2010) continues this pattern of discourse. This paper was presented at the time as a document intended to stimulate discussion, with a closing date for submissions of 2010. Submissions came in from many experts and scientists with evidence and support for changes to digital economy policy. Since that time, three years ago at the time of writing, the federal government has offered neither a follow-up nor a timeline for introducing the actual federal digital economy strategy. The Canadian government position puts it in sharp contrast to almost every other Western developed country that have clear information society policies in place.

The majority of the Consultation Paper remained urban-centric in its goals and it is implied that they are only concerned with where its wealthiest companies can secure Canada's position in the global digital economy. The effort the paper's rhetoric makes to change Canada's history is interesting. They state that "[f]or generations, we have sought as a country, through appropriate frameworks and policies, to promote the creation of and access to Canadian creative content made by Canadians, designed to inform, enlighten and entertain, and that is reflective of our linguistic and ethnocultural diversity." This rhetorical flair is oddly positioned next to the fact that discussion regarding First Nations is almost non-existent in this paper.

The brief discussion of remote and rural communities note that they "present unique challenges" and that broadband development must ensure that "citizens and communities have more than just basic broadband, but the speeds and capacity for economic growth" (Government of Canada, 2010). Further, the creation of "Canadian content for under-represented communities" and how "Aboriginal Canadians are under-represented in ICT occupations" is also briefly noted in the paper. First Nations, under this rhetoric, are an untapped cultural and economic force to benefit Canada's position in the global economy. Given the minute focus on First Nations, it is no surprise that there were only four submissions in response that focused on Aboriginals/First Nations within the information society. Notably a submission from a consortium of First Nations groups, including the three partners involved in this research project (Whiteduck, J., Burton, Whiteduck, T., and Beaton 2010), was among those few (others: Congress of Aboriginal Peoples, 2010; LaRose, 2010; McMahon and Smith, 2010).

Remote and rural First Nations

This section summarizes both the samples examined to compare to the historical discourse of broadband development as well as how First Nations communities are using these opportunities to publish their subjugated knowledge. Samples from remote and rural First Nations on broadband development was taken from Keewaytinook Okimakanak's KO-KNET websites. Due to its involvement in the Northwestern Ontario project, the Nishnawbe Aski Nation's (NAN) website on the expansion initiative was also examined. Websites were chosen as primary sources for examination in some cases due to the absence of available publications or reports from those groups. In many cases, websites served both as the formal publication and as a means of distributing updates and project developments. Common themes observed were the concentration on jobs and the benefits to health and educational services with full participation of the communities involved in the projects.

As an outlet for news of developments, KO-KNET's e-community website (<http://e-community.knet.ca/>) works to endorse initiatives which will utilise the new ICT tools available for community self-sufficiency, such as videoconferencing for e-health, e-learning, e-business, and e-work. Discursively, this works to emphasize that ICT in the communities will both employ local First Nation community members as well as assert autonomy from dependence on outside assistance. KO-KNET also promotes the identity of First Nations as autonomous, modern people who have been utilizing ICT tools for many years. This information is contrary to what the government of Canada or the telecommunications industry would suggest.

Telecommunications companies focus on potential customers and profits, while government reports focus primarily on the benefits of building up a First Nations workforce for the benefit of the Canadian economy.

NAN's website (2012a) on the Northwestern Ontario Broadband Expansion Initiative echoes many of the benefits cited by KO-KNET, with more emphasis on the economic benefits and less on the community development. Curiously, NAN chooses to cite many figures from the federal and provincial governments (2012b). NAN's rhetorical choices place the emphasis on governmental voices rather than First Nations, contributing to a discourse already dominated from the government and telecom industry perspectives.

First Nations using First Mile approaches to e-community have capitalized on the use of the Internet and their locally owned and managed network infrastructure to show the developments and benefits of the applications and services that they require. Keewaytinook Okimakanak's e-community online environment is documenting the various community owned and managed e-services that are now available in the remote First Nations as a result of their ability to own and manage their local broadband infrastructure. Local jobs, professional skills and revenue generated is now staying in these communities and new innovations and opportunities are able to be explored and developed using their ICT infrastructure. The First Nations' relationship with both the government and Bell Aliant continues to be a challenge for all the same reasons discussed throughout this paper but now all three parties are able to meet to discuss everyone's needs. Everyone depends on each other to be doing the work required to support local development and opportunities.

Summary

Discourse from the government of Canada and the telecoms regarding remote and rural First Nations demonstrates a traditional, colonial approach in the discourse of broadband development: from the non-existence of the issue, to one of concern for a needy group. The proposed solutions as presented by Bell Aliant and the government agencies also demonstrate that they see fibre connection as a means of making remote and rural communities more urban, more able to contribute to the global economy. Bell Aliant identifies additional revenue from the resource extraction industry in the region as a rationale for their investment in the fibre construction project. This is simply an updated form of political colonialism with First Nations and their treaties being ignored.

We would like to remind readers that many of the documents examined in this study focused on First Nations/Aboriginal issues exclusively. Broadband development remains an issue that is given lip service in press releases and reports, and neglected within the wider discourse. In their presentations, press releases and media interventions, government sources tend to present an image of helpless people in need of extra funding and private sector intervention. While intervention is indeed required due to the lack of resources available to remote and rural First Nations, the representation of the situation by the government of Canada reflects that of a parent (Canada) caring for a child (First Nations) by way of day care (Telecoms). This colonial

approach employed by both the government and the telecom industry to working with First Nations must change.

First Nations and their organizations on the other hand are producing evidence that they are able to develop, own, manage and operate the infrastructure required to deliver the broadband services they require. The First Nations are demanding that governments and industry recognize that these developments are using funds that only exist because their communities have this unique treaty relationship with the crown. During NAN meetings, the leadership of the First Nations made it very clear that the \$60 million of public funds raised for the construction of the fibre network are First Nation dollars that they are choosing to invest in this project. With all the changes being made to the project, and with several First Nations being left off the planned network and with the project cost over-runs, the government officials might consider having the First Nations manage their own project instead of leaving it in the hands of the telecom industry. In Northwestern Ontario, the First Nations have a proven record of building and managing their own networks and infrastructure but this history was ignored when the government used public dollars to pay the telecom industry to build and own the infrastructure to serve these communities.

Conclusion

Historically the federal government has a legal responsibility to ensure that First Nations are not exploited in their dealings with corporate entities, also known as the Crown's fiduciary relationship. However the federal government's close links with telecommunications companies, as well as its policies that flow public funding directly to this industry instead of to the First Nations or their organizations, have called the fiduciary relationship into question. Forcing First Nations to be dependent on the telecoms is yet another form of paternal colonial governance that furthers the relationships that benefit these urban centres at the expense of developing remote and rural communities. These relationships also means that many First Nations communities end up being disempowered and unable to deal with the issues themselves as all the government resources are used to take care of the telecommunication corporations.

As McKnight notes, this is the dilemma of a service economy attitude: the need for need (1995, p. 96). An attitude of defeat combined by the rhetoric of care is the material upon which the service economy builds its success. In other words, a service industry survives by needing people to need it. This attitude, as we have shown, is reinforced in the dominant discourse from both government and the telecom industry. Both consistently reinforce the feeling of disempowerment by continuing to silence First Nations in their reports and documents, as well as reinforcing the need for care by those who can provide. Ignoring the First Nations, their history and experience, has resulted in an incomplete project with millions of dollars in public funds being spent on taking care of the telecom company and its way of doing business.

It is perhaps ironic to consider how the telecoms have more need of First Nations than is evident from their reports. Along with fibre expansions to remote and rural First Nations,

telecoms are eager to lay down fibre for the Ring of Fire mining projects in Northern Ontario. What telecoms need and are able to access with government assistance in the process is First Nation permits to access the land for their fibre network. As well, telecoms such as Bell Aliant are now benefiting from using this government funding to serve remote and rural First Nations as a means to help subsidize their expansion to these mines.

What we have shown is how First Nations are combating this rhetoric of colonial-imposed helplessness and delivering concrete alternative approaches that support community ownership and control of the infrastructure and applications. KO-KNET, FNEC, and ACFNHD have all sought to show how remote and rural First Nations communities can take on the work, create new opportunities and build sustainable jobs and infrastructure. While not dismissing the need for partnerships to provide the fibre to the regions, they emphasize the need for jobs and infrastructure to be locally owned and managed by community members. Only then will these communities begin to escape the cycle of dependency being imposed by colonial processes and programs that benefit only private industry and public institutions in urban centres.

If progress is to be made from the government's perspective, it must be that policies must be drawn which do not (re)produce this dependency. The situation does not need policy which continues to serve the telecom industry's needs rather than remote and rural First Nations. We need policies that "recognize the right to work, the right to income, the right to real authority, the right to care rather than be served, the right to tools that allow people to produce rather than consume, the right to working neighbourhoods, the right to working farms, and the right to be free from racism. These are the rights we really need – not more service" (McKnight, 1995, p. 98). Remote and rural First Nations using First Mile have made it their objective of doing this for themselves. The least the government of Canada must do is create the policies and programs that support them in this endeavour.

Acknowledgements

This study was conducted as part of the First Nations Innovation research project (<http://fn-innovation-pn.com>). Project partners include Keewaytinook Okimakanak (KO), the First Nations Education Council (FNEC), Atlantic Canada's First Nations Help Desk (ACFNHD), and the University of New Brunswick (UNB). The research has been funded since 2006 by the Social Sciences and Humanities Research Council of Canada and in-kind contributions from the project partners.

References

AANDC. (June 2011). Implementing Canada's Economic Action Plan: Impact for Aboriginal and Northern Communities. Available from *Aboriginal Affairs and Northern Development Canada*: <http://www.aadnc-aandc.gc.ca/eng/1315405562510>

Alexander, C. (2005). Northern exposure: Assessing citizenship, democracy and the great

- Canadian e-government expedition. *Technikfolgenabschätzung: Theorie und Praxis*, 2(14), 80-87.
- Assembly of First Nations. (2011). First Nations e-Community Strategy. Resolution 53/2011, adopted at the Special Chiefs Assembly, Ottawa, December. Available from: <http://www.afn.ca/uploads/files/sca-res-11.pdf>
- Bell Aliant (2009). *Bell Aliant 2009 Annual Report*. Available from: http://bellaliant.ca/english/ir/2009_annualreport/pdfs/2009_Annual_Report.pdf
- . (2010). *Bell Aliant 2010 Annual Report*. Available from: http://bellaliant.ca/english/ir/2010_annualreport/media/2011-BellAliant-AnnualReport.pdf
- . (2011). *Bell Aliant 2011 Annual Report*. Available from: http://www.bellaliant.ca/english/ir/2011_annualreport/ebook/media/2011-Bell-Aliant-Annual-Report.pdf
- Congress of Aboriginal Peoples (2010). Equal Access to Digital Services for Off-Reserve Aboriginal Peoples. Consultation Paper, submitted to Industry Canada's Digital Economy Strategy consultation and to Indian and Northern Affairs Canada. Available from: <http://www.digitaleconomy.gc.ca/eic/site/028.nsf/eng/00294.html>
- Coulthard, G. (2007). Subjects of Empire: Indigenous Peoples and the 'Politics of Recognition' in Canada. *Contemporary Political Theory*, 6, 437–460.
- Dru Oja Jay (2013). Know Your Rights: A treaty primer for non-natives. *The Media Co-op*, January 14, 2013. Retrieved 15 January 2013 from: <http://www.mediacoop.ca/blog/dru/15600>
- Fairclough, N. and Wodak, R. (1997). Critical Discourse Analysis. In van Dijk, T (ed) *Discourse as Social Interaction*. London, SAGE Publications: 258-284.
- First Nations Innovation (2013). Partners & Communities. Available at: <http://www.fn-innovation-pn.com/partners.aspx#>
- Fiser, A. (2010). A Map of Broadband Availability in Canada's Indigenous and Northern Communities: Access, Management Models, and Digital Divides (Circa 2009). *Communication, Politics & Culture*, 43(1): 7-47.
- Fiser, A and Clement, A. (2009) KNET and Canadian Aboriginal Communities, *IEEE Technology and Society* 28(2): 23- 33

- Foucault, M. (1979). *Discipline and Punish: The Birth of the Prison*. New York: Vintage.
- . (1980). *The History of Sexuality, volume 1*. New York: Vintage.
- Gramsci, A. (1971). *Selections from the Prison Notebooks of Antonio Gramsci*. New York: International Publishers.
- Gibson, K., O'Donnell, S., Coulson, H. & Kakepetum-Schultz, T. (2011). Mental health professionals' perspectives of telemental health with remote and rural First Nations Communities. *The Journal of Telemedicine and Telecare*, 17(5): 263-267. Available from: <http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=1442>
- , Coulson, H., Miles, R., Kakekayskung, K., Daniels, B., & O'Donnell, S. (2011). Conversations on telemental health: Listening to remote and rural First Nations communities. *International Electronic Journal of Rural and Remote Health Research, Education, Practice, and Policy*, 11(2), 1656. Available from: <http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=1364>
- Government of Canada. (2010). The Digital Economy Consultation Paper. *The Digital Economy in Canada*. Available from: http://www.digitaleconomy.gc.ca/eic/site/028.nsf/eng/h_00025.html
- Keewaytinook Okimakanak. (2012). Keewaytinook Okimakanak e-Community. Available from: <http://e-community.knet.ca/node/16>
- Keewaytinook Okimakanak Research Institute (KORI) (2005) *C-Band Public Benefit – Keewaytinook Okimakanak's Kuhkenah Satellite Network work 2001-2005 - Summative Overview - Assisting Remote Communities Across Canada to Access & Use C-Band Public Benefit*. March 28. Available from: <http://knet.ca/documents/05-03-29-Summative-Overview-C-Band-Public-Benefit-KNet1.pdf>
- Kuhkenah Network of Smart First Nations Demonstration Project (2005) Project # 478789 – *Final Report for the Project as of March 31, 2005*. In completion of Industry Canada's Smart Communities Demonstration Project (April 2001 - March 31, 2005) - Submitted August 2005. Available from: <http://knet.ca/documents/KNET-Smart-Final-Report-Aug05.pdf>
- Kulchyski, P. (1995). Aboriginal peoples and hegemony in Canada. *Journal of Canadian Studies*, 30(1): 60-68.
- LaRose, J. (2010). Improving Aboriginal People's Place in Canada's Digital Economy. Consultation Paper, submitted to Industry Canada's Digital Economy Strategy consultation and to Indian and Northern Affairs Canada. Available from: <http://www.digitaleconomy.gc.ca/eic/site/028.nsf/eng/00292.html>

- McKelvey, F. & O'Donnell, S. (2009) Out from the Edges: Multi-site Videoconferencing as a Public Sphere in First Nations. *Journal of Community Informatics*, 5(2). Available from: <http://ci-journal.net/index.php/ciej/issue/view/27>
- McKnight, John (1995) *The Careless Society: Community and Its Counterfeits*. New York: Basic Books.
- McMahon, R., O'Donnell, S., Smith, R., Woodman Simmonds, J. & Walmark, B. (2010) Putting the 'last-mile' first: Re-framing broadband development in First Nations and Inuit communities. Vancouver: Centre for Policy Research on Science and Technology (CPROST), Simon Fraser University, December. Available from: <http://meeting.knet.ca/mp19/file.php/16/Publications/2010-Putting-the-Last-Mile-First.pdf>
- , Smith, R. (2010). Ensuring Aboriginal Involvement in Canada's National Digital Strategy. Consultation Paper, submitted to Industry Canada's Digital Economy Strategy consultation and to Indian and Northern Affairs Canada. Available from: <http://www.digitaleconomy.gc.ca/eic/site/028.nsf/eng/00448.html>
- , O'Donnell, S., Smith, R., Walmark, B., Beaton, B. & Simmonds, J. (2011). Digital Divides and the 'First Mile': Framing First Nations Broadband Development in Canada. *The International Indigenous Policy Journal*, 2(2). Available from: <http://ir.lib.uwo.ca/iipj/vol2/iss2/>
- Milliken, M., O'Donnell, S., Gorman, E. (2009) How KNET and Atlantic Canada's First Nation Help Desk are using videoconferencing for community development. *Journal of Community Informatics* 5(2). Available from: <http://ci-journal.net/index.php/ciej/issue/view/27>
- Nishnawabe Aski Nation. (2012). About NWOBEI. Available from: <http://www.nanbroadband.ca/article/about-nwobei-3.asp>
- Palmater, P. (2011). Stretched beyond human limits: Death by poverty in First Nations. *Canadian Review of Social Policy*, 65/66, 112-127
- O'Donnell, S., Perley, S., Walmark, B., Burton, K., Beaton, B., and Sark, A. (2009) Community Based Broadband Organizations and Video Communications for Remote and Rural First Nations in Canada. In Stillman, L., Johanson, G., and French, R., (eds), *Communities in Action*. Newcastle upon Tyne, UK: Cambridge Scholars Publishing. 107-119. Available from: <http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=404>
- , Milliken, M., Chong, C., and Walmark, B. (2010). Information and communication

- technologies (ICT) and remote and rural First Nations communities: An overview. Presented at the *Canadian Communication Association Annual Conference (CCA 2010)*, Montreal, June 1-3, 2010. Available from:
<http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=404>
- , Molyneaux, H., Gorman, E., Milliken, M., Chong, C., Gibson, K., Oakley, P., and Maitland, J. (2010). Information and Communication Technologies to Support Health and Wellness in Remote and Rural First Nations Communities: Literature Review. Fredericton: National Research Council, May, 136 pages. Available from:
<http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=705>
- , Walmark, B., Hancock, B-R. (2010) Videoconferencing and Remote and Rural First Nations, in White, J., Peters, J., Beavon, D., Dinsdale, P. (eds) *Aboriginal Policy Research Volume 6: Learning, Technology and Traditions*. Toronto: Thompson Educational Publishing: 128-139. Available from:
<http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=704>
- , Kakekaspan, G., Beaton, B., Walmark, B., Mason, R., Mak, M. (2011). A New Remote Community-Owned Wireless Communication Service: Fort Severn First Nation Builds Their Local Cellular System with Keewaytinook Mobile. *Canadian Journal of Communication*, 36 (4) 663-673. Available from: <http://www.cjc-online.ca/index.php/journal/issue/view/137/showToc>
- , Kakekaspan, M., Beaton, B., Walmark, B., Gibson, K. (2011). How the Washaho Cree Nation at Fort Severn is Using a “First Mile Approach” to Deliver Community Services. Presented at the Telecommunications Policy Research Conference, Arlington, September 23-25. Available from:
<http://meeting.knet.ca/mp19/mod/book/view.php?id=1722&chapterid=1441>
- Paisley, L., & Richardson, D. (1998). Why the *first* mile and not the last? In L. Paisley, & D. Richardson (Eds.), *The First Mile of connectivity: Advancing telecommunications for rural development through a participatory communication approach*. Communication for Development. Rome: Food and Agriculture Organization of the United Nations (FAO). Available from: <http://www.fao.org/docrep/x0295e/x0295e03.htm>
- Perley, S. (2009) Representation and Participation of First Nations Women in Online Videos. *Journal of Community Informatics*, 5(2).
- van Dijk, T. (1985). *Handbook of Discourse Analysis. Volume 4: Discourse Analysis in Society*. London, Academic Press Inc.
- . (1993). Principles of Critical Discourse Analysis. *Discourse and Society* 4(2): 249-283.

Whiteduck, T. (2010). First Nations SchoolNet and the Migration of Broadband and Community-Based ICT Applications, in White, J., Peters, J., Beavon, D., Dinsdale, P. (eds) *Aboriginal Policy Research Volume 6: Learning, Technology and Traditions*. Toronto: Thompson Educational Publishing: 105-117.

Whiteduck, J., Burton, K., Whiteduck, T., & Beaton, B. (2010). A First Nations Perspective on a Digital Economy Strategy and an Aboriginal Connectivity Strategy. Consultation Paper, submitted to Industry Canada's Digital Economy Strategy consultation and to Indian and Northern Affairs Canada. Retrieved 9 August 2012 from:
<http://deen.gc.ca/wpcontent/themes/clf3/upload/1938/Aboriginal-Connectivity-AFN-First-Nation-Submission.pdf>

Wodak, R. And Meyer, M. (2001). *Methods of Critical Discourse Analysis*. London: SAGE Publications.