Experiencing Space:

A Socio-Cultural Case Study of the Canadian Government's Pioneer Telegraph Service in Western Canada, 1870 - 1904

by

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ABSTRACT

In this thesis, the development of a Dominion government telegraph on a portion of the Canadian frontier is analyzed as a formative moment of socialization and cultural expression. It utilizes a socio-cultural framework for understanding the 'experience of space'; notably how changes in presence or access to one another -- facilitated by this new mode of communication -- are central to this experience.

The thesis argues that the telegraph is crucially related to issues of public confidence. Its approach draws upon recent social and cultural treatments of communication technologies which stress the ways that the material reality of such technologies become part of a larger social and symbolic order. The thesis refers to indicators such as reliability, public works, public interest, competence, and trust to investigate a social apprehension of confidence. 'Confidence', in this case, is not treated as fixed and equally understood, but as something that is invested, shared, built-up and worn down. Thus concerns for and with 'public confidence' help to reveal changes in socio-cultural development. The research also investigates important questions with respect to regionalization of information and understanding. With the telegraph, boundaries reveal both a distant and a local capacity to influence the sense of place. The expression of 'domain' and 'station' are argued to both explicate these issues.

The archival evidence in the thesis encompasses telegraph projects in Rupert's Land, British Columbia, and notably the Yukon between 1870 and 1904. Their initiation, operation, and, later, their disregard are argued to provide us with practical insights into social behaviour and experience organized around telegraphic communication.

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Chapter One

An Introduction

In this thesis I address changes in human experience that follow the introduction of pre-dominant media of communication; particularly adjustments in the experience of space brought on by the extension of the telegraph to frontier regions of Canada. I discuss this problematic as a government practice of extending access to communications. Widespread access to a pioneer telegraph service is evaluated in terms of its social and cultural consequences. Historical data is largely derived from a case study of the Dominion Government Telegraph and Signal Service.

Research Focus

During the nineteenth-century the telegraph became a means of bringing actors together in Western Canada. If it is to be called a strategy of Government then it was a good one. Unlike Canada's later attempt to 'bind the nation with steel' the Dominion Government Telegraph and Signal Service (DGT) was quickly constructed and widespread. The telegraph pioneered alternate routes, Fort Garry to Edmonton, for instance, and was responsive to community and business requests for extensions. And it could use local resources -- donated trees and labour -- to offset the cost of the work. At the same time, telegraphs were frail enough to require constant attention, and thus warrant year-round employment. As early as 1870, a government telegraph service put Ottawa and the Red River country within moments of

one another. Upon completion of this link the settlers considered themselves to be "of the world." The government line represented a commitment to personal safety that was heretofore absent. The telegraph, as the saying goes, put them on the map. Moreover, the Government telegraph made it almost impossible for Canadians to get lost in their own country any more. Marking every centimetre with wire, every thirty metres with a pole, and every 80 kilometres with a station, or a câché, the telegraph became a reasonable course of travel for those persons whose survival skills were limited to largely urban challenges or whose wilderness experiences were derived from common literature. This was especially so during the winter months. On the Prairie, the line could provide dry firewood where none existed and in the mountains of British Columbia the line was littered with refuge huts. Strikingly, the overhead line always presented a potential link with one's destination should trouble or tedium intervene. A simple break in the line or a short code tapped out on the wire conveyed the same message, help.

The line also linked people with a larger Government undertaking of bringing Colonies and Territories together. Its introduction in the West coincides with the Red River Rebellion and the cession of the North-West Territories in 1870 and British Columbia's confederation agreement in 1871. The Government line is a technological solution to the problem of managing new lands. But it is also a project that is intimately involved in the becoming of a Western Canadian place. The telegraph was a staple

of Western development. Because, the Dominion Government Telegraph and Signal Service frequently was the first indication of a Federal presence in newly opened territory, DGT offices attracted Federal -- postal, surveying, railroad, etc. -- bodies and contained the gist of Federal power, surveillance. In all cases, each pulse along every kilometre of line was somehow connected to a central organizing influence in Ottawa.

If one were solely looking at the Federal aspects of telegraphic ownership, one could conclude that it was a quick and cynical fix to momentary pressures or 'cyclones'. One could look past the Government's telegraph as an unplanned for moment within a more important railroading project. But the telegraph touched remote regions of Canada like no railroad ever would. Here a dialectic of control is observed. The telegraph, as a public work, invokes and shares Federal power. And so, a margin of change emerges. Within the margin the Government's telegraph presented opportunities for some people to feel secure in their decision to live away from the centre and for others to employ themselves in the Service regardless of the boom or the bust, the mirage or the disappointment inherent in the place. The DGT shared a sense of continuity or ongoingness in the margin that exceeded the flashes of interest that came and went from time to time. Similarly, the pioneering telegraph carried with it an ideology of discovery that failed to recognize the aboriginality of the land. The DGT buttressed this thinking and gave settlers Telegraph Coulee, the Telegraph Trail, K1, K2, K3, etcetera, to

mark the space as civilized, and thus theirs. Moreover, the Government's telegraph supported the drunks, misfits, adventurers, and future politicians whose job it was to occupy these places and whose personalities would share themselves with geographical distinctions such as The Qu'Appelle, The Badlands, and frighteningly, The Interior.

The DGT was an opportunity for Government to show itself to peripheral interests. Lines would be strung, branches approved, and stations opened -- and this can be said without qualification -- *regardless* of conditions. In this way, a Government prerogative gained access to remote circumstances. But the DGT was also compelled to reflect the particularities of the places that it passed through, thus its proximity was tempered by its isolation.

Research Background

This thesis begins in the stacks of the National Library of Canada. During my year of coursework at McGill, I acquired a once-a-week habit of hopping on the Montreal-Ottawa express and spending a day at the National Library. By making up some excuse -- usually one that meant that library staff would have to cart up 50 or more volumes -- I gained access to the stacks. While wandering among those stacks one day I came across an old National Film Board slide/tape presentation on the Yukon telegraphs. The transcript provided some dates, mentioned the haste with which the line was constructed, and noted that the telegraph was a government undertaking. Somewhere near the end

of that transcript the author also mentioned that the line had assumed an almost 'mythical' status among the people of British Columbia.

Research Methods

The following year, I moved from the stacks to the PAC. I soon found that a background in communications policy did little to prepare one for historical research. And so, lacking sophistication in this regard, I simply read everything that mentioned the government's use of the telegraph. This work resulted in a broader appreciation of the government telegraph service (for example, that it stretched to Blanc Station at the eastern frontier of the Quebec border to Cape Beale on the west coast of Vancouver Island and from Pelee Island in the South to Boundary, Alaska in the North) and a narrower understanding of its use. The PAC records more or less emphasized the national co-ordination of the line. The mythical dimension -- the 'how' and the 'what' -- was conspicuously absent.

I followed the telegraph project to British Columbia. At the Provincial Archives in Victoria and at the UBC Archives in Vancouver, I again engaged in document review. Here, my digging yielded information that was very different from what I had collected in Ottawa. Telegraphers manuscripts, diaries, and letters organized a history of individuals' actions and personal experiences. Similarly, anecdotal histories, such as Hamilton's Yukon Story, regional newspapers -- the North Pacific Times, the Sentinel, the Colonist, later the Sun -- and contemporary

journals and publications, the Telegraph Journal and Electrical Review, The Telegraph and Travel, and The Wild Northland, for instance, afforded a general social form. On two subsequent trips to the PAC I verified dates and names and the like, and followed new leads. Needless to say, the cost of conducting cross-country research was high and the project was delayed several times as a result.

My archival research is supported by a literature review. This literature encompasses theoretical engagements with the communication of experience, period histories, and theses and dissertations that address the development of Western Canada. Of this first group, the work of Harold Innis and Anthony Giddens is a touchstone. From them extends an approach that treats communication in a formative sense and a time/space framework that copes with the social and cultural implications of new media. Not surprisingly, they lead to diverse texts and disciplines. On one hand, cultural history; on another, elements of time-geography. Historical journals have been reviewed for articles that deal with the extension of the telegraph during the period that this thesis covers. Otherwise, theses and dissertations -- largely those produced at UBC and other Western universities -- were used as a cross-reference for archival data and to include features of regional history that were otherwise undocumented.

The main body of information, however, is archival. This information appears throughout the thesis although primary

historical data is concentrated in the final two chapters, a case study of the DGT's western service. This case encompasses a 34 year period that begins in 1870 -- with the Federal extension of a line to Fort Garry -- and ends in 1904 -- with the completion of the Washington Alaska Military Cable and Telegraph Service (WAMCATS). Although this case regards a western extension of telegraphic services it relies heavily on material relating specifically to the British Columbia and the Yukon lines.

Research Tradition

It was late into the development of this thesis that I began to feel uneasy about its final organization. Naturally, I turned to historians for guidance. I soon found, however, that the study of communications occupies a rather unceremonious position in that discipline. Although communication systems undeniably have a history, historians, as Robert Darnton observes, "have rarely studied it" (1990: p. xvii). Moreover, historians are circumspect of others. No less a personage than Elizabeth Eisenstein, for instance, has wagged a finger at the conservative tendencies of her peers and cautioned:

> The fifteenth-century 'media revolution' is also of interest to those who cultivate various avant-garde fields (communications theory, media analysis and the like) and who scrutinize the current scene without paying much heed to the past (1979: p. 39)

Eisenstein's admonition, like Darnton's lament, appeared to invite new histories and, as I thought about it, to encourage new historians -- avant-garde or not -- to do the work. Darnton, whose own work captures the personal revolutions of France's

eighteenth-century book trade, adopts the term cultural history. Others prefer to call it ethno-history. Still others call it political economy, interdisciplinary studies, even communications history. "It is assumed, that history is not a seamless web but rather a web of which the warp and the woof are space and time woven in a very uneven fashion and producing distorted patterns" (Innis, 1984: p. xvii). Within this framework historians think of symbols as "polysemic, fluid, and complex" (Darnton, 1990: p. 336) and emphasize the wideranging relationships between "geography, economics, and political and social change" (Berger, 1976: p. 261). It is into this tradition that this thesis fits and where its contribution lies.

Research Approach

From the beginning, historical data indicated that the introduction of the telegraph was profoundly important; formative and certainly widespread. Hence, this thesis is guided by two pre-dominant themes. On the one hand, the 'revolutionary' consequences of new communications technologies, and on the other hand, the issue of space and spatiality. The former situates the telegraph in a history of improved communications and the latter suggests an interpretive scheme for reactions to new technologies and, particularly, the experience of a pioneer telegraphic form. This treatment incorporates elements of time-geography -- as articulated by Torsten Hägerstrand, Tommy Carlstein, and Allan Pred -- but not its methodological program.

In this thesis, I propose no one approach to my subject. Rather, I adopt guidelines that feature communications as the "primary phenomena of experience" (Carey, 1989: p. 25). Anthony Giddens contends, for instance, that the fundamental problem of social theory is explaining "how the limitations of individual 'presence' are transcended by the stretching of social relations across time and space" (1986: p. 35).[1] Like the problematic proposed by Harold Innis, Giddens asks how social order persists.[2] As a consequence, Giddens's theory of structuration, while it comprehends a constitution of society, can also be read as a philosophy of communicative practice.[3] For Giddens, communication (as interaction, co-presence, and reflexive monitoring) is inextricably tied to the formation and reformation -- the appropriation and transformation -- of "the practical activities carried out in the enactment of everyday life" (p. 242). Human communication is portrayed as specialized, yet ubiquitous; elemental, though contingent. Mindful of limits, Giddens enlarges our consideration of co-presence by introducing

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[1]All references are to the 1986 edition of the Constitution of Society: Outline of the Theory of Structuration. Berkeley: U of California P.

[2]See, for instance, "The Problem of Space" in Bias of Communication. Toronto: U of Toronto P, 1984. pp. 92-131.

[3]This view is supported by a growing number of communications theorists. In the mid-1960s, for instance, Raymond Williams argued: "What we call society is not only a network of political and economic arrangements, but also a process of learning and communication" (1966: p. 19). More recently, Marike Finlay has suggested that: "the act of communicating....is itself a **social practice** which is part of the world, indeed perhaps the central part of the social world" (1987: p. 13).

the concept of presence-availability, the "means whereby actors are able to come together" (p. 123). He notes that over the past one hundred years, technical innovations have altered the potential for local interaction, and thus the character of access to one another. Giddens's consideration of electric telegraphy, though brief and somewhat fragmented, suggests that the telegraph is crucial to comprehending adjustments of human 'presence' and the reproduction of new economic (dis-) order (pp. 192-193). Simply put, Giddens renders electric telegraphy as integral to understanding the invention of modernity:

> Communities of high presence-availability in **all** cultures, prior to only some one hundred years ago, were groupings of individuals in close proximity to one another....The media of communication were always identical to those of transportation....The mechanization of transport has been the main factor leading to the dramatic forms of time-space convergence noted...as characteristic of the modern age. But the most radical disjuncture of relevance in modern history (whose implications today are very far from being exhausted) is the separation of media of communication, by electronic signalling, from the media of transportation, the latter always having involved, by some means or another, the mobility of the human body. Morse's invention of the electromagnetic telegraph marks as distinctive a transition in human cultural development as the wheel or any other technical innovation ever did. (p. 123)

Giddens suggests that the task of communications research is to probe how such technologies might be implicated in the minutiae of everyday life. Hence, Giddens's program recognizes that the practice of communication both emphasizes and exceeds corporeality and brings together the particularities of human

agency with the "supra-individual durée" of institutions -- a process he calls time-space distanciation.

The communication theory of Harold Innis develops a structural model of bias that, in many ways, complements Giddens's concern with limits.[4] For Innis, media of communication express and orient social organization in the sense that they are indicative of pre-dominant social practice.[5] Innis contends that technological innovations do not in themselves transform society but rather suggest a change of everyday life:

> Technological advance in communication implies a narrowing of the range from which material is distributed and a widening of the range of reception, so that large numbers receive, but are unable to make any direct response. Those on the receiving end of material from a mechanized central system are precluded from participation in healthy, vigorous, and vital discussion. (p. 102)

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[4]Although Innis's communications works fail to develop the significance of either the telegraph or the telephone, his economic studies reveal an acute awareness of their import. His 1943 essay on liquidity preference and industrial development, for instance, describes the relation between new efficiencies of communication and capital reproduction. "The completion of the Atlantic cable in 1866, the extension of cables, telegraphs, and mail steamships linked the financial structures of North America to Great Britain and to the Far East and facilitated capital movements and more direct control of economic and political development" (1973b: p. 353).

[5]For a critical discussion of Innisian protocols, see Paul Heyer's 1981 essay, "Innis and the History of Communication: Antecedents, Parallels, and Unsuspected Biases" in Culture, Communication and Dependency. Ed. Melody et al. Norwood, NJ: Ablex, and Chapter Eight of his 1988 book Communications and History. Greenwood Press: New York.

Hence, the bias of communication signifies both an extraordinary capability to store information (bind time) and an enlarged capacity to extend influence (bind space). Pre-literate Greek culture provided Innis with what he considers to be an ideal situation: the bias of time was balanced by the bias of space. That is to say, the capacity of human memory coincided with the limitations of human movement. But, Innis writes, a "decline of oral tradition meant an emphasis on writing (and hence on the eye rather than the ear) and on visual arts, architecture, sculpture, and painting (and hence on space rather than time)" (1952: p. 131). Furthermore, he believes that an extraordinary concern with time or space also involves a potential or an actual strain on the resources of a civilization and an opportunity to challenge its authority. Bias, in this sense, stresses a margin of change by supposing a dialectical -- a negotiable -- model of power. By overlaying this generalized schema on society, Innis found that he could comprehend and assess the emergence and decline of civilizations in a way that specialized disciplines -- such as economics, history, and military sciences -- could not. Innis's concept of bias augments a consideration of technological resources only in so far as they are bound up with the reproduction and transformation of institutional/human -- social/corporeal -- relationships.

Giddens and Innis emphasize an on-going struggle between the sanctity of human-life movement and the conventional machinery that undergirds and overcomes the boundaries of 'civilized'

relations. Both also elaborate the 'revolutionary' character of communications in the structure and structuring of everyday life. And each address the limits of order by stressing the human use and institutional usefulness of various resources.

Elizabeth Eisenstein's (1979) treatment of the printing press and Stephen Kern's (1983) cultural history of the nineteenth century both stress the importance of technological resources. Each dig deep into the consequences of media revolutions and find their expression in the continuity of human life. Eisenstein, for instance, argues that Protestantism and 'modern' scientific thinking were ushered in by print and connects these forces with changes in socialization. "The displacement of pulpit by press is significant not only in connection with secularization," she writes, "but also because it points to an explanation of the weakening of local community ties" (1979: p. 131). Similarly, Kern addresses a correspondence between access to distance-spanning technologies (bicycles, planes, telephones, and so forth) and cultural developments. He argues that innovations in technology laid a 'material foundation' that directly shaped the consciousness of the time. For Kern, cubism, urbanism and imperialism all return to an annhilation of distance that the telegraph first demonstrated. "An actual experience of the masses," Kern calls it,

> that enabled them to raise money, sell wheat, make speeches, signal storms, prevent log jams, report fires, buy groceries, or just communicate across ever increasing distances (1983: pp. 214-15)

Others, notably James Carey (1989, 1983) and Carolyn Marvin (1988) deal specifically with the promotion, adoption, and extension of electric technologies of communication. Their work emphasizes how improvements in nineteenth-century communication disturbed human presence and established a template for its re-organization. This mapping phenomenon, observed by Carey in prose and commerce and by Marvin in bodies and manifestos, assumes extraordinary methodological importance. It excises the telegraph from a merely technical determination and attaches it to larger issues of culture and society.

The telegraph is, to borrow James Carey's phrase, a "representation for and of reality" (1989: p. 29). As such, it addresses a great many cultural themes which pertain to 19th century life; particularly, the experience of space. In support of his thesis Carey (1981) constructs a fundamental cultural map for interpreting changes introduced in North America by 'revolutions' in communication. On one hand, a frontier embodied by 'boomers' and buffered by isolation and, on another hand, a back-tier that is stocked with outfitters and fueled by the prosperity extracted from the margin. "Every frontier, in short, has a back tier" (1981: p. 80). Joining these regions is the pioneer telegraph. Carey (1983) suggests that the telegraph is a standard in the regionalization of experience and is well-suited to evaluating expressions of space; especially issues of consciousness and uneven development. Joshua Meyrowitz (1985) uses a similar scheme to explain a redistribution of spatial

experience. Meyrowitz, like Carey, speaks of a separation between back and front. His interest, however, is not so much with the bias that characterizes front/back relations, but rather with the manner in which electronic media merge situational information and change behaviour; indeed, the way that they disrupt our very sense of place. For Meyrowitz the greatest impact on the sense of place, "has been on social groups that were once defined in terms of their physical isolation from one another" (1985: p. 308). The telegraph put Imperialists and Aboriginals, national governments and former colonies, bankers and miners, bureaucrats and linemen into unusual proximity to one another. "Like all electronic media," he writes,

> the telegraph not only defies limits formerly set by distance, but also bypasses the social rite of 'passage', that is the act of moving both physically and socially from one position to another (1985: 116).

When integrated, the scheme that Carey and Meyrowitz present is remarkably straight forward. Back spaces and front spaces are separate, yet increasingly connected. At a minimum, the human appropriation of electronic media, such as the telegraph, captures personal, social, and geo-political engagements with space. This is not so much a matter of who controls 'the medium', but an issue of how it is included in and fed back into our knowledge and use of these spaces.

Research Outline

In Chapter Two considerations of spatiality are reviewed and a research framework is developed which consists of a guiding set

of concepts. These concepts are applied in three spatial contexts. Here, the research framework addresses notions of personal, social, and geo-political spatiality, by using examples pertinent to telegraphy and the nineteenth century.

Chapter Three presents the first part of the case study on the Dominion Government Telegraph and Signal Service. In particular, it examines the extension of access to telegraphic communications in terms of domain. This provides a general background for understanding the public working of the DGT and also shows linkages between that work and contemporary issues of confidence.

Chapter Four extends the work begun in the previous chapter. Here, the extension of telegraphic services is discussed in terms of station or position. The negotiation and expression of station by communities, groups, and individuals emphasizes how the problems of space are related to the practice of extending access.

An Afterword discusses the limitations of the research presented. It also proposes areas of potential collaboration and recommends possible directions for future research.

Chapter Two:

Space as an Interpretive Scheme

If you flip through Canada Post's directory of postal codes you will find that many of these codes end with a zero. My code in Sioux Lookout, Ontario, for instance, is P0V 2T0. Here and in other Canadian places the Post Office reckons that a zero denotes remoteness. Insofar as I am isolated from some resources as well as from some protocols and forms of authority, I am, at the same time, well-connected to other places by telephonic and LPRT technology. But when I walk across the road and into the bush I am, in not too many steps, isolated from modernity or from the standards of living that generally constitute an appreciation of 'Canadian' space.

These 'remote' experiences manage my perception of things. My point is merely a suggestive one. In this chapter, I ask you to regard the experience of space as an interpretive scheme that is appropriate to the writing of Canadian communications history. Here, I take a cue from Innis's dictum that the "present Dominion emerged, not in spite of geography but because of it" (1973a: p. 393).

This chapter establishes a regionalization in the experience of space. Distinguished as an interplay between front and back spaces, this action is then described in personal, social, and geo-political terms. Throughout, I use telegraphic examples to emphasize what cultural historian, Stephen Kern, calls the "unique spatialities created by technology" (1983: p. 220).

I preface this chapter with a brief discussion of spatial portrayal in academic writing and I end it with an assertion that spatiality is a suitable framework for evaluating changes that follow the introduction of new communication technologies. On the one hand, I identify a particular interpretive need, and, on the other hand, I apply a scheme that organizes a negotiation of human experience. The purpose of this exercise is to guide the historical project that is pursued in the subsequent chapters, namely, the extension of a pioneer telegraph across a Western Canadian frontier.

A Problem of Spatial Portrayal

Time, Anthony Giddens writes, "is perhaps the most enigmatic feature of human experience" (p. 34). Time is at once the return of day-to-day life, one's life span, and the longue durée, "both the condition and the outcome of the practices organized in the continuity of daily life" (p. 36). Time, in other words, is sustained in the durée of living and embedded in the institutions which exceed and distinguish our history. Giddens is quick to qualify and complicate this riddle by drawing our attention to an existential bias of social scientific thinking, what might be called the hegemony of time:

> Distance in space is apparently easy to comprehend and to cope with conceptually; distance in time is not. It might seem to follow from such reasoning both that space can be left to the geographers and that the study of spatial forms is relatively uninteresting. (p. 363)

Not surprisingly, geographers are the loudest critics of social studies which disregard spatial factors. Louis-Edmond Hamelin's treatise on Canadian nordicity laments that throughout the "evolution of humanity, space has tended to appear as a variable that is both dependent and inflexible; it has been thus in the Canadian North" (1979: p. 47). For Hamelin, this explains much of the indifference that characterizes a Canadian appreciation of space. As a country, Canadians appear unable to cope with the implications of a polysemic and interactive engagement with their northern space. Internationally, Neil Smith has developed a program which confronts the problem of uneven development by asking questions about how space is produced. Smith contends that "we all conceive of space as emptiness, as a universal receptacle in which objects exist and events occur" (1984: p. 68). Geography, while at the cutting edge of human progress is "simultaneously rendered increasingly irrelevant to social intercourse" (1984: p. 80). Mel Watkins, for instance, argues that these concepts coincide with a historical marginalization of indigenous presence in Canada. The Indian, Watkins writes, was made irrelevant:[6]

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[6]"Racial irrelevance manifests itself ideologically and, as William McNeill relates, practically: "White settlement along the frontier was assisted also by the fact that destruction of Indian populations by infectious diseases, of which smallpox remained the most formidable, continued unabated. The ravages of smallpox among Indians may in fact have been assisted by deliberate efforts at germ warfare. In 1763, for instance, Lord Jeffrey Amherst ordered that blankets infected with smallpox be distributed among enemy tribes, and the order was acted on" (1973: p. 222).

> This functional irrelevancy is dramatically demonstrated in the very terminology that is used to characterize Canada -- and other like cases such as the United States, Australia, and New Zealand. Their aboriginal populations notwithstanding, they are called "new countries" or "empty lands" or "areas of recent settlement" or "undeveloped areas" -- or simply "the frontier". (1981: p. 63)

Similarly, Allan Pred prefaces his theory that place is a historically contingent process by noting that until very recently "places and regions have been portrayed as little more than frozen scenes for human activity" (1986: p. 6). Pred, however, understands a sense of place as one with "symbolic and emotional meanings, memories and attachments to people and things" (1986: p. 21); experiential variety that a conditional spatial vacuum could never support. For Giddens and others, then, the consideration of space is central to comprehending the limitations of social organization.[7] Time cannot not simply be stretched across social scenery, but must accomodate cultural presumptions of space -- its annhilation, for instance -- that pertain to the very 'becoming' of history. Hence, socially scientific geography not only supposes that space is actively engaged with human being, but also that the character of spaces is often concealed from our view.

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[7]Fernand Braudel, for instance, insists that geography, history, and society constitute a single moment. Posing the question, "Is there a geography of biological man?", Braudel writes: "Geography seems to me, in its totality, to be the spatial study of society, or to take my thoughts to their conclusion, the study of society through space" (1980: p. 115).

The Regionalization of Experience

Adam Shortt's 1894 vacation to the Canadian North-West produced in the young historian an ambivalence toward the character of nationhood. During that summer he probed an agglomeration of Prairie places and personalities and recovered an uncommunicated scheme of Canadian social development. Upon his return to Ontario, Shortt wrote of "two quite distinct, and in some measure conflicting ideas answering to the name North-West:

> The one, corresponding to the great North-West with the retinue of superlatives, was obtained by reading Government pamphlets and settlers' guides, C.P.R. literature of a similar type, and articles on the territories and the railroads....The other, a much narrower, more localized and much less splendid, but withal more human idea, was derived mainly from conversations with persons who had lived in widely different parts of the North-West. (1895a: p. 183)

Although Shortt's intention was to explicate, quite literally, the degree to which North-Western settlers had been "railroaded" by the federal government, his careful observations of Prairie culture also emphasize a social-spatial duality. On the one hand, the North-West nurtures a public perception of the Dominion and, on the other hand, routinely challenges an organic presumption of the State. Moreover, his consideration of the means by which each "idea" of the North-West had been described, learned, and exchanged suggests that media of public communication are carriers of relationships that reflect and conceal how a location's character is installed.

Shortt's early regard for the social organization of space anticipates Erving Goffman's interest in the region as a site where certain brands of human interaction may occur. Goffman defines the region as "any place that is bounded to some degree by barriers to perception" (1959: p. 106) and divides it into front and back portions. For Goffman, the front region fosters 'impressions' that are "knowingly contradicted as a matter of course [in the back region]" (1959: p. 112).[8] Accordingly, Goffman contends that back regions are neither arbitarily chosen, nor accidentally imputed.[9] Rather, these regions are concrete extensions of social experience:

> Given the values of a particular society, it is apparent that the backstage character of certain places is built into them in a material way, and that relative to adjacent areas these places are inescapably back regions. (1959: p. 124)[10]

Goffman used the concept of regionalization to demonstrate how changes in place or physical setting reflected changes in social

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[8]For a traditional discussion and application of the back region concept, see Turner and Edgley's 1988 essay "Funerals in America" in Dramaturgical Analysis of Social Interaction. Paul Hare and Herbert Blumberg, Eds. New York: Praeger.

[9]This point finds support in historical and geographical considerations of marginal areas. Braudel, for instance, maintains that life in peripheral zones "often resembles purgatory or even hell. Their mere geographical location provides sufficient explanation for this" (1977: p. 82).

[10]Aldous Huxley illustrates the complexities of this 'built-in character' when he invites the reader and the half-breed into the 'New World' classroom: "In the Beta-Minus geography room John learnt that "a savage reservation is a place which, owing to unfavourable climatic or geological conditions, or poverty of natural resources, has not been worth the expense of civilizing" (1973: p. 130).

interaction. On the one hand, recognition of 'position', 'station', and 'domain' is a pre-condition of appropriate social behaviour, and, on the other hand, disregard for 'setting' will lead to untoward results. J.S. Macdonald, a longtime Supervisor with the Dominion Government Telegraph (DGT) in Saskatchewan, provides this example of the latter. The setting is thus. Two men, Mr. Macdonald and a junior operator, have been sent out onto the Prairie to repair a break in the telegraph line. The condition that motivates this exercise is the Métis conflict of 1885. Their objective is to resume military communications. Upon discovering the damage, Macdonald finds himself unable to conclude the repair for the lack of sufficient water to ground the wire. A command that the junior operator urinate in the general vicinity of the break is met in this way:

> Joe's sense of decorum was outraged, and he vehemently protested that he had not come from Montréal and risked his life a hundred times among savages to undertake tasks such as this. (Macdonald, 1930: p. 42)

To borrow from Innis for a moment, Joe's behaviour occurs 'not in spite of his remoteness, but because of it.' Joe's 'sense of decorum' supersedes his 'sense of place'. His outrage indicates that he had never really left Montreal (the front region) and, as a result, is quite justified in his rejection of a prescribed social situation (in the back region). Joe further distances himself with his reference to civility. His willingness to risk death, 100 times, is contrasted with his refusal to suffer, but once, from embarrassment. The 'savages' counterpoint Joe's reserve.

The concept of regionalization also points to the ways in which social procedures are organized in a given place. "Back regions," writes Giddens,

> clearly often do form a significant resource which both the powerful and the less powerful can utilize reflexively to sustain a psychological distancing between their own interpretations of social processes and those enjoined by 'official' norms (1986: p. 126)

The distance between the back and the front permits a negotiation to occur. In this bargain, aspects of social control, central governance, for instance, are arranged and changed in unanticipated ways. Shortt observes that this back to front pressure was characteristic among Prairie settements in the 1890s:

> the tendency to regard the Dominion Government as a kind of donkey engine for assisting the settlers in all sorts of ways, is very strong, and the organizing of various influences to operate upon the Government for special purposes expresses the chief political activity of the Territories. In a typical town in the North-West, I observed that the streets had never been altered from their condition as primitive prairie. There were no sidewalks except on part of the main street. There was no waterworks, no sewage system, no street drains...Yet the town had a mayor and council and levied taxes. Discussing civic matters with one of the councillors, I asked what the town council found to occupy its attention, and its revenue. "Well," he replied quite seriously, "its chief business is to keep the claims of the town and district before the Dominion Government" (1895b: p. 16)

Here, the mayor and council allocate scarce resources toward the communication of their experience to the government at Ottawa. The local consequence is that the town assumes more and more of a

back region flavour to the outsider -- no sidewalks, or waterworks -- regardless of the fact that the residents may consider such 'improvements' unnecessary. In the distance, this same self-inflicted impoverishment is documented -- in telegrams, Ministerial correspondence, and proposals -- as evidence of the government's disregard for remote settlements. In the bargain, the town engages its own isolation and utilizes government channels, such as the telegraph, to empower its 'position'.

Joshua Meyrowitz has advanced Goffman's and Giddens's work considerably by asking how our understanding of social setting has changed with the introduction of electronic media of communication. Meyrowitz argues that electronic media like the telegraph constitute a technological sense of place, and thus, "give us new events and new behaviors" (1986: p. 43). The telegraph, for instance, broke down hierarchies built on prerogatives such as gender and broadened the implications of social distance. The rapidity with which the telegraph was extended created a shortage of operators. Moreover, the aural and visual imperceptibility of the operator and the standard code made gender irrelevant. Telegraphic protocols enclosed gender -- from station to station -- so that changes in the workforce could occur. "New media," as Carolyn Marvin explains, "took social risks by permitting outsiders to cross boundaries of race, gender, and class without penalty" (1988: p. 107). This is not to say that the telegraph destroyed the gender hierarchy. Rather, telegraphy negotiated a social space for women to

participate within limits.[11] At the same time, telegraph technology was a popular means of co-ordination and control. Harold Innis, for instance, claims that the telegraph helped to compensate for the paucity of Northern generals during the American Civil War. By eliminating physical presence as a strategic aspect of military command orders could be 'flashed' from a central office and acted upon in a distant setting. The net result, in Innis's view, was a "longer period of war, greater loss of life, and greater bitterness toward the south" (1952: p. 29). Accordingly, a diminished sense of physical setting in the application of military practices produces a unique set of consequences that emphasize social distance, notably the emotional isolation of a particular region.

For Meyrowitz, the crux of social change is information flow. "By altering the informational characteristics of place," he writes, "electronic media reshape social situations and social identities" (1986: p. 117). Peter Goheen's recent analysis of economic information conveyed by nineteenth-century Canadian dailies, for instance, engages information flow to probe "how changes in the technology of message transmission altered the relationships of time and space" (1990: p. 177). Goheen argues that the extension of the telegraph in Canada marks a transition

[11]The 7 June 1884 edition of TJER, for instance, notes that although women were being welcomed into the service in great numbers, those who married while in the employ of the British service were still required to resign and that "they were not legally entitled to either pension or gratuity in respect to the years they had served" (p. 490).

to the modern newspaper. "What then came to mark the principal papers was the increase in volume of such [telegraphic] items which they carried" (1990: p. 183). Insofar as these papers were the primary carriers of urban North American (front region) economic values, their presence in isolated places (back regions), such as British Columbia, represents an important influence on changes in social organization such as colonial consolidation.[12]

Meyrowitz's emphasis on the technological extension of human senses enriches a 'regional' consideration of social experience. The importance of physical setting to human interaction is augmented by changes in the information available in a given setting. Like a television in a prison, a telegraph office in 'the bush' changes the way personal, social, and geo-political presumptions of space, such as isolation, are experienced. This permits a "coarser backstage style" and a "more pristine on-stage performance" (1986: p. 47) -- stereotypification -- and, at the same time, the 'shrinking' of space creates new notions of access by introducing new information and new informants and by merging previously incompatible situations.

Personal Space

The human body is often cited as the ultimate destination. As such it constitutes a reference point for understanding

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[12]Goheen notes that the Victoria Colonist began publishing in daily format in 1865, the same year that a telegraphic extension was completed to the two colonial capitals, Victoria and New Westminster. The following year, a new colony of British Columbia placed its capital at Victoria.

personal space and security. The introduction of electric technologies in the nineteenth century enormously extended the perception of personal space. John Quirk's and James Carey's 1970 essay, "The Mythos of the Electronic Revolution," provides a scheme for understanding the electrification of nineteenth-century living. Carey and Quirk couple the Promethean force of the Victorian era -- electricity -- with a motivating and compensatory doctrine, the "promise of the eighth day" (1970a: p. 220). While their intent is to 'demythologize' a futurean mirage and to expose and ponder the apparent lack of 'real' change over time, Carey and Quirk also point to the importance of communications in the development and expansion of electricity. The telegraph is reflexively engaged with the 'rhetoric of the technological sublime', both by co-ordinating the delivery of a progressively 'boundless' narrative and by providing a 'public' laboratory within which science and industry can work out the practicability of (electric) power.[13]

Carolyn Marvin discusses this phenomenon as locating the body in an electrical space and time. According to Marvin, the body became the preferred site for making electricity familiar. The body became an agent connecting nature with culture. As

[13]Armstrong and Nelles, for instance, emphasize the structural influence of 'pioneer' technologies: "Electricity, the telephone, and the electric streetcar burst into a world already crowded with **solidly entrenched** gas, horsecar and telegraph companies (emphasis added). Ironically, the demonstrated effect of the old technologies alerted well-positioned businessmen to the possibilities of the new and released the animal spirits of competition" (1986: p. 65).

agent, the body was often draped in electric lights, treated with electric curatives, and eulogized following an encounter with lightning. This agency, argues Marvin, was the central feature of a public discourse that portrayed science as "sensate rather than cerebral" (1988: p. 137). Science and engineering created living and working maps that demonstrated individuals' access to a new sense of personal space. Turning on a lightbulb and sending a telegram produced the same effect: "remote connection between actual events and the audience observing them and an elaborate culture of vicarious experience" (1988: p. 148). Just as the electric switch connected the lightbulb with a remote source of power and sustained a simulation of daylight, telegraph flashes reached into even the most distant regions and provoked a sense of being there.

Stephen Kern offers numerous examples of how inventions, acted upon the personal sensibilities of the nineteenth-century. Perhaps of greatest interest here, is his consideration of personal time. Citing contemporary authors -- Joyce, Freud -- Kern divines a spatial expansion of the present that corresponds with the application of world standards for time and the demonstration of a technical capacity to be in more than one place at the same time. These works exhibit the literary and analytic distance attainable in individuals' minds. A 'flash' of experience extends for hours. Similarly, the consequences of human agency are attributable to some distant experience in one's personal past. Technical innovations, Kern argues, introduced

new models for human action that changed how Western culture thought about and experienced space and time. For Kern, the cultural shift from the irreversibility of the historical past (institutional time) to the complete reversibility and utter simultaneity of memory and imagination (personal time) constitutes a watershed. He reminds the reader that "[one] is not so responsible for history in the way one is responsible for one's past...(1983: p. 63). The experience of personal space, then, not only extended outward to distant events, but also advanced inward to the level of individual consciousness.

Telegraphers, as a workforce, embody the challenges and opportunities of personal space that were introduced during the nineteenth century. The telegrapher's skills were codified and his actions were contained in a station or office. Further, his body was the hub that organized simultaneity. And the telegrapher's key was the point at which time and space converged. The effect on the operator was often devastating. The 29 March 1884 issue of the Telegraph Journal and Electrical Review (TJER), for instance, summarizes a medical paper on telegrapher's cramp. In that paper the author, a Mr. Fulton, calculates that an "average operator makes between thirty and forty thousand flexor and extensor contractions per hour" (1884: p. 261). As an aside, he cites observations of the disorder made by a French physician, M. Onimus. Labelled mal télégraphique, Fulton reports that "insomnia, palpitations, vertigo, and other subjective sensations; and that melancholia,

loss of memory, moral and physical atony, and even insanity may supervene" (1884: p. 261). The following year, TJER rails against overworking telegraphists. Noting the "youth of many of the clerks," and the "long-continued and nearly incessant daily labour of twelve hours in a not too wholesome atmosphere" the Journal explains:

> His work is mental, and it is also monotonous. It involves long harping on one chord of his intelligence, with but little intermission and little variety. We have frequently to do, therefore, with a badly nourished brain, subject to sustained impulses passing along the nerve of hearing, and obliged, by concentrated and generally uniform effort, to convert these into visible expressions. Thus the brain, losing the exercise of invigorating reflection, and acting merely as a higher reflex centre, is apt to be driven to exhaustion by sheer wear and tear of certain lines of nervous tissue (8 August 1885: p. 129)

In the telegraphists body we see the same patterns of interior extension outlined by Kern. In addition, his position entails a capacity to surpass the industrial determinations of his age. He must cope with mental exhaustion on a daily basis. The steady flow of information to the operator -- especially following the refinement of multiplexing -- passes to and fro a hand that contracts over 400,000 times each day. He sends and receives, reverses and directs history as it occurs. By paying attention only to the sound of 'his key' the operator has access to an ever accelerating sense of the present and an ever expanding notion of personal extension across space. The latter quality is demonstrated most forcefully as the 'Boomer'.

Telegraphists followed many paths while in the service. Operators had an unusual capacity to find work in the most unusual places. A Prospectus issued on 23 September 1898 for investment in the Dawson City and Victoria Telegraph Company includes this testimonial from a man identified as E.G. Woodford, former State Mining Engineer in Transvaal District:

> I may also mention that the difficulty of securing suitable operators and line men which so often occurs in remote countries may need not be anticipated as amongst the numerous miners who have flocked into the country there will be found many hundreds of experienced telegraph men. (Laurier Papers, p. 30856)

The widespread physical presence of the telegraph incorporated a variety of life chances. In Canada, opportunity was often linked to public works. In 1883, for instance, Sessional Papers report 23,320 miles of Government owned telegraph wire or cable in Canada and the highest office to citizen ratio in the world -- one office for every nineteen hundred and fourteen persons (SP, 1883). Accordingly, all of those offices required a supply of labour that, from contemporary accounts, was remarkably fluid and well connected. One British Columbia operator remembers:

> The telegraph field was very interesting, especially from 1880 to 1900. It was bound together as one big family by a number of 'Boomers' who travelled from one big office to another, from New York to San Fran and Winnipeg to New Orleans. These boomers carried the gossip from place to place, and everybody seemed to know everybody, either by gossip or contact on the wire. (Le Bourdais, 1976, Box 12, no. 3 [note paper])

Although the familial metaphor reeks of nostalgia, it also develops a relationship between the operators' experience of space -- in the office -- and the way that they used their experience to maintain relationships over time and space. Indeed, the 'Boomer' is exemplar of a new sense of distance. The 'Boomer' regularly carries 'gossip from place to place', and he and his fellow operators transcend physical limitations by negotiating a technological space through 'contact on the wire'. 'Boomer' status also denotes a high degree of skill, speed on the key, for instance, emphasizes the widespread nature of employment opportunity, and characterizes the prevailing 'boom and bust' economic conditions of the late 19th century.[14] The 'big' offices stake out four centres of influence -- East, West, North, and South -- which attract information and contain power. Here, the best operators work under the most demanding conditions and are privileged with the broadest and most sensitive information. Moving away from these centres we find that the stations become more and more remote, their appearance and function becomes less standardized, and human skill levels vary greatly. In his note papers, Louis LeBourdais relates: "Difficult get oprs, go into lonely cabins in North. Had have first class opr at different points for relay purposes -- to relay messages when the wire was bad on account of the storms -- but those in other stations did

[14]The 15 September 1880 issue of TJER, for instance, reports that "Canadian operators are leaving for the United States in large numbers, tempted by the higher rate of wages, and the fact that expenses are but little, if any, higher than in the Dominion" (1880: p. 318).

not have to very fast on the key" (1976, Box 12, folder 3). These locations constitute an extended family. The 'Boomer' engages isolated posts, culls gossip from them, and represents a personal connection among confrères. The 'Boomer' maintains a kind of omnipresence as he moves from job to job carrying with him the personal experiences of a line or an entire system.

Social Space

The experience of social space underwent dramatic transformations in the nineteenth-century. Strangers became a feature of everyday life, people crowded together in increasing numbers, and commonly-held notions of access were challenged and overcome. Kern writes that the introduction of distance spanning technologies such as the bicycle produced a levelling effect. Cycling allowed new groups to venture forth, to interact with new others, and to apprehend a fuller direct experience of space (1983: p. 111). Meyrowitz cites a similar influence with the introduction of new communications media. The telegraph, for instance, not only superceded previous methods of sharing and monopolizing information, but re-articulated standards of social behaviour. "Like all electronic media," he writes,

> the telegraph not only defies limits formerly set by distance, but also bypasses the social rite of "passage," that is the act of moving both physically and socially from one position to another (1985: p. 116)

Telegraphists, for instance, may have been overworked, but their toil was compensated for by a new sense of position. 'Boomers', as discussed earlier, were a privileged group within the

industry. In daily life "operators who kept the messages clicking over the wires were slaves to their keys, but socially they were lords of the earth" (Macleod, 1971: p. 8). Similarly, prudent use of new telegraph technology allowed members of the public to overcome tradition, protocol, and ceremony as well as unmanageable distances. R.V. Rogers, for instance, reports in the July 1893 edition of Queen's Quarterly how telegraphy could, if in a somewhat impertinent style, turn consenting adults into nuptials.

> People have attempted to commit matrimony, and the words he said to her and that she said to him have been wafted hither and thither along the wire. Doubtless there is something romantic in sealing the marriage bond by the electric fluid....On one occasion, out in the West, an Army Chaplain attempted to unite a couple 275 miles off. the telegraph operator where the bride and groom were arranged matters, and two other operators 225 and 300 miles away were the witnesses (1893: pp. 53-54)

By removing barriers, and bypassing conventions, new media enlarged the social spatiality of the Victorian era. Social distance was negotiable, within limits. On the one hand, new forms of access introduced opportunities; on another hand, unanticipated access engendered confusion and uncertainty. Carolyn Marvin speaks to this issue as a problem of reliability. The shift from interpersonal interaction to highly mediated communication was disorienting. "The social clues supplied by remote presence," she writes, "were less reliable than face-to-face encounters..." (1986: p. 87). Marvin, for instance, reports that in 1883 a caucasian woman was granted an annullment after

her telegraphic marriage united her with a black man (1986: p. 94). For Marvin, changes in social distance relate directly to how new electric media "changed the cues, or authenticity fictions by which groups....estimated the trustworthiness of those with whom they had dealings" (1986: p. 234).

The diffusion and widespread use of telegraph technology was a formative moment in the public invention of reliability. Not only does the telegraph represent a pioneering effort to practically apply and enormously extend the principles of electric energy, but it also co-ordinates a public discourse wherein the expertise of science confronts the resilience of human doubt and experience. The Oxford English Dictionary reports that in about 1850 the word 'reliable' -- "That which may be relied upon, in which reliance or confidence may be put; trustworthy, safe, sure" -- came into common use and by 1855 was "freely employed" in British works. (1989: p. 562). Originally considered to be a "barbarism of American invention" (Burnhart, 1988: p. 907), 'reliable' accommodates a functional shift in the English language -- from an on-going process to a quantifiable quality, i.e. from a verb (to rely on) to an adjective (to be reliable) -- that parallels the institutionalization of electrical engineering and anticipates a necessity to ascribe a measure of trust to public machinery.[15]

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[15]Brian Bowers's history of electrical engineering in Britain is unqualified in its estimation of telegraphy's influence: "the science, technology, industry, and profession of electrical engineering all grew out of the telegraph....the early progress of telegraphy is the early history of electrical engineering" (1982:

Igor Bazovsky's survey of reliability engineering traces the scientific study of trustworthiness to the early days of rail technology and to the advent of electrification (Bazovsky, 1961). Bridging these developments was the introduction and extension of the electro-magnetic telegraph. Accordingly, the telegraph became a reliable symbol for the nineteenth century. Early telegraphs, in the form of electric signalling, not only regulated the frequency of trains -- thereby introducing new standards of efficiency and safety -- but they accomplished this by recognizing and compensating for a hitherto unknown technology: the employee. The industrialization of transport and communications meant that ordinary workers, with little or no education, carried an enormous social responsibility.[16] The following 1875 editorial in the Telegraphic Journal and Electrical Review, for instance, measures the human costs of rail travel by the yardstick of human error:

> one fact stands boldly forth in the [Thorpe rail] tragedy and of many other of its class, viz. that the human machine, without check, is not reliable. One train late, one ahead of time. (1875: p. 26)

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pp. 39/40). Similarly, the premier issue of the Telegraphic Journal and Electrical Review contextualizes the role of electricity by emphasizing the autonomy and the publicness of telegraphy: "We need not dwell upon the importance of the applications of Electricity. It would be better to review the position that the chief branch -- Telegraphy, a science itself --occupies in relation to the Public" (15 November, 1872: p. 1).

[16]Grand Trunk Railway employees, for instance, were instructed that "[c]ommunications regulating the movement of trains must be transmitted with **MORE THAN ORDINARY CARE**, and be copied by the receiving operator in the plainest matter" (Purkis, 1855: p. 7).

Reliability was not the exclusive purview of industry.[17] The successful integration of telegraph and rail technologies coincided with State concern that those in control of telegraphy -- like the employee -- might themselves prove unreliable.[18] Governments observed that the economics of geography constrained private enterprise in its delivery of a reliably national service and were troubled that profit and power motives might, in some way, compromise the confidentiality of political and military communications.[19] Jeffrey Kieve's

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[17]Newspaper publishers associated the telegraph with a number of qualities. In 1847, the Globe newspaper became the first Canadian journal to regularly use telegraphed reports. Beneath the banner 'EXCLUSIVE USE OF THE TELEGRAPH' an article offsets the cost of the service by hailing its timeliness: "The expense will be very heavy, but it is hoped that, 'a discriminating public' will appreciate this effort to secure for Canada, the News at the earliest moment" (3 April 1847: p. 2). Twenty years later the use of 'flashes' is implied in the Globe's capacity to comprehend the Confederation of the Canadas: "In the general conduct of the paper fresh efforts will be made in the coming year to secure that prominence among the journals of the Province which the Globe has heretofore maintained. **The telegraph wires will be still more largely availed of than in the past**" (emphasis in the original). (1 to 22 January 1867: p. 1).

[18]Such concerns were not exclusive to the State. For instance, on 3 June 1844 Samuel Morse reported to the U.S. Treasury that the potential for telegraphic manipulation necessitated government ownership: "The proprietors respectfully suggest that it [the telegraph] is an engine of power, for good or evil, which all opinions seem to concur in desiring to have subject to the control of Government, rather than have it in the hands of private individuals and associations" (in Harlow, 1971: p. 104).

[19]This concern is apparent in Britain as early as 1840. The Minutes of the British Select Committee on Railways, for instance, reveal an awareness of the security problems posed by private ownership: "Circumstances may arise in which it may be very inconvenient to leave in the hands of a private company or an individual the exclusive means of intelligence which the telegraph affords, it cannot fail to be of paramount importance that the Government should be furnished with similar means of procuring and

history of British telegraphs, for instance, concludes that the loyalty of telegraphic entrepreneurs, to their metropolitan shareholders, contributed in part to the Government's 1869 decision to absorb and consolidate the domestic telegraph industry as a branch of the Post Office:

> the companies could not push ahead with unremunerative extensions and therefore tended to confine their lines to the larger towns. The Post Office, not needing to make a profit, but only to cover costs, could extend the telegraph to remote areas, unserved under the old system (1973: p. 161)

Consequently, government and industry introduced measures (legislation[20] and rules[21]) to regulate the human manipulation of telegraph technology -- that is to say, to ensure the structural reliability of the telegraphic enterprise. Hence, the expansion of telegraphy at once publicly demonstrated the advance of an industrial age and emphasized a concomitant re-articulation of trust relations among industry, government, and the publics that they served. At the same time, the telegraph was demonstrating its capacity as an effective instrument of

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transmitting intelligence" (in Kieve, 1973: p. 36).

[20]In Canada, "An Act to Provide by One General Law for the Incorporation of Electric Telegraph Companies" received Royal Assent on 10 November 1852 (Statutes of Canada, Chapter 10).

[21]See, for example, Grand Trunk's 1855 employee manual: Rules and Regulations to be Observed by the Operators and Stations Masters Working the Telegraph Lines of the Grand Trunk Railway. Montréal: H. and G.M. Rose.

government in distant and inaccessible regions."[22] And in cases where governments exercised a fiduciary responsibility and provided some or all of the domestic telegraph services, reliability was more directly implied in the enactment of everyday life.[23] For example, the author of Slater's Code, a popular method of public crytography, describes the nationalization of British telegraphs by hailing the Post Office's reliability with regard to letter delivery and by stressing the unique circumstances that government telegraphy entails:

> On the first February, 1870, the telegraph system throughout the United Kingdom passes in to the hands of the Government....In other words, those who have hitherto so judiciously and satsifactorily managed the delivery of our sealed letters will in future be entrusted also with the transmission and delivery of our open letters in the shape of telegraphic communications, which will thus be exposed not only to the gaze of public officials, but from the necessity of the case must be read by them. With every disposition on the part of the Post Office authorities to

[22]See, for instance, Sir Frederic Goldsmid's 1874 account: Telegraph and Travel: A Narrative of the Formation and Development of Telegraphic Communication between England and India [1852], Under the Orders of Her Majesty's Government with Incidental Notices of the Countries Traversed by the Lines. London: Macmillan and Co.

[23]The British government's operation of telegraphs is a case in point. The November 1872 issue of the TJER both editorializes that the Government's rates are too high -- "the advantage to be derived from flashing becomes, in many instances, purely imaginary; and if it were not for this sentiment we might often as well have written by post. That is cheaper, more confidential, and a word or two more makes no difference in the price" (p. 2) -- and insists that the Government pay its operators more in order to ensure high standards of service: "We want accuracy, speed, and confidence as to privacy as to make it what it ought to be" (p. 19).

> work the telegraphs in such a manner as shall command the confidence of the public, and justify them in entrusting their dispatches to them -- and this disposition certainly exists in no ordinary degree -- the community will frequently have occasion to employ the telegraph in the transmission of messages which they will be most anxious to forward in such terms as shall be unintelligible to the operators through whose hands they pass. (n.d.: pp. iii-iv)

Similarly, government was acutely aware that the details of operating a domestic service made it vulnerable to questions of confidence. In Canada, the former typically emanated from the actions of operators and repairers and the latter were generally attributed to geographic and weather conditions. On Wednesday 1 April 1885, for instance, Canada's Minister of the Militia contacted H.P. Dwight, General Manager of the Great Northwestern Telegraph Company, to ask for his assistance in the Métis crisis: "I wish a reliable operator and a wire in the Department of the Militia for the special use of that Department (Morton, 1972: p. 62). By the next day the Government Telegraph Service had sent C.C. McNab, John Horne, and J.S. Macdonald into the field. Their Superintendent, Frederick Gisborne, assures the Minister that, "they are all first-class operators and reliable men" (Morton, 1973: p. 75).

Otherwise, the reputation of Canada's government telegraphs were forced to cope with natural hazards. In a 1888 address to the Canadian Society of Civil Engineers, Frederick Gisborne details the Service's difficulties on the Canadian Prairie. Gisborne relates roaming Bison, the limited availability of cedar

or pine trees for poles, the teamsters' use of poles as firewood, and the constant threat posed by lightning, to the public's perception and use of the Government's service:

> In repairing telegraph lines, you may have to travel some 50 miles to find the break. During that time business is delayed, and horses and men have to be employed at considerable cost, while the stoppage of messages often results in a permanent loss of business to the line because people would not trust the telegraph unless it were perfectly reliable. (1888: p. 25)

Like rail and electric technologies telgraphy was bound up in the social organization of the modern age. Unlike other technologies, however, the reliability of the telegraph objectified and comprehended a socio-cultural investment in an apparently unlimited extension of social experience. As such the operation and expansion of the telegraph was the object of great enthusiasm and extraordinary circumspection. To the extent that it penetrated individual, institutional, and industrial practices, it was a 'harbinger of the emerging social order'.[24] Accordingly, reliable telegraphy not only encompassed the timely and accurate transmission of information between buyer and seller, but also the ability to withstand the force of human nature and to overcome -- i.e. push back -- the uncivilizing influences of space.[25]

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[24]Here, I am closely following the argument made by Armstrong and Nelles with regard to the street railroad and the 'Invention of Necessity' (1986: pp. 45-46).

[25]This point is illustrated in W.F. Butler's The Wild Northland. Travelling south from Fort St. James, B.C., Butler encounters the rusting remains of the Collins Overland Telegraph

Geo-political Space

The political economy of Canada is often described in terms of 'staples' that are consumed, produced, and extracted. Pursued by Harold Innis as a way to comprehend the vicissitudes of a resource-based economy and variously organized as fluvial and metropolitan theses, a staples approach considers the historical relations that bind a Canadian mainstream with the basin that it drains. "The economic history of Canada," Innis writes, "has been dominated by the discrepancy between the centre and the margin of western civilization" (1973a: p. 385). Accordingly, Innis's consideration of 'development' addresses distant as well as proximal conventions.

Innis reasoned that public ownership of various Canadian enterprises, such as the Dominion Government Telegraph and Signal Service, was a crude though effective method of dealing with a staple economy.[46] In 1933, for instance, Innis insists that public sector participation is an integral and inevitable step in

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extension. The scheme was abandoned in 1866 when the Atlantic cable proved reliable. Clearly perplexed, Butler writes: "Crossing the wide Nacharcole [sic] River, and continuing south for a few miles, we reached a broadly cut trail which bore curious traces of past civilization. Old telegraph poles stood at intervals along the forest cleared opening, and rusted wire hung in loose festoons down from their tops, or lay tangled amid the growing brushwood of the cleared space. A telegraph in the wilderness! What did it mean?" (1873: p. 333).

[46]Innis's despair with this reality often finds expression. In his History of the Canadian Pacific Railroad, he notes that the "inexperience of Government was constantly in evidence. Contract No. 5 for the construction of a telegraph was broken because the Government had awarded it before a line could be located and at an expense of $18,284" (Innis, 1971: p. 92).

the constitution of Canadian space. Government ownership in Canada, Innis writes:

> is fundamentally a phenomenon peculiar to a new country, and an effective weapon by which the government has been able to bring together retarded development and the possession of vast natural resources, matured technique, and a market favourable to the purchasing of raw materials. It was essentially a clumsy, awkward means of attaining the end of immediate investment of tremendous sums of capital, but it was the only means of accomplishing the task and of retaining a substantial share of the returns from virgin natural resources. (1933a: pp. 80-81)[27]

His analysis of the Canadian mining industry in 1941 suggests a circuitous relation. Innis complements his earlier thoughts by pointing to the reflexive character of federal involvement. He argues that placer discoveries not only created a demand for consumer staples on the periphery -- that is to say, that they excited the production of minerals, wheat, lumber, and fish -- but also helped to reproduce the conditions necessary for the production of producer's staples by government. The 1897 Yearbook of British Columbia, for instance, makes this case with respect to the negative impact of winter isolation on mining investments:

> Telegraphic news is a most important factor in the manipulation of mining interests on the European Stock Exchange, and people avoid a mine that affords no information for six months at a stretch. (BC, 1897: pp. 476/477)

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[27]Mel Watkins, for instance, writes of a 'staples theory' that "has always been about understanding the successive opening up of the country" (Watkins, 1981: p. 56).

"These activities," he concludes, "have implied state capitalism in Canada..." (1973b: p. 320).

The telegraph allowed political and economic centres to direct the resources of marginal areas and, in this process, to extend their domain. The founder of time-geographic studies, Torsten Hagerstrand, regards the concept of domain as being integral to the maintenance of order and praticability in human affairs. For Hagerstrand domain distinguishes spatial boundaries of influence and conveys a measure of skill or proficiency:

> The concept first of all refers to the intricate lattice of earthbound spatial units in which specified units or individuals or groups have socially recognized rights to exert control....But, secondly, the concept stands for 'position' ('office') that is to say for a derived space which by contrast gives its holder certain rights as well as certain duties (1978a: p. 124)

In the first instance, domain recognizes place bound authority. The second aspect of domain complicates the first in the sense that it infers that this space must be, at some point, forged and subsequently maintained over time. Accordingly, domain is neither unchallengeable nor irrevocable. Rather domain engages a centre and its margins in what Giddens' calls a dialectic of control -- "how the less powerful manage resources in such a way as to exert control over the more powerful in established power relationships" (p. 374) -- or what James Carey neatly describes as an "interplay of resistance and acceptance" (1981: p. 83).

Innis writes, for instance, that the discovery of gold in the Pacific region had "enormous significance to the economic and

political history of North America" (Innis, 1973b[1941]: p. 311). First in British Columbia and later in the Yukon Territory an economic "cyclone" of gold production "brought a reversal in the trend of a spread of money from the centre to the circumference in the sudden emergence of money on the fringes" (1973b [1943]: p. 331). The 'cyclone' of activity that descended on British Columbia and the Yukon engaged those frontiers in a classic relationship with their back tier. The nature and the intensity of the 'cyclone', as Innis notes, permitted this relation to tilt in an unconventional way. And this sense of balance invested the gold mining frontier with a longstanding sense of agency. Witness this editor's conclusion to an article celebrating the completion of the Yukon Telegraph:

> Through various causes the Canadian Yukon, although a large contributor to the revenue of the country, has not been of the advantage it might have been to the trade and commerce of the Dominion. These causes were inherent in the nature of the country and derived much of their efficacy from the fact that very many of the pioneers of the Yukon were American citizens....But by providing a market for gold produced in the Yukon, and by establishing closer relations with the business community centered at Dawson, Canada is gradually overcoming these natural disadvantages by placing the Yukon in a position to confer and receive the benefits due from one integral part of a country to the others" (BCMR, October, 1901: p. 316).[28]

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[28]In contrast, the Deputy Minister of Public Works writes in 1906 that the DGT "rendered a national service....the lines constructed in B.C. and the line which has, for the past six years, kept the Yukon district in touch with the rest of Canada and of the civilized world has been of great use and benefit to the country" (Sessional Papers, 1906: p. 7).

Here, as in every staple relationship, the means with which the centre organizes remote resources becomes available on the margin. And it is this access staple that confers 'position'.

James Carey, a major interpreter of Innis's communications theory, believes that the staples approach also cites a basic way to understand the organization of continental relations. "[W]hat Innis saw more clearly than most was how modern institutions were thoroughly infected by the idea of space" (1981: p. 84). According to Carey, the telegraph played a key role in the extension of institutional influence. "The telegraph freed communication from the constraints of geography" (1983: p. 305). In so doing, the telegraph not only maintained a longstanding symbolic value that supported an ideology of space, but it demonstrated a cumulative practical value by facilitating the acquisition of new lands. Charles Vevier, for instance, writes that the Collins Russian-American Telegraph signified both the "ideology of a manifest destiny and the exhaltation of the American frontier within an informal thought which properly should be called American continentalism" (1967: p. 215). Writing a century earlier, the Journal of the Telegraph summarizes the same project in this way: "It has quickened and widened the conceptions of our whole people in respect to the possibilities of the future. It has opened up by its explorations the knowledge of a vast region yet to be resonant with the voices of Commerce" (1867: p. 4).

Similarly, the success of grand telegraphic projects in other parts of the world -- the 1865 completion of the London to Bombay line for one -- reduced the sense of distance and emphasized the accessibility of new territories. As Kern notes, it was during the nineteenth century that the notion of imperium again became popular. Nations began to realize that the "space commanded by a country was an important factor in the determination of its political and economic life" (1983: p. 227-28). In America this impulse was known as a manifest destiny, in Europe as imperialism, and in Canada as, perhaps, confederation. Its dynamics have been summarized in this way: "without peripheries, no cores; without both, no capitalist development" (Hopkins, 1982: p. 13).[29] Consequently, space-binding technologies, such as the telegraph, play a dual role. They bring space into production by supporting an uneven institutional arrangement which emphasizes a geo-political regionalization of space -- yet renders it increasingly irrelevant to social intercourse -- and they make this structure accessible to unanticipated individuals, interests, and publics. Hence, the best laid plans...

Chapter Summary

The experience of space plays a major part in the organization of society. By virtue of its presence in everyday

[29]Carolyn Marvin offers this variation on the same theme: "With new communications techniques the idealized world of technologists [cultural harmony and organized public intelligence] would be extended automatically to the less fortunate periphery -- less fortunate because it was at the periphery" (1988: p. 192).

life it brings paths, regions, and tiers together and mediates perceptions, behaviours, and chances. Within an environment of space there is a negotiable tension between individual and institutional, front and back, centre and margin that contains unique information about day-to-day life. In this thesis, the experience of space contributes to an understanding of the introduction of distance-spanning technologies of communication.

The Canadian government's involvement in the extension of telegraphic communication engages near and distant experiences of space. Based in Ottawa, warehoused in Québec City,[30] and operating lines that were exclusively remote the consolidation of services in outlying areas facilitated the construction of information corridors through isolated aspects of Canada. And in these locations, variously known as wilderness, the bush, or simply awful places, the DGT's cabins, refuge huts, and agents constituted a longstanding Federal presence in extremely remote areas. Not surprisingly, research about this service is largely concerned with the experience of the centre. In the two chapters that follow this information is presented alongside a frontier experience of telegraphy.

[30]"For the convenient and expeditious handling of line and office materials, instruments and supplies for the [Western?] service" (SP, 1897: p. 252).

Chapter Three

Domain

The Canadas -- and the Colonies that came to constitute their Western most boundary -- were, in the 1850s, emergent domains. Large in size and disparate in nature, they were controlled by institutional protocols developed elsewhere. As a consequence, their integrity -- and ultimately, their autonomy rested upon an ability to demonstrate competence to the Colonial Secretary and to install conventions that accommodated indigenous behaviours, concerns, and expectations. Law-making, with regard to the operation of the telegraph, captures one aspect of the working out of domain in Canada. Otherwise, the Colonial/Federal presence in the industry constitutes, perhaps a personal and albeit 'much narrower, more localized and much less splendid, but withal more human idea' of domain.

Regulation of Telegraphs

Prior to 1852 proposals to establish or extend the telegraphic enterprise, received individual charters that stipulated general conditions of business and responsibilities to government.[31] And although these charters assumed a similar form, the discrete character of incorporation did, on occasion, threaten to weaken Colonial control over telegraphy. At this point it became the responsibility of the Imperial government to

[31]Early on, petitions were made directly to government for such things as rights of way. On 14 October 1846, for instance, Toronto-Buffalo Telegraphs made application to plant posts along roads under Public Works jurisdiction (Analytical Index to the State Books, vol. 8).

bring the error to the attention of the Colonial Legislature and have it amended. On 15 June 1848, for instance, Earl Grey communicates his concern to Lord Elgin that although the incorporation of the Western Telegraph Company encompasses the day-to-day operation of a line of telegraph it does not fully address the contingency of government privilege:

> I observe that although [the Act] enables the Government at any time to assume the Telegraph on paying the actual cost of its erection, it does not empower them in any case of emergency, to secure temporarily the exclusive use of the line on making reasonable compensation to the proprietors.
>
> In this respect the Act differs from Imperial Acts of similar nature...and as it appears to me to be important that the Government should possess the power of controlling the Telegraph on particular urgent occasions, I shall defer tendering any advice to Her Majesty on the subject until Your Lordship shall have had an opportunity of considering whether a clause to the effect I have pointed out, ought not to be introduced into the act in question. (Journals of the House of Commons of the Legislative Assembly of Canada, 1849: Appendix N, p. O)

In the Colony of Vancouver Island[32] similar concern is expressed over the presence of a particular clause. In this case, the Colony had, on 8 March 1864 -- under the First Telegraph Act -- approved the California State Telegraph Company's proposal to build a line to the Cariboo gold fields and had granted it an

[32] A consolidation of Colonial laws was completed in 1871. See, The Laws of British Columbia Consisting of the Acts, Ordinances, and Proclamations of the Formerly Separate Colonies of Vancouver Island and British Columbia, and of the United Colony of British Columbia with Table of Acts, Alphabetical Index, and Appendix. Victoria: Government Printing Office.

exclusive privilege to provide telegraphic services in the Colony for 20 years (Laws of British Columbia, 1871: pp. 71-74). Unbeknownst to Governor James Douglas,[33] Britain had chosen on 9 February 1864 to support Perry McDonough Collins's plan to build an overland line that stretched from San Francisco, through British Columbia, across the Bering Strait to Russia and Europe (Robb, 1968: p. 14).[34] This challenge, in terms of the locus of decision-making, was met by two subsequent pieces of legislation the 21 February 1865 International Telegraph Ordinance that stipulates the conditions upon which the Collins project would traverse British Columbia,[35] and the 22 February Telegraph

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[33]Helen Ferguson's history of the development of communications in Colonial British Columbia discusses Douglas's zeal for infrastructural development. Between 1858 -- when he left the HBC and the Puget Sound Agricultural Company and his retirement from office in April of 1864 -- Douglas, "divorced from the fur-trade and faced with the exigencies of a new economy based on gold...entered a phase in his career during which he earned the title of the 'Road-King'" (Ferguson, 1939: p. 28).

[34]Robb notes that Collins had, in the 1850s, established durable connections in Britain by attracting financial support for his scheme to construct a Transmundane telegraph from Montréal across the NorthWest Territories to the Behring Strait. These connections included figures, such as, the then Overseas Governor of the Hudson's Bay Company, Sir George Simpson (Robb, 1968: p. 7).

[35]An extraordinary clause in this Ordinance reflects the practical benefits of the Collins line. In British Columbia, the Company was not only required to cede the use of the telegraph should a crisis arise, but also its remote outposts: "Provided that it shall be lawful for the Government of British Columbia, in case of any emergency arising sufficient in the opinion of the said Government to warrant such action, to take possession of and freely use any such block houses or defensive posts" (The Laws of British Columbia, 1871: p. 176). Collins sold the title to the project to Hiram Sibley's Western Union Company on 16 March 1865 for $100,000 and ten percent of the stock in the Overland Company (Robb, 1968: p. 17).

Amendment Ordinance, which effectively cancels the exclusivity arrangement between the President of the California State Telegraph Company, Horace W. Carpentier, and the Colony.[36] "Whereas it is contrary to the policy of Her Majesty's Government to grant exclusive Telegraphic privileges," the Ordinance states:

> Be it enacted that the Government of B.C...as follows:
>
> 1. So much of Clauses 5 and 6 of the "First Telegraph Ordinance, 1864," as renders or construed to render, exclusive any of the Telegraphic privileges by that Ordinance conferred on the said President, his successors, and assigns, shall be, and is hereby repealed. (The Laws of British Columbia, 1871: p. 181)

Not surprisingly, domain in Colonial Canada coincides with Imperial purview. The difference of each case, however, is striking. On the one hand, an omission is corrected; on the other hand, an Ordinance is rescinded. The case of the incorporation of the Western Telegraph Company reflects, perhaps, a stenographic blunder. The First Telegraph Act, however, reveals an immediate and pro-active concern for Colonial well-being and, equally, an indifference toward acknowledged consultative protocols with the British Government. Subsequent legislation designed to regulate telegraphy in Canada and British Columbia underscores these differences.

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[36]The importance of this arrangement to Carpentier is revealed in his correspondence with the Office of the Colonial Secretary. On 22 September 1864 he writes: "The exclusive privileges contained in the Ordinance referred to were the sole inducement to this Company to undertake the work at that time" (PABC, Colonial Correspondence, F272/31).

"For Good or Evil?"

Government in the Canadas shared Samuel Morse's conviction that the telegraph was "an engine of power, for good or for evil" (Harlow, 1971: p. 104). And like their British manager, Legislative Assemblies in Canada and British Columbia thought it expedient to take steps to ensure that the telegraphic project was 'trustworthy, safe, sure'. On 10 November 1852, the Canadas passed an Act to Provide by One General law for the Incorporation of Electric Telegraph Companies and on 7 July 1864 Vancouver Island adopted the Telegraph Regulation Act. In both cases the gist of government unease lingers in what might be called the reliability clauses.

The 1852 and 1864 telegraph Acts cover similar ground in terms of regulation. Each conveys procedures for capitalization, incorporation, and construction. Where they differ, however, is their emphasis on the public working of the telegraph. The Canadian law, while it protects telegraphic plant against vandalism (section 6) and identifies a punishment for revealing the contents of telegrams (section 11) -- by imposing fines of £10 and £25 or imprisonment for one to three months or both -- is actually built around government privilege. Included in the 1852 law is the privilege to assume control of the telegraph -- and its operators -- in the event of an emergency (section 12), the power to nationalize the entire telegraph system or parts thereof on two months notice (section 13), and, in section 10, the establishment of a priority for the transmission and reception of

the government's messages:

> any Message in relation to the Administration of Justice, arrest of criminals, the discovery or prevention of crime, and Government Messages or Despatches, shall always be transmitted in preference to any other Message or despatch, if required by persons connected with the Administration of Justice, or any persons thereunto authorized by the Provincial Secretary. (1852: p. 16)

The point of the 1852 Act is to make an industry reliable. The law does this by instituting rules whereby Government assumes a day-to-day and preferred presence on the wire, where Government reserves a temporary right to seize the lines,[37] and where Government emphasizes the impermanency of the telegraph business by giving itself the power to make it -- at an undefined time -- a Public work. In this Act the common weal coerces an industry. At the same time, telegraphic syndicates are portrayed as an object of circumspection and engaged as a vehicle for demonstrating Government competence.

"Of Wasteful and Expensive Habits"

In British Columbia reliability was volatile. The character of the gold commodity, the makeup of the general population, and the pace of postal communication were such that maintaining the

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[37]"The flexible character of national emergency is drawn out in the Hon. J.A. Macdonald's justification of his government's taking control of the telegraph at Budget time: "He said that the seizing of the wires in this manner had never been previously resorted to. It had only been done [today] as soon as the Finance Minister opened his Budget; but the moment the wires were taken possession of, the hold on them must be absolute, as messages which purported to be private, but really had references to changes in the tariff, might be forwarded, and thwart the object which the Government had in view in taking possession of the wires" (Newspaper Debates, April 24, 1874: p. 24).

integrity of telegraphic messages assumed a position of considerable importance. Unlike the Canadas, the development of Vancouver Island and British Columbia was "cyclonic."[38] The Colonies had been overrun by speculators rushing for gold in the Queen Charlotte Islands (1852), New Caledonia (1858), and the Cariboo (1862).[39] Moving towards the 20th century the net effect of this influx on the constitution of the general population was one-sided.[40] On 20 Februrary 1870, for instance, Governor Musgrave relates this impression of the people of British Columbia:

> The number of the population is not known, and it includes a large number of Indians, who are to a great extent consumers. The white inhabitants are chiefly male adults of wasteful and expensive habits. (SP, Governor Musgrave to the Governor-General of Canada, no. 18, 1871: p. 2)

At the same time, the swiftness and intensity of development emphasized, particularly for the business community, that the observed method of business communication -- correspondence -- fell short of the mark in British Columbia. Prior to the

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[38]H.A.Innis originates this thesis in a number of essays on the mining industry and, in his discussion of liquidity preference as a factor in industrial development, summarizes that the effect of mining "on the movement of population and on transportation facilities were cyclonic in character" (1973: p. 330).

[39]Innis estimates that between 1858 and 1876 the yield of British Columbia mines was upwards of $40,000,000 (1973: p. 330).

[40]Ferguson, for instance, reports that in 1858 -- the onset of the rush into New Caledonia -- between 20 and 30 thousand miners lived in the Colonies (Ferguson, 1939: p. 27). By 1871, the entire population of British Columbia is estimated to be only 36,247 (Innis, 1973: p. 328).

construction of the Collins Overland Telegraph in 1865, there was no road connecting the Colonial Capital, Prince Albert [New Westminster], with Yale or Lillooet.[41] Accordingly, mail was shipped between the Interior and the Coast on steamers that were "neither safe nor reliable" (Harris, 1983: p. 11). Even with the construction of an overland route messages passed through many hands and communication was slow[42] and infrequent.[43] Consequently, the regulation of telegraphs in British Columbia reflects individuals' interests.

The 1864 Act stratifies breach of trust, imposes severe penalties, confers privilege to the system's operators and linemen, and establishes a place for the telegraph in day-to-day transactions. Perhaps the most poignant aspect of the Act is its regulation of human conduct. Operators and linemen could not divulge the content of telegrams, alter or forge messages,

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[41]Robert Harris's 1983 article on road-building between New Westminster and Yale reports that the route, jointly surveyed by the Colonial Government Engineer and a representative from Western Union, was 12 feet wide and 100 miles long (p. 6) and that the telegraph company was obligated to pay up to $8,000 for its two-foot right-of-way (p. 10). Although Harris limits himself to the planning and building of the road, the diary of a Mr. James Fravel -- a British Columbia Telegraph employee -- records, on 24 August 1870, these observations about the practical character of the route: "The man that laid the line out that we have come over today must have been crazy or drunk" (PABC, "Diary" of John Fravel).

[42]During his 1871 trip to British Columbia, the Minister of Public Works, Hector Langevin, observes that the "mail coach drawn by 6 horses travels between Yale and Cariboo at the rate of nine miles per hour" (Langevin, 1872: p. 210).

[43]For example, the 1 October 1870 issue of the Cariboo Sentinel complains that "in Cariboo where we have mail communication only twice a month for six months of the year, the telegraph would prove an inestimable boon" (CS, 1870: p. 2).

appropriate or use information sent or received by telegraphs, or refuse or neglect to send messages (pp. 86-88). On 4 October 1873, for instance, Robert Burns McMicking, then Superintendent for British Columbia Telegraphs, points to the delicate responsibility of being an Operator -- maintaining reliability -- and explains the human consequences of violating the Act. Answering a charge by the Quesnel business community that a Government agent has used his position to win a bet, McMicking writes:

> I am sorry that any operator in the service, should be branded as unreliable, or unworthy the confidence of the public...Operators are liable by Statute to heavy "fines" and "imprisonment" if convicted of in any manner, "tampering with Telegrams." None could be more willing to prosecute or anxious to convict, than myself, if any irregularity existed. (McMicking Letterbooks, p. 374)[41]

At the same time, Colonial misgivings about telegraphers were couched in privilege:

> All Operators of any Telegraph Company whilst employed in the offices of the said Company or along the route of its Telegraph lines, shall be exempt from militia duty and from serving on juries, and from any fine or penalty for the neglect thereof (Laws of British Columbia, 1871: p. 87)

Regulation, however, did not end at the level of the employee, but encompassed the people of British Columbia. Accordingly, the general population was prohibited from opening sealed messages, clandestinely learning of messages, bribing employees or agents,

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[44]Further references in this chapter are to: McMicking, Robert Burns. Letterbooks, 1871 to 1880, Victoria: Public Archives of British Columbia.

and obstructing, cutting, or breaching a line or a stretch of cable. Anyone -- employee or citizen -- convicted of violating the Act was, in most cases, liable for damages incurred as a result of their misdeed and subject, in all cases, to fines of no less than $500 or six months in jail or both, and no more than $1,000 or 1 year in jail or both. It should be noted, however, that the Act was not always an effective deterrent. The 24 June 1865 issue of the Cariboo Sentinel, shows how easily the reliability of the telegraph could be compromised. The Sentinel gleefully reprints the Victoria Chronicle's apology for prematurely reporting the death of a Mr. Jeff Davis:

> finding the wires down below Seattle [the perpetrator] repaired to the roof of the building over which the wires ran and applying a small instrument to it manufactured the dispatch out of whole cloth. The operator at New Westminster was deceived, so was the Columbian editor...and so were we at the Chronicle (Cariboo Sentinel, 24 June, 1865: p. 3)

Otherwise, the Telegraph Regulation Act provides for the commercial exigencies of life in British Columbia by redefining contractual form and, thus mitigating the inefficiencies of postal communication. The Act stipulates that "contracts made by telegraph shall be deemed to be contracts in writing." As a result, government and business were able to take full advantage of the telegraph in the organization of their affairs.[45]

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[45]The Banks of British North America and British Columbia, for instance, opened offices in Barkerville -- the hub of Cariboo gold exploration -- in 1866, the same year that an extension of the Collins line reached the town.

The regulation of telegraphic communication in the Canadas and the Colonies reveals shortcomings of the regulator. Regulation both crystallizes domain and points out weaknesses in terms of competence. At the centre, law-makers draft legislation which affirms control over an industry and augments territorial growth and management. On the margin, an Ordinance supervises the day-to-day character of social life and encourages sectorial growth and management. In both places, the telegraph is a surveillance staple of Government. As such, it is a medium with which the extension of reliability is accepted and challenged.

Government Telegraphs in Canada

Federal domain over telegraphy begins and ends with the extension of services.[46] Beginning in 1869 with a scheme to connect the Red River Settlement, Ottawa, by 1899, worked 2,958.75 miles of line that stretched up the North Shore of Québec to Labrador and as far east as Port au Basque, Newfoundland to Cape Beale on Vancouver Island in the west and from Pelee Island, Ontario in the south to 150 Mile House, British Columbia in the north (SP, 1900: No. 9. p. 4) Two years later Government lines would increase by 2,029.25 miles and reach north to Dawson City, Yukon Territory and Boundary, Alaska (SP, 1902: No. 19, pp. 29/30). In roughly 30 years the Dominion Government Telegraph and Signal Service had established a Federal

[46]Richeson reports the first direct Canadian government involvement with telegraphs as a subsidy of the line that connected Québec City and St. John. Begun in 1861, the Government withdrew its support in 1864 due to a lack of traffic over the line (1972: pp. 18-19).

presence in some of Canada's most inaccessible places. In the West, the extension of telegraphic services was managed by two objectives of the newly confederated Canada. Consequently, as the 20th century began to unfold, the Canadian government had assumed responsibility for telegraphic communications "in sections where no commensurate return for the expenditure would be hoped for" (Sessional Papers, no. 19; 1901: p. 28).

In the short-term, the telegraph was deemed to be a necessary step to maintain frequent and reliable communication with the Red River and other Western settlements. The 1858 charter granted to the North-West Company to build a line west of Superior had lapsed in 1861, Edward Watkins's Atlantic and Pacific Transit and Telegraph Company floundered in 1864, and promises made by the Hudson's Bay Company to construct a line across the Northwest Territories were scuttled in 1866 when the Collins Overland project failed.[47] By 1869, the threat of

[47] In 1864, the Hudson's Bay Company received 1,944 coils of no. 10 wire, 787 bundles of no. 16 wire and 34,980 insulators at York Factory (OIC, 5 Dec, 1870). By the following year, the Company had begun its survey for the project. The Cariboo Sentinel, for instance, records that "Mr. McKay of the Hudson['s] Bay Company station at Kamloops arrived on Saturday evening on Williams Creek, after a lengthened journey across the country on an expedition to find out a practicable route for a line of telegraph to the Red River Settlement on the east side of the Rocky mountains" (CS, 12 June 1865: p. 3). Otherwise, William Pearse, a former Government Surveyor in the West, explains the scope, the failure, and the consequences of the scheme: "The Hudson's Bay Company initiated proceedings to build a line from Georgetown on the Red River to connect with this American Anglo-Russian System, probably in the neighbourhood of Kamloops...About one hundred and fifty tons of telegraph wire was brought out and stored at Fort Garry, and some of it probably at points further west. Owing to the failure of the Anglo-American-Russian enterprise caused by the success in the laying of the Atlantic cable this project was dropped. The wire

Fenians,[48] commercial disinterest in a line of telegraphs to Red River, and a corresponding Federal interest to maintain control over the territory contributed to a scenario in which Government obliged itself to intervene. Ruling out a Canadian route as too costly,[49] the government of the day opted to purchase, on 5 December 1870, the Hudson's Bay Company's telegraphic plant and agreed, with reservation,[50] to have the Northwest Telegraph Company construct a line from Fort Garry to Breckinridge, Minnesota where it would interconnect with the Continental

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brought out was afterward disposed of to the Canadian Government and used by it for Canadian Telegraph lines in the West" (William Pearse Manuscript, 1925: p. 130).

[48]Government worries with regard to Fenian attacks were born out. A 28 March 1885 telegram from H.P. Dwight, General Manager of the Great Northwestern Telegraph Company, to the Hon. W. McDougal, former Lieutenant-Governor for Rupert's Land, offers his company's assistance in the North-West Campaign and references previous experience: "You will remember the service we were able to render the Government during the Fenian raid" (Morton and Roy, 1973: p. 47).

[49]Asked to estimate the cost of an all-Canadian telegraph route, S.L. Tilley responds on 8 June 1870 that a stretch of cable to the Lakehead would be approximately $476,000 and that construction of an overland section to Fort Garry would require an additional $44,300 (RG 2, no. 1560).

[50]The Hon. Hector Langevin expresses his concern about foreign control over communications in this memorandum to his Cabinet colleagues: "The undersigned would in conclusion remark that, as the lines of the Northwestern Telegraph Company traverse a foreign country, it is probable many inconveniences will attend the transmission of **[a line is placed through the word 'secret' in the original]** confidential **[a line is placed through the word 'political' in the original]** messages by their means, and that it may hereafter be necessary to establish a line of telegraphic communication between this portion of the Dominion and the North West Territory, which shall pass on Canadian soil throughout (RG 2, no. 1488, 18 May 1870).

network.[51]

Over the long-term, the telegraph was seen as a way to augment the construction of the railway and to forestall criticism regarding its progress.[52] Under the purview of the Department of Railways and Canals contracts were let in 1874 and 1875 to construct, maintain, and operate a line of telegraphs between Prince Arthur's Landing (Port Arthur), Ontario and Cache Creek, British Columbia.[53] The object of this exercise was to construct a temporary line to support the progress of the CPR. The original tender reads:

> it is not expected that the telegraph will in the first place, be so permanently constructed as could be desired. The main object, however, is to provide a pioneer line throughout the whole extent of the country, to assist in the building of the railway and settlement of the country. (SP, 1876: p. 25)

But the CPR did not arrive in British Columbia for eleven years

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[51]Terms and conditions of this arrangement are contained in RG 2, no. 76, 17 August 1870.

[52]Robert Fortner, for instance, maintains that the "strategy adopted in 1874 -- to precede railway construction with the telegraph -- was a further indication of the political leaderships dependence on communications systems to facilitate Canada's consolidation and growth" (Fortner, 1978: p. 314). For former Premier of Saskatchewan, J.M. Anderson, however, the impetus for the extension was the arrival of a police force: "When the members of the North West Mounted Police, in 1874, made their first march to the westward and established their posts in the wilderness it was decided by Government to endeavour to establish touch with them by means of telegraph communication, and so the Government Telegraph system in the West came into being" (in Macdonald, 1930: p. iii).

[53]The original arrangement for the construction of lines on the Prairie meant that the contractor also ran the line for the Government Accordingly, repairs were forestalled as long as revenue was forthcoming.

hence,[54] and in May of 1882, the route was shifted to the south.[55] What was left was a medium of Government without its attendant messages. "It was now clear," writes Neil Ronaghan,

> that money spent on it [the telegraph] would have nothing to do with railway construction, but would be an index of how much importance the government placed on maintaining an end to isolation in the communities through which or near which it passed. (Ronaghan, 1976: p. 84)

This line of telegraph, following a northern railroad route, advanced a National commitment to 'bind the nation in steel' and traced out a Federal path into remote settlements. Meeting administrative objectives also entailed capturing an isolated and demanding public. Hence the DGT, conceived as an instrument of Government, developed as such. The circumstances playing on this strategy, however, modelled a distinctive Federal presence -- one divorced from the railroad -- and contributed to the formation of unique expectations among widespread populations. And at every stage of this process, Government exposed itself to questions of competence.

"Wires Down"

As has been noted elsewhere, the telegraph was bound up in a rhetoric that somehow imagined that it could overcome the

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[54]Despite the 17 November 1875 report by the Earl of Carnarvon which issues this directive: "the wagon road and the telegraph line should be immediately constructed" (Innis, 1971: p. 86).

[55]On 3 July 1882 (RG 2, 3 July 1882) [or 30 June 1882 (SP, Appendix 11, p. 148)] responsibility for the Manitoba and the Northwest Territory lines was transferred to the Department of Public Works.

contingencies of space and time."[1] Unfortunately the public working of Government telegraphs in Canada, as one contemporary notes, occurred only where it "would not be profitable for commercial telegraph companies to enter" (Murray, 1905: p. 124). And Government officials took great pains to convey the character of the land through which the service passed. In January of 1873, for instance, Robert McMicking compares British Columbia's lines with the services which traverse other parts of the Dominion:

> Canada and British Columbia are vastly different in a telegraphic sense. The cost of repairs in British Columbia are at least 80 percent greater than in Canada. British Columbia is without population, having a small knot of settlers at either extremity of the line 608 miles distant. (24 January 1873: p. 229)

Similarly, Frederick Gisborne's 1883 assessment of the Government's operations on the Prairie points out that the line of telegraph connecting Battleford with Edmonton "is in a very

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[1] An early example of rhetorical flurry is displayed in The Great Peace Maker, a poem written by a Mr. Horne on the 1851 laying of cable between Dover and Calais:

I am the instrument of man's desire
To hold communion with his fellow man
In distant fields - in other climes afar
Swifter than flight of migratory bird -
Nay, swift almost as speech from mouth to mouth...
(TJER, vol. 2, no. 21: p. 23).

By the dawn of the twentieth century, a rhetorical standard had been more or less achieved: "Time and space annihilated. We are of the world now. Wire just reached here at six P.M." ([William Ogilvie, Commissioner of the Yukon to Clifford Sifton, Minister of the Interior] (Vancouver World, 24 September 1901).

rotten condition, and is carried through and over lakes, and through groves of timber, now grown up" (Gisborne, 1883: p. 52). And of the newly constructed Yukon line, Frederick White, Comptrolier for the Northwest Mounted Police in Dawson City, advises on 18 October 1901 that the Minister of the Interior send important messages via Whitehorse and Skagway "to prevent unfair criticism of the Government Telegraph Service....the line runs through a stretch of uninhabited desolation and, in some parts, through sections quite inaccessible during the winter months" (Laurier Papers, p. 61062).[57] For the Government Service, then, its determination to put lines up was only exceeded by the certainty that some aspect of space would bring the wires down.

Accordingly, breaks in the wire are a matter of public record. Possibly the most damning criticism of Government telegraphs is contained in Charles Burrows's 1880 report on the state of the Canadian Pacific Telegraph. Burrows offers personal observations, cites Government sources, and quotes local newspapers to show that the operation of the Government line on the Prairie had gone amuck. Calling the line west of the Red River "one of the most egregious blunders ever made by the

[57]White's description is corroborated by the British Columbia Mining Journal's summary of the Yukon project: "The wild, unexplored country through which the line passes, has made its construction a most difficult and arduous piece of work....With the exception of the section of the line beween Ashcroft and Quesnelle, 225 miles, and the Dawson - Atlin section, the construction party had to cut its own trail, pack every pound of wire, tools and food, erect poles, and, in fact, cut its own road and run the telegraph wire through a country practically previously untrodden by a white man" (BCMJ, 1901: p. 316).

Minister of Public Works" (p. 3),[58] Burrows points to an obvious error in Sir Sandford Fleming's judgement.[59] The course plotted for the line of telegraph crossed muskeg country.[60] E.W. Jarvis, for instance, offers this testimony, regarding delays associated with repairing the line, to the Senate Committee on the Route of the CPR West of the Keewatin:

> Q: Do you know why the line was down?
> A: Yes, the poles had been stuck up in the snow and frozen moss, and when the snow melted they fell. The contractor could not get in there during the summer and had to do the work in the winter.
> Q: Why could he not get in there in the summer?
> A: I believe it was too swampy to go in there in summer. (Burrows, 1880: p. 6)

Most criticism of Government telegraphs, however, was a local

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[58]Understandably, Burrows assumed that the Prairie line was a Public Works project. In 1879, a Dominion Government Telegraph and Signal Service was established. The $2,500 a year wage for its Superintendent, Frederick Gisborne, was split between the Departments of Public Works and Railways and Canals (RG 2, 21 February 1880). Until 3 July 1882, however, the only Western lines that were controlled by Public Works were those operating in British Columbia.

[59]Fleming's choice of a Prairie route fulfills his prophecy of 1862 that the telegraph would be a failure unless it was coupled with the railroad: "A telegraph would be much more expensive in the first place, and almost impossible to maintain on any line across the country except the railway or other travelled land route, if carried around lakes or through hundreds of miles of uncleared forest, the wires would constantly be broken by fallen timber, and the posts frequently destroyed by running fires, inconvenient interruptions might thus occur when the telegraph was most in need" (Fleming, 1862: p. 85).

[60]Neil Ronaghan concludes that Fleming chose the interlake route because he did not like to have to cross Prairie rivers and because it was approximately 30 miles shorter. Unfortunately, the "line could not be counted on to function in the period between Spring break-up and the onset of winter" (1976: p. 40).

affair that found expression in newspapers[61] and correspondence. Less than a month after the completion of the Yukon line, for instance, the Atlin Claim ran its first installment of a soon to be regular column entitled 'Wires Down': "Last Friday's storm played havoc with the through telegraph service and communication was only restored on Thursday night. The congestion of private messages has delayed Press despatches" (19 October 1901: p. 1).[62] And public reports were buttressed and enlarged upon in letters to Government. On 12 November 1901, J.B. Leighton -- a merchant on the Cariboo Road -- pens this unsolicited report to Sir Wilfred Laurier:

> The line at present is not working through to Dawson more than one third of the time caused by faulty construction between Ashcroft and Quesnelle (a distance of 220 miles) up to this point [Quesnelle] there are two wires on one pole. One wire to Barkerville and one to Dawson. They are too close to each other and are constantly coming together causing what is called a cross. (Laurier Papers, 12 November 1901: p. 60008)

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[61]Burrows cites this example from the 4 November 1878 issue of the Saskatchewan Herald: "The object of the Government in building [the telegraph] that quick communication might be had between these outlying regions and the seat of government, on occasions of emergency, is frustrated, and sore inconvenience is the daily result" (Burrows, 1880: p. 7).

[62]The regularity of the "Wires Down" column is perhaps the most common feature of newspapers along Government lines. Generally, the appearance of this column is preceded by editorial comment on the invulnerability of the line. Four days after the completion of the Yukon line, for instance, Atlin's Claim confidently proclaims that there is "little fear about difficulty about breaks during the winter, as every precaution has been taken" (28 September 1901: p. 1).

The spatial realities which the DGT had elected to overcome were such that its work was always clouded by a public experience of doubt. Consequently, Government moved to introduce internal controls to make its day-to-day presence a reliable one.[63] Otherwise, public confidence in the DGT relied upon contingent events such as the urgency of conflict.

"If the Operator Were Also the Postmaster..."

Upon his Summer 1871 arrival in British Columbia, the Hon. Hector Langevin, Minister of Public Works, inspected a line of telegraph for which his Government was now responsible. Although Governor Seymour, in 1869, had described the section from Quesnel to Skeena as "absolutely useless" and lamented the fact that the line to the Cariboo "scarcely paid the expense of operations" (Macdonald, 1947: p. 350), Langevin bravely reported that the telegraphs in British Columbia appeared to be "generally in good condition" (1872: p. 38). Unlike Seymour, the object of Langevin's inspection was neither to make the line pay for itself nor to close it. Rather, the Minister's task was to consolidate public works in the new Province. Langevin's plan to open a new

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[63]Frederick Gisborne -- Superintendent of the Dominion Government Telegraph and Signal Service from 1 May 1879 until his death in August of 1892 -- did a great deal of work to ensure the reliability of the physical plant. In 1886, the Canadian Government adopted his porcelain insulators and his newly patented iron poles for use on the Prairies (TJER, 24 September 1886: p. 318). And in 1888, Gisborne provides this information, on the reliability of different trees as telegraph poles, to the Canadian Society of Civil Engineers: Red & White Cedar poles last 25 years, Juniper & Larch 14 years, Black Spruce 10 years, and Poplar barely 3 (1888, p. 4).

telegraph office, for instance, brings together two other Federal works, postal delivery and the railroad:

> [an office at Caché Creek] would be almost absolutely necessary in order to communicate with the surveying parties, and for the construction of the railway. The monthly outlay would be $75, but if the operator were also the postmaster of the district, the revenue of the office would be increased, and would probably, before long, considerably diminish the expenditure, if it did not entirely meet it. (Langevin, 1872: p. 40)

This brand of physical consolidation became a longstanding feature of Government telegraphs. On the Prairie, J.S. Macdonald reprints photographs of 1884 (Postal/Telegraph) and 1888 (Police Headquarter/Telegraph) stations in Saskatchewan (1930: pp. 28 and 41). Similarly, Richeson records the practice on the Yukon line:

> In Atlin, where the post-office previously existed in rented accommodation, a building was purchased to house the telegraph office, the post-office, and a custom house. (Richeson, 1982: p. 8)

The DGT offices were the Federal buildings in outlying areas. And beyond towns and villages, repeater stations and repair huts resembled a narrow yet tightly woven safety net. As such, the DGT brought individual paths together with a largely unknowable institution -- Canadian Government -- and a pre-dominant project of Confederation. But consolidation also assumed an internal character. Whereas buildings represented a public work, administrators and workers embodied its reliability and authenticated its presence. In British Columbia a telegraphic service had been included as a condition of the 1871 Confederation agreement. Consequently, co-ordination of

telegraphic operations begins with the assignment of a Superintendent and the transfer of funds.[64]

Following Langevin's 1871 visit to British Columbia, significant changes occurred in the administration and the operation of B.C. telegraphs. Most, if not all, of these changes relate to the discontinuation of Western Union's repair and maintenance arrangement with the Department of Land and Works and the subsequent hiring of Robert Burns McMicking as Superintendent of B.C. Telegraphs.[65] A meticulous record-keeper,[66] McMicking, standardized the practice of telegraphy in British Columbia.

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[64]Orders-in-Council show that the first transfer -- of $21,000 dollars -- "towards deferring the cost of telegraphic service in British Columbia" encompassed the fiscal year ending 30 June 1872 (RG 2, 15 March 1872).

[65]McMicking assumed the Superintendent's position on 18 December 1871 and left B.C. Telegraphs on 1 March 1880 to run Victoria's telephone service. He is credited with pioneering the telephone in the province and being the "father of electrical enterprise in British Columbia." McMicking migrated from Ontario to the Cariboo with the Overland Journey of 1862. Leaving his job in Ontario with the Montreal Telegraph Company, McMicking cut his prospecting short to work as the Operator at Yale for the original Collins project from 1865 to 1869. In 1870 he moved to Victoria to work for Western Union and Barnard Express (Kerr, 1890: pp. 253 to 262).

[66]McMicking's Letterbooks, deposited at the British Columbia Archives, reveal an uncommon sense for detail and organization. Sadly, the collection is incomplete. Letterbooks for 1876 and 1877 are missing.

"At a Moment's Notice"

Standardization assumed many forms during McMicking's tenure. Not only did he emphasize technical reliability,[67] but he tenaciously argued for the special character of the B.C. service, instilled a sense of professionalism and duty in his Operators, and introduced a value-added news service that allied the regional telegraphic plant with the practice of journalism. On the eve of a new year, Robert McMicking writes to J.W. Trutch, British Columbia's Minister of Land and Works, to relate his vision of a reliable telelgraph service. McMicking sees a 'regular' service with three to five additional stations and full-time employees whose job would be to keep the wire up. "I would recommend," says McMicking,

> adoption of the only system yet found to give general satsifaction, that of employing men, whose special and only duty, will be to speedily repair breaks, and keep in order a certain number of miles of line on either side of the Office at which they reside, under the immediate direction of the operator, ready at a moment's notice to travel in the direction of an interruption. (31 December 1871: p. 11)

A year later, McMicking spells out the reasons for a uniform method of maintenance and repair. Writing this time to his Federal Supervisor, William Pearse, McMicking excuses his poor record and lashes out at the unforgiving character of his critics:

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[67]On 6 August 1872, for instance, McMicking instituted a regular 0800 hours line check between Yale and Barkerville (Letterbooks, p. 152).

> Obstacles and difficulties there are innumberable, to the management and maintenance of telegraphic communication by the present route of line through British Columbia, unknown to lines of eastern, or more settled and unbroken countries and to which the passing glance of a casual observer or the merciless criticisms of an irresponsible public are comparative strangers, and for which they do not make proper allowance. (4 January 1873: p. 223)

Criticism, however, was not restricted to technical reliability. McMicking found that his employees had to be constantly reminded of the rules governing their behaviour and reprimanded for incompetence. On 16 May 1873, for instance, McMicking records a letter sent to W.H. Wright, his Agent at Caché Creek. Barnard Express -- a company from which Mr. McMicking received employment in 1870 -- had charged Mr. Wright with failing to relay a message to stop the transport of a certain parcel. This mistake cost Barnard and, as a result, the Service, $10.00. "The error," McMicking rails,

> is most glaring and humiliating, it is this class of errors, that will most effectually lower the status of the company, and poison the minds of the patronizing public with a feeling of insecurity, for the due manipulation of such part of their business as they may desire to entrust to the telegraph. (p. 305)

McMicking, then, instituted controls that increased the certainty of technical and human performance. But perhaps the most sweeping aspect of McMicking's co-ordination of British Columbia's telegraph system was his creation of a regional news service.

Since April of 1865 -- when the Collins line carried the first telegraphic news item from San Francisco to New Westminster[68] -- the character of British Columbia's newspapers had begun to change. Bessie Lamb's history of the origin and development of newspapers in Vancouver observes the mutation of one local paper:

> With the opening of telegraphic communication between New Westminster and the United States in 1865, the Columbian started to publish special news despatches, chiefly from San Francisco and New York....British news, which was usually transmitted by letter, was published at irregular intervals with the arrival of the English mail. (Lamb, 1942: p. 395)

Similarly, Peter Goheen's study of inter-urban communications in nineteenth-century Canada concludes that by 1875 "San Francisco, Montreal, and Toronto were all important nodes in the system of information flows in which Victoria's press participated" (1990: p. 193).

The appeal of highly contingent news reports by telegraph and the uneven nature of Continental and intra-Colonial correspondence made it difficult for regional news to find a place in the daily record. Access by Coastal papers to Interior news and by Interior papers to Coastal and Imperial news was seasonal. What Robert McMicking realized was that he not only managed the telegraphs, but that he also controlled a 600-mile

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[68] "The first news which has reached us over the telegraphic wires is of fearful import. The death of Lincoln" (North Pacific Times, 19 April 1865: p. 2).

wire service with Agents positioned at strategic points along the way. For Interior newspapers, such as the Barkerville [Cariboo] Sentinel, McMicking offered "regular and complete local and foreign reports" (17 January, 1872: p. 19) and for Coastal papers like Victoria's Colonist and Standard he was prepared to "furnish interesting Interior News Items regularly...from the Sentinel and elsewhere, and a record of all notable occurrances as they transpire throughout the whole route of the line" for $30.00 per month (4 September 1872: p. 156). But making this service viable required a modicum of salesmanship. On 19 May 1873, for instance, McMicking writes to the Editor of the New Westminster Guardian to inform him of current press rates and to remind him of the timeliness of the B.C. service:

> at the present moment when the season's business is opening and Indian wars threatening, local news may be specially interesting, our facilities for furnishing late and interesting items are also daily increasing. (p. 310)

By the following year, the British Columbia Government Telegraph News Service was prepared to take a final step. On 28 April 1874, McMicking issues a general order for his operators to adopt a journalistic protocol. The Service would no longer simply convey information, but it would make news:

> Report to Barkerville for publication in Sentinel any occurrence of interest in your neighbourhood -- Put items in readable shape to the best of your ability. Study your composition, let them be unbiased and strictly truthful. Avoid sending careless reports in a careless manner. (p. 475)

The standarization of services in British Columbia represents a thorough reworking of administrative and organizational form. The care given and the practices applied made room for innovation to take place. Consequently, day-to-day demonstrations of competence reconciled regional domain and carried a Government option forward. On the Prairie, the malleable character of the Government's telegraph limited its relevance. Accordingly, demonstrations of competence are as rare as they are significant.[69] The Métis/Canada conflict of 1885, for instance, provides a glimpse into the public working of a Dominion government telegraph.

"The Most Perfect Means of Concentration of Military Power"

The military utility of the telegraph, as Hershbell has shown, is an ancient matter. In North America, telegraphs were first vigorously coupled with organized force in the American Civil War.[70] Innis, for instance, suggests that the North used the telegraph to compensate for an exodus of Generals to the

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[69]J.S. Macdonald's history of the Service, for instance, cites the invention of regional time and the origins of Tele-Health He reports that a sun dial erected outside of the Battleford office in 1879 was, for several seasons, the "standard for time the country over" (1930: p. 26). At the same station a medical text was used by Operators to give advice and later "as settlement increased and doctors established themselves at points far apart, it was a matter of common practice for them to give advice to their patients over the wire. No charge was made for this service" (1930: p. 27).

[70]The importance of the telegraph to the United States army is demonstrated in their construction of a discrete continental service in 1880 (TJER, 1 December 1880: p. 405) and the WAMCAT [Washington-Alaska Military Cable and Telegraphs] project that was begun in 1900 and completed in 1904 (see Webb, 1986: pp. 158 to 168).

South (1952: p. 29). In Canada, the perceived importance of the telegraph in war is neatly summarized by Sir Sandford Fleming in 1862. Rationalizing the construction of a transcontinental railroad he asserts:

> It requires no argument to prove that the Railway and the Electric Telegraph are the most perfect means for concentration of military power that could possibly be desired, and we can easily perceive with what comparative ease forces could be brought to bear through the instrumentality of these agents, on any point threatened with invasion. (Fleming, 1862: p. 91)

But the railroad lagged behind the telegraph and there was no sustained invasion. Rather, civil unrest erupted on the Prairie in 1885. Furthermore, the locus of this conflict would be well to the North -- and later to the South -- of the CPR route. Accordingly, the role that the Government's telegraph assumed in managing the dispute was a significant one. The DGT helped to establish and preserve Federal domain during and after the conflict. "It was the Rebellion," says J.S. Macdonald, "which proved the incalcuable value of the telegraph line and abundantly justified its construction...."

> For the Indians had the 'Moccasin Telegraph', swift runners and horsemen, knowing every foot of the country....A knowledge of the fact that troops were on their way did more to keep the Indians on their reserves than all other influences combined....The Rebellion cost the country about 7 millions of dollars, but without the telegraph, it would have cost many times that sum, while the loss of life would have been infinitely greater. (Macdonald, 1930: p. 34-35)

Macdonald's history of the Prairie Service paints a picture of a

wildly contingent military exercise that took full advantage of the telegraph, a view that finds support in Desmond Morton's and Reginald Roy's compilation of telegrams from the North-West campaign.[71]

For General Frederick Middleton, the person charged with leading operations in the field, two aspects of the campaign were problematic: "Communication and supply are my great difficulty," reads his dispatch of 26 April, "as yet enemy have not interfered" (p. 210).[72] The Government's telegraph service helped to meet these needs in two ways. On the one hand, the Government wire co-ordinated military operations, and, on the other hand, the lines organized the flow of public information.

Morton and Roy, in their introduction, note that less than seven days after the outbreak of hostilities the Minister of the Militia, the Hon. Adolphe Caron, arranged for a "direct line to be established in his offices in the West Block of the Parliament Buildings in Ottawa" (p. ix). Interested in the most secure method of transmission and reception, Caron used the telegraph to direct the movement of military resources. His negotiations with the Hudson's Bay Company, for instance, constitute an enormous share of the telegraphic traffic and begin with this telegram to J. Wrigley, Commissioner of the Company's Winnipeg operations:

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[71]Further references in this Chapter are to Morton Desmond and Reginald Roy (Eds). Telegrams of the North-West Campaign, 1885. Toronto: The Champlain Society.

[72]Macdonald notes that only once "while at Straubenzie was the wire tampered with, when it was apparently hacked through with a hatchet about four miles from camp" (1930: p. 40).

"Get cipher from [Lieutenant Colonel] Houghton [at Winnipeg] or General as I do not like to telegraph otherwise" (28 March: p. 15).[1]

In the field, the telegraph was a highly effective tool for gathering strategic information, such as weather conditions and the whereabouts of the enemy. Because the military action began during Spring break-up, the collected telegrams are filled with reports similar to this one filed by DGT operator, W.H. Moloy at Clarke's Crossing: "Ice still good-crossing, safe for 10 days at least (28 March: p. 27).[2] Otherwise, the military was privileged with tragic, though useful, information concerning the location and scope of hostilities. On 1 April, for instance, Hartley Gisborne, sends this message from the office at Battleford: "Indians raiding, killing outlaying settlers. Barney Freeman, our old repairer, murdered" (p. 65).

The telegraph also managed much of the information that was

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[1]The cryptograms exchanged between the Department of Militia and its agents were, as Macdonald reports, "a medley of ordinary English words and others adapted from Slater's Code, with which I was familiar, and, as a result, knew the contents of all messages handled by me" (1930: p. 40).

[2]This does not mean that these reports were always given much attention. Macdonald relates that one June morning while stationed at Clarke's Crossing he received a telegraph from the Operator at Swift Current notifying him that the river was in flood. "I hunted up the Officer in charge of supplies and advised him of the conditions. He answered to the effect that he was quite capable of doing his duty without outside advice....At some future day, dredges deepening the river may come upon deposits of canned corned beef" (1930: p. 38).

consumed by Canadian and other publics.[75] Although Macdonald reports that as operator, he "received many telegrams from people in the East praying for news of relatives" (1930: p. 37), the primary role of the DGT was that of censor.[76] Middleton, like Lincoln,[77] feared that the Press -- in their anxiousness to convey the latest news -- would reveal strategic and erroneous information. On 6 May, for instance, Caron is notified that "Globe correspondent [Frederick] Davis, an R.M.C. Graduate, published information and suggestions which might get into Riel's hands so I told him he had better leave camp" (p. 244). Similarly, Macdonald recounts that newspaper correspondents, in an effort to 'scoop' each other, "accepted the wildest rumours and telegraphed them as facts, unwilling to wait until reports were verified or disproven" (Macdonald, 1930: p. 37).

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[75]That is not to say that the wire was the exclusive news channel. Caron issues this directive to Middleton on 2 May after reading his daily newspaper: "Correspondences appear in papers by members of the force. I think you should issue an order to stop this immediately" (p. 233).

[76]Perhaps the best example of this role relates to the 16 May 1885 news blackout that followed Riel's surrender. Macdonald remembers that: "with one exception [the Press] all accepted the situation gracefully. This man stormed and insisted that I take his copy despite the General's veto. Finding threats and storming of no avail, he went away returning an hour later gleefully announcing that he had secured a courier to carry his correspondence to Humboldt, the nearest telegraph office, some 60 miles east. I replied that I was much obliged for the information since I would at once telegraph the operator not to send it -- a contingency which evidently had not occurred to him" (Macdonald, 1930: p. 39).

[77]Innis notes in his Idea File that access to the telegraph by war correspondents during the American Civil war also posed a threat to military secrecy (1980: 29/48).

Chapter Summary

Moving from principle to practice, the telegraph was always already wrapped up with domain. On the one hand, legislation established rules; on the other hand, the public working of the telegraph integrated these procedures with everyday life. And because Government telegraphs were a moment of this process, their ability to demonstrate the integrity of their service was mediated by the space that characterized the regions that they reached into. Accordingly, domain became a highly localized and important construct, one that included a public ability to participate in the order of things. In the next chapter, this sense of participation will be discussed with relation to the station or position of different communities, groups and individuals.

Chapter Four

Station

Carolyn Marvin has pointed out that new electronic media of communication changed the sense of social distance in the nineteenth century. Telegraphs delivered access to anyone who could pay the price. One's station or position was now somewhat variable. Marvin contends that the key to protecting one's position and to extending it was knowing "how to interpret remote or non-immediate presence, that special form of interpersonal engagement particular to new media" (1988: p. 87). Similarly, James Carey asserts that the telegraph enabled a formal transformation of values in North America. For Carey, new electronic media were fundamental to the devolution of influence from communities to individuals. In Carey's somewhat conservative view of American life, changes brought about by the telegraph expressed a deterioration of community and the re orientation of publics (Carey, 1983: pp. 310-311). In Canada, the introduction of Government telegraphs also facilitated changes in social organization. The presence of the DGT was woven into social and personal experience. Insofar as it touched frontier communities the DGT affected the 'publicness' of Canadian experience. Rather than representing the beginning of the end of convention, the Government telegraph enormously extended the 'station' of Canadians in remote areas. Sometimes Provincial, sometimes regional, but always personal -- even corporeal -- the DGT negotiated, in praxis, an understanding of how a public works.

Frontier Telegraphy

On 20 July 1871, the Province of British Columbia became a moment of Confederation and its system of telegraphy became the public work of a central Government. And while Canada had made the case at the 1864 Québec City Conference that telegraphs were its responsibility (Rawlings, 1865), it is unlikely that by winning this point the Federal government had ever intended to run a Provincial telegraph system, especially one in such desperate shape. This point-of-view, in fact, structures Hector Langevin's 1872 discussion of British Columbia telegraphs. The distance from Ottawa, the costs associated with building up a new branch of the civil service in the Province, and the frequency of repair presented fundamental problems of co-ordination, control, and maintenance. "The question now arises," writes Langevin,

> whether the Canadian government should continue to retain this line of telegraph under its management, or whether it would not be better to replace the whole in the hands of the local government of Columbia, an annual sum being paid to that Government until such time as, in consequence of the country having become sufficiently populous, the telegraph line shall become self-supporting. My own opinion is that if the Federal government continues to manage the line itself, the cost of working will be much greater than it would be to the local Government, which has already on the Cariboo Road its superintendents, officers, and employés charged with the duty of keeping that great medium of communication in a good state of repair; while the Federal Government would have to employ new hands, or convey the permanent employés over considerable distances whenever repairs to the line became necessary. (Langevin, 1872: p. 40)

Of course, these were considerations that the government of British Columbia had had to cope with when Western Union had lost interest in its northern extension.

The failure of the Collins project in 1866 had left Western Union with a three million dollar construction bill and a little used line of telegraph that ran from the Oregon Territory to the Interior of British Columbia and a cable that ran from Swinomish, Washington Territory, to Victoria. By 1868, Western Union was arguing that the cost of maintaining such a remote line was excessive and the Company demanded that the Government undertake to defray $4,500 of the cost. "Despite every effort," British Columbia Magistrate, F.W. Howay reports, "the line in British Columbia did not pay. In 1868 the company stated that its loss for that year on the operation of the portion from Portland northward was $27,000" (UBCA, Howay Papers, Box 24, File 12).[78] That year, the Government did its best to ignore the request. And by 1869, Western Union was again beating at the Colony's door for their $4,500 subsidy. This time, however, the point of negotiation was a 'free' telegraph service. In his 12 October letter to J.W. Trutch, Frederick Lamb offers:

> to make the Government of British Columbia an absolute gift of their telegraph line, offices, instruments, and office machinary with the whole equipment belonging to them from Swinomish, WT north to Quesnel....The telegraph line from Swinomish north and all

[78]For a discussion of the construction and operation of the line running from San Francisco to British Columbia see E.D. Smith's 1938 article on "Communication Pioneering in Oregon," in the Oregon Historical Quarterly.

> profits arising therefrom will thus belong to and be under control of the Government as in England and might be worked to advantage in connection with some of the departments already existing. (PABC, Colonial Correspondence, 1869: 899A, pp. 1 and 2)

Despite its service record in British Columbia, the Government found an attraction in owning, at least a portion of, a regional system of telegraphy. As it turned out the British Columbian government passed on the offer to take over the service and signed, on 20 May 1870, a perpetual -- 999 year -- lease for the stations, land lines, and cable portions of Western Union telegraphs north of Swinomish, Washington Territory (PABC, Colonial Correspondence, General Agent of Western Union, G.H. Mumford to J.W. Trutch, F7111A). This lease was not signed without controversy.

"They Want Their Luxury"

Although British Columbia telegraphs had been introduced by private industry, the Government, from the outset, had closely associated itself with their extension. In April of 1865, for instance, the Government gives and receives. Hailing Hobbes, then Governor Seymour at the helm of his Leviathan, tows the final section of the Western Union line across the Fraser River to New Westminster. In exchange, the Construction Boss, James Gamble, "promised to carry a branch of the wire to the government offices at the camp" (Macdonald, 1947: p. 347).

So when Governor Musgrave opened the February 1870 session of the Legislature with a speech that expressed concern about the future of the telegraph in the Province he also opened a powder-

keg. Although he had requested $4,500 to subsidize the Victoria cable,

> he said he did not favour expending government funds to keep the line open to Quesnel. A public meeting was held at New Westminster protesting against the Governor's proposal and a petition to that effect was signed by 150 residents and forwarded to His Excellency. (Macdonald, 1947: p. 350)

Consequently, Dewdeney's 6 April report recommending that "money for supporting the line be raised by loan" (Victoria Colonist, 7 April 1870: p. 3), transmogrifies to become the Select Committee on the Customs Duty Bill **and** Maintaining the Mainland Telegraph (Victoria Colonist, 13 April 1870, p. 3). And it is this Committee that recommends on 11 April 1870 to finance the service by imposing a $2.50 duty on each and every gallon of alcohol entering the Colony (see the "Customs Amendment Ordinance, 1870," Laws of British Columbia, 1871: pp. 439-440). The deliberate nature of this solution proposed that all was well. But, as the pages of the Victoria Colonist and the Cariboo Sentinel reveal, the centre and its margin shared only a difference of opinion. In Victoria, "Dr. Helmcken was opposed to the bill and to the telegraph line at the price. He said the 'gain' was not worth the candle'. He said the line was not wanted. The only purposes for which the line could be used were government purposes (13 April 1870: p. 3). In the Interior, the Editor of the Sentinel composes this reponse:

> From Yale to Williams Creek people are continually enquiring about the telegraph. They want their 'luxury', as it was called by Dr. Helmcken, and a luxury it is to everyone

> except the printer We need not say anything about the advantages of telegraphic communication -- they are generally well understood and appreciated -- but in Cariboo where we have mail communication only twice a month for six months of the year, the telegraph would prove an inestimable boon. (1 October 1870: p. 2)

Using an equation that incorporated all of British Columbia and which underwrote the cost of maintenance and repair of the line with a 'universal' vice tax on "spirits and strong waters," Victoria attempted to defuse a feeling that the interests of the Government had preceded those of its citizens. However successful, the threat that the service might be removed demonstrates a hitherto tacit expectation that Government had assumed the responsibility for the telegraph in remote regions. This type of demonstration can be witnessed in a number of places served by the Government's telegraph. A particularly volatile incident is recorded on the Prairie.[79]

J.S. Macdonald reports that in 1883 the General Superintendent of Telegraphs had approved an extension of line to the community of Prince Albert, [Saskatchewan]. All was well until an unannounced change in the plans was made. Instead of building the line into Prince Albert, it stopped about four miles short of the village at the Hudson's Bay post. Macdonald remembers:

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[79]This is not to imply that all breaching demonstrations were violent. Often the breach was latent, in the sense that it involved the absence of a line. In such a case, the community made a genial petition to Government for an extension and it was generally approved as a matter of patronage.

> The immediate result was a near riot, some wire and a few poles being torn down by the angry populace and Mr. [Hartley] Gisborne's person threatened, he in turn bringing action against several of those implicated. The matter was promptly reported by wire to the Minister at Ottawa, Sir Hector Langevin, who at once replied deprecating the action of the citizens in taking the law into their own hands, but asserting that he personally had not been advised of the arrangement and that he was desirous of meeting the wishes of the citizens. Eventually, charges were withdrawn and the matter settled by the establishment of offices both at Prince Albert and Goshen. (Macdonald, 1930: p. 23)

The Prince Albert demonstration emphasizes how seriously the extension of a telegraphic service was taken by the residents of a remote community. But it also shows how directly their needs was communicated to Government via the telegraph and how quickly and satisfactorily their discomfort was addressed. In this case, the Federal government's access to a remote community is balanced by that community's access to Federal decision-makers. Likewise, the commercial interests of the Hudson's Bay Company are offset by the fiduciary interests of Government. Of course, the attention of Government was related to how narrowly it defined its publics.

"Now They Wanted Their Rights"

The Federal government's disregard for Aboriginal interests in Canada is well documented. Indeed, they are the dispossessed. Consequently, the historical interaction between Aboriginal people and the telegraph constitutes another margin, a largely invisible one. This absence is, in part, attributable to popular notions that Native, i.e. peripheral, populations were afraid of

the technology and, as a result, hid away from it.[80] In a 1932 speech in Quesnel, for instance, Judge Howay establishes the civilizing influences of the Collins project by juxtaposing its technology with a primitive -- and thus, unreliable -- feeling of fear:

> The Indians greatly feared this dead but living thing which could speak over such great distances and they believed that it would kill them; it required a great deal of explaining to satisfy them that it was neither superhuman nor deadly. (Howay Papers, Box 24, File 12, 19 August 1932)[81]

What Howay regrets to mention is the manner in which the telegraph was first demonstrated. The exploration crew for the Collins line was lead by a Major Pope. Upon reaching Fort Fraser on the 29th of July, 1865, Pope wished to ensure that the Indians would not attack him and his party. He set up a short line with a pocket telegraph key at one end and a revolver at the other.

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[80]A complementary, 'if dogs could talk', strategy buttressed this notion. In this case, 'savages' use modern technology against its purveyors. The December 1876 edition of the Telegraphic Journal and Electrical Review, provides this example: "We learn from New York that the Indians are very thankful for the telegraph poles on the prairie; they formerly had to ride a long distance to find a place to chain a prisoner while they tortured him" (TJER, vol. 4, no. 69: p. 308). Carolyn Marvin situates such statements in a predominant discourse. As a preface to her discussion of cultural homogenization, she states that those who controlled electrical technologies during the 19th century frequently " dismissed vastly different cultures as deficient by civilized standards lacking even the capacity for meaningful communication" (1988: p. 191).

[81]Similarly, J.S. Macdonald validates a general perception that Native people were fearful of electric communication technologies by recording one Indian's first experience with a telephone: "exclaiming that the box contained a devil, he hurried from the building and never entered it again" (1930: p. 44).

"Everything being in readiness, Major Pope requested the chief to place his finger upon the key, which was followed by an instantaneous report of the pistol at the extremity of the wire" (Neering, 1989: p. 154). This experience demonstrates an unimaginable extension of the Chief's personal power Yet, at the same time, it underscores the importance of 'possessing' the telegraph key and introduces a legitimate concern that one might be fired upon if one approached the line of telegraph.

Aboriginal use of the telegraph, however, was widespread. Following the collapse of the Collins extension, for instance, a number of sources report how the tons of 'useless wire' met the "domestic requirements of the Indians for manufacturing nails, fish spears, traps, and toboggans...(Le Bourdais, 1976: vol. 5, folder 3: p. 6),[82] and "which the Indians later used on their swing bridges" (Boss, 1948: p. 49). Remembering his 1898 trek to the Yukon gold fields, Walter Hamilton describes one such bridge:

> Near the mouth of the Bulkley, where it joins the Skeena, was a suspension bridge, built by the Indians. It was made of felled wire taken from the abandoned telegraph line of 1866. It stood for many years and was much pictured as something of a triumph of native ingenuity in bridge building. (1964: p. 12)

Otherwise, the business of the telegraph wound its way into the lives of Native people as a place to work, a conduit for

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[82]Following the caption, "Destruction of the Telegraph Wire," the 3 May 1884 issue of the Telegraphic Journal and Electrical Review reports: "The Indians of Alaska are said to have used, in making salmon nets, the bulk of 900 miles of telegraph wire, which was laid by the Overland Telegraph Company many years ago, at a cost of $3,000,000" (p. 376).

commercial and social transactions, and an emergency system of communication. McMicking reports in January of 1873, for instance, that the telegraph line connecting New Westminster, Hope, Yale, Lytton, and Clinton was all being maintained by Indians (Letterbooks, p. 215), and Mattie Washington makes frequent reference to Native use of the telegraph on the North coast of British Columbia. "Sometimes," she writes,

> I had their whole [Indian] council in my office at once. They calmly seated themselves and went into a lengthy discussion before deciding upon the nature of their message and then took great pleasure in seeing it go. (Boss, 1948: p. 62)

And the telegraph represented a last chance for Native people who took sick away from their camps or injured themselves in the bush. An article in the Kingston Whig-Standard, for instance, documents a case in Northern British Columbia. Leading with the headline, "Sick Indian Rips Down Telegraph to Get Aid," the article both discovers the Government telegraph service for its readership -- "Do you know that the public works department has ten thousand miles of telegraph lines reaching up through the northern wilderness to keep the isolated folk up there in touch with civilization?" -- and plays with the spectacle that a "Redskin" could understand that bringing the wires down would mean that help would soon follow, "Talk about the simple Indian, that Indian knew that if the wire was tampered with some white man would come along to find out why" (LeBourdais, 1976 vol. 5, folder 2).

Perhaps the most important measure of how well Native people understood the telegraph was that its presence tended to confirm, rather than breach, underlying expectations of non-native culture. Boss's innocent description of a Native man sending an important message to Vancouver, for instance, captures a pecuniary moment of this process: "I daresay the despatch was urgent as the salmon cannery season was about to commence. After the message was "ok," the line went down. The Indian came two or three times for his reply and then went wild saying 'Maybe you don't send my message and keep my money'" (1948: pp. 62-63). But it is J.S. Macdonald's plaintive recapitulation of two confrontations, between Indians and a telegraph construction crew in 1875, that crystallizes Indian circumspection. "They said how the Government had promised them a treaty," the letter begins,

> that they had received a letter from Governor Archibald, making them all sorts of promises, of which none had ever been fulfilled, and now the Government was sending the telegraphs (or speaking iron as they called it) through their country without saying anything to them, or asking their permission. Now they wanted their rights; they were not going to let the constructing party come any further than the south branch.

Two days later the same party meets up with another small group of Indians who convey a similar message:

> I had only gone about four miles further west when we were met by more of the Indians....One of them reported himself as head speaker....He said he had never saw wire like that before, and that if they allowed this to be put up it would frighten all their game away. Now he wanted the Government to send out a man and tell them what their intentions were -- whether the Government

> hated them or liked them, or was it going to make a treaty with them or take their country by force....he said he had been expecting a Commissioner up to speak to them, and when he saw the wire first and heard nothing of the Commissioner, he felt as if something was sticking in his throat. (1930: pp. 17-18)

Far from being afraid of telegraphy, Aboriginal people had first-hand experience with its use and a tacit understanding of its function. They recognized that the telegraph, like something sticking in one's throat, represented innumerable personal and social constraints. Moreover, they appreciated the symbolic value of a line. The rubric of fear disassociates Aboriginal position and features a Government interest in extending its telegraphic facility across Aboriginal territory. Accordingly, the Government telegraph allied its public working with racial privilege and became a harbinger of the inequalities that would characterize fiduciary relationships between Aboriginal populations and the Federal government.

Yukon Telegraphs

The Yukon line was a massive public work. Between 1898 and 1904, the Federal government expended $1,218,645 to build, maintain, and operate 1,685 miles of telegraph in northern British Columbia and the Yukon Territory (Sessional Papers, 1898 - 1905).[83] Budgeted to cost $372,500 in 1899 (Debates, 9

[83]By way of comparison, the telegraph service in British Columbia received Federal subsidies totalling $634,466.29 between 1871 and 1896. Of this amount $189,027.65 or 29.8 percent financed construction and $445,438.64 or 70.2 percent was put toward its maintenance and operation (British Columbia Year Book, 1897: p. 450).

August 1899, pp. 10093 and 10099), the cost of constructing the line had more than doubled to $786,224.41 by May of 1902 (Debates, 5 May: p. 4151). In his report to the Commons that year, the Hon. Minister of Public Works, Israel Tarte, explains that some sections "cost over $700 per mile because we had to pack provisions, wires, and so on, for a distance of 100 miles, and in some cases the men had to shovel away snow and ice to a depth of six feet" (p. 4154). The construction accounts would eventually close in the summer of 1903 and the cost would be a "little less than $900,000." (Debates, 14 October 1903, p. 14042). Accounts of the line's work, however, had just begun. Bracketed by a rush for gold in the area of Dawson's Creek and a boundary dispute on the Pacific coast, the Yukon line was the largest single capital project ever co-ordinated by the Government Telegraph Service. As such, its presence represents an inordinate public interest in the margin.

"This is a Government Undertaking and a Precedent in The Way in Which Governments Move"

The use of public funds to construct the Yukon telegraphs marks a distinctive shift in the character of the DGT. The westward extension of the CPR had meant that some DGT lines were closed while others were leased to private companies or sold at a marginal price to the railroad. By all accounts, the western presence of the DGT was clearly in decline. In July of 1883, the Port Arthur to Winnipeg line had been handed over to the CPR and on 1 October 1886 the Government sold the main trunk of its British Columbia service -- valued at $89,400 in 1885 (SP, 1885,

App. 22: p. 217) -- for $15,780, and agreed to let CPR Telegraphs operate the lines between Cache Creek and Barkerville. "In consequence of the completion of the Canadian Pacific Railway to British Columbia," says the Government,

> and the establishment of its accompanying telegraph system, which would necessarily be in competition with the lines operated over the same territory by the Government for the purpose of affording telegraphic facilities to the public, it was decided to accept an offer made by the Railway Company for the purchase by them of the lines which had been heretofore maintained by the Government, along or in proximity to the railway route. (SP, 1887: p. cxxvi)

Following the 1886 sale, the DGT in British Columbia languished. With the exception of a Vancouver Island extension in 1890/91 that joined Nanaimo with Port Alberni and Cape Beale (approximately 225 miles), a 1895 branch from Lillooet to Ashcroft (62 miles), and the opening of an office at 150 Mile House that same year to "afford needed facilities for the business that is being done in connection with mining operations in that neighbourhood" (SP, 1895: p. 218), the Service had been allowed to deteriorate. It had become a victim of attrition. Consequently, any extension of service supposed a commercial presence.

Mining activity in the Yukon gold fields triggered investor interest in establishing telegraphic communication with the Territory.[84] Accordingly, private capital was organized to fill

[84] The Times of London, for instance, argues in September of 1898 that the "most urgent need of the Klondyke country at the moment is a telegraph line" (in Laurier Papers, p. 30855).

this need and several syndicates were formed."[85] In the Spring of 1898, for instance, Charles Hosmer, General Manager of CPR telegraphs expresses his belief that the "line will be built in the very near future, and our company will operate it" (BCMJ: 1898: p. 34).[86] That summer Federal charters were granted. The one issued to the Canadian British Columbian and Dawson City Telegraph Company gives them the privilege to:

> construct, maintain, and operate lines of electric telegraph and telephone by means of cable lines or otherwise from the city of Victoria in the Province of British Columbia by the way of Telegraph Creek and Teslin Lake in the said Province, or as nearly in that direction as is practicable, by the most feasible route to Dawson City on the Yukon River in the North-west Territories. (Statutes of Canada, 1898: p. 176)

But the Yukon telegraphs would never have anything to do with this or any other private company. The line would proceed in the public interest.

The 16 March 1899 speech from the throne seals the fate of the Canadian British Columbian and Dawson City Telegraph

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[85]Of these syndicates, one -- John Morris Catton and Thomas Dupont -- filed its petition with British Columbia's Legislative Assembly and another -- the Northern Commerical Telegraph Company -- received a Federal charter, but was soon dissolved.

[86]The CPR's interest appears to be longstanding. On 2 May 1901, for instance, the Minister of Public Works announces to the Commons that "Mr. Hosmer "wrote me a standing offer, if I may call it so, in which he said that the Canadian Pacific Railway would be ready to take up our line and pay us an interest of 4 per cent on the cost of the work" (Debates, p 4285).

Company[87] and opens a Pandora's box for the Liberal government. Noting that it was "thought expedient in the public interest to authorize the construction of a telegraph for the purpose of maintaining speedy communication with the people of those distant Territories," and citing the fact that the chartered company had allowed "months to lapse without doing anything," Laurier announces that the Government is determined not to lose another year, "but to build a telegraph line during the season" (reprinted in Debates, 9 August 1899: p. 10102). The interests that the Government had overidden, however, were powerful. The Directors of the Canadian British Columbian and Dawson City Telegraph Company included Sir James Grant of Ottawa, former Minister of the Militia (1880-1892) Adolphe Caron, former Premier of British Columbia, J.H. Turner, and W.P.J. Fawcas, Director of the Edison and Swan United Electric Company. Consequently, public opposition and private lobbying was intense.[88] That

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[87]The Laurier Papers catalogue an excruciatingly long and Kafkaesque dialogue between the Company and various levels of government. Having first said no in December of 1899 (p. 40265), Laurier finally states in May of 1903, that "the Government cannot entertain the claim of the Canadian British Columbia and Dawson City Telegraph Company" (p. 70487). What the Company seems to have misunderstood from the outset was that their plans to link Dawson with Victoria via a land line to Skagway and a cable to Vancouver Island both included a section of line that traversed the United States and that constituted a submerged, as opposed to a territorial, presence in the Yukon and Northern British Columbia.

[88]The announcement that such an undertaking would proceed without first going before Parliament sparked a small fury among the Conservative opposition. Calling for the Prime Minister's resignation and demanding to know more the Government capitulates in June. The Hon. Minister of Finance, Mr. Fielding, relates that on 13 March an Order-in-Council was passed "authorizing that certain steps should be taken to construct a telegraph into Dawson"

winter, Israel Tarte writes to the Prime Minister to reassure him that the Government's purpose in working the Yukon line is a good one. Shunning commercial forecasts,' Tarte relates the Yukon scheme to a larger fiduciary project of Government. "I have no desire to vouch for the future financial results of the telegraph system in the Yukon," he writes,

> But, again, the fact that private parties are so eager to buy the line built by the Government and prevent the Government from going on with its work may, I venture to say, be considered as a pretty strong evidence that there is a good future for those lines. Moreover, is it not in the interest of the country and of the people interested in the development of the Gold mines in the Yukon that the line remains in the hands of Government. The Government has no shareholders behind him, and provided they will be able to pay the working expenses and a moderate rate of interest on the cost of the line I feel that the country will not ask anything more. Perhaps it is not out of place to remind you that in many countries of the world, the telegraph lines are, as much as possible, under control of governments[90]

(Debates, 21 June, p. 5604). The following week, the Minister returns with financial information. A total of $15,000 had been advanced, $2,500 each from the British Columbia telegraphs and dredging votes, and $10,000 from the appropriation for surveys" (Debates, 29 June, p. 6121).

'The question of profitability will nag Tarte throughout his tenure at Public Works. This uneasy interrogative in the Commons is typical of many others: "I would like very much to know the feeling of the House as to rates. Am I expected to make a paying business out of these lines? I think I can do so if I maintain the rates as they are now. [asked what he means by this] "If I make it pay interest on the capital with a balance to the good, I think that will be all right" (Debates, 5 May 1902: p. 4175).

'Calls for the Government to take over telegraphy in Canada had never been favourably received, regardless of the party in power Beginning in 1873, with a motion from a Mr Glass for the Government to "purchase, control, and work the whole telegraph

(Laurier Papers, December 1899, p. 39804)

On 28 September 1899 the first section of the line, connecting Dawson and Bennett, had been completed. "This construction however, was only a link of what the Government considered necessary to unite the Yukon Country with the rest of the world" (SP, 1901: p. 27). Almost two years later, on 24 September 1901, the Atlin - Quesnel line would carry its first message.[7] And it was this link that would set a "precedent in the way in which governments move" (Atlin Claim, 7 October 1899: p. 1)[8]

"I Am Speaking Of Patronage"

The construction of Government telegraphs also allowed for the expression of less public interests, such as patronage.

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system of the Dominion" (Journals, 1873: p. 225), proposals of this nature were routinely ignored. Witness this exchange recorded in the Newspaper Debates: "Mr. Ross [MP - Durham] asked whether it was the intention of the Government to take over telegraphs like Britain. Mr. Mackenzie said it was not the intention of the Government to do this" (22 April 1874: p. 46). Renewed interest in this possibility during the late 19th Century contributed to the preparation of a feasibility study by the GTS. The 18 March 1892 Telegraphic Journal and Electrical Review reports: "A proposal has been made to the Dominion Government with the view of taking over the control of all telegraphs in the country as in England. Mr. F.N. Gisborne, the superintendent of the Government telegraph, has drawn up a report on the subject" (p. 360).

[7] Superintendent of construction, J.B. Charleson, sends this telegram to Sir Wilfred Laurier on 24 September 1901: "I have the honour to report that the great overland telegraph between Dawson and Ashcroft was this day completed" (Laurier Papers, p. 59122).

[8] "The Yukon line not only meant that the Government owned a new concern, but that it re-absorbed key portions of what it used to operate. As the Deputy Minister of Public Works mentions in 1903, "This line [Ashcroft to Barkerville and Ashcroft to Lillooet] which was formerly operated in conjunction with the C.P. Ry. Co. has since 1 May 1901 been operated direct by the Department, and latterly as part of the Yukon telegraph system" (SP, 1903, p. 26).

Poles had to be purchased, supplies delivered, and Agents engaged. This often meant that the party in power demonstrated fiduciary responsibility by placing the interests of its members before those of other constituencies. On the one hand, appeals for favour, such as this one from the Editor of the Yukon Sun, demonstrated a general expectation, "I hope as the government newspaper you will be able to show us some special consideration in our telegraphic service" (Laurier Papers, 26 September 1899: p. 37624); on the other hand, the public working of Government did nothing to discourage such demands. Asked, for instance, if he would disregard political considerations when letting contracts along the Yukon line, Israel Tarte responds:

> That is going too far....My position is this: I must first serve the party to which I belong.
> Mr. Kemp: No. No. Country first.
> Mr. Tarte: I am speaking of patronage. There are a great many men in both parties, and I find there are enough good men in the Liberal party to supply the government in many lines at the lowest prices. (Debates, 5 May 1902: p. 4161)

And while large contracts were tendered, smaller contracts and jobs -- 123 in 1904 -- were awarded on a patrorage basis. 'Permanent jobs with the [Yukon] Telegraph Service," writes historian David Richeson, "required political approval even at the level of line repairer or operator" (1982: p. 7). Similarly, political removal of employees was also commonplace. One such example involves a Mr. James A. Wilson, Superintendent of British Columbia telegraphs. Wilson's actions are, on 12 November 1901, reported to Wilfred Laurier by a man who identifies himself as

J.B. Leighton, "a representative of Liberals along the Cariboo Road between Ashcroft and Barkerville" (p. 60003). Leighton claims that Wilson is manipulating the Manager of the Yukon project, J.B. Charleson, that Charleson is wasting government money, and -- importantly -- claims that Wilson showed Charleson "who the Tories were along the road and who should have Telegraph Offices opened in their premises" (Laurier Papers, 1901: p. 60007).[33]

Of course, Sir Wilfred was already very familiar with Mr. Charleson and his weakness for persuasion. Charging corruption and incompetence during the first phase of construction, the Conservative opposition had scoured the Minutes of the Public Accounts Committee to document the familial nexus that characterized Charleson's management style. And on 2 May 1901, the opposition asks the Liberal government to comment on the fact that Charleson had, between 16 March 1899 and 30 March 1901, expended $104,771.36 in payment to E.E. Charleson, W.G. Charleson, Alex Charleson, A.J. Charleson, and P.W. Charleson. (Debates, p. 4279). Clearly, Charleson had staked his claim with relative autonomy.

Patronage, unlike other mechanisms of government, attached itself directly to the loyalty of remote and highly specialized constituencies. Moreover, accessibility to favours by party

[33]A post-script to this correspondence appears in Sessional Papers two years later. The Deputy Minister announces that M.W. Crean relieved James Wilson as Superintendent in November, 1901 (SP, 1903: p. 10).

loyalists implies an interest in the life chances and the biographies of other unintended individuals. Likewise, the Agents who operated and repaired the Yukon line were patrons whose presence constitutes a corporeal, and perhaps a mythical, interest in the margin.

"The Wonderful Fortitude and Fidelity Of Its Employees"

When Walter Hamilton left Ontario to stake a claim in the Yukon, he stopped at Cache Creek and headed north to Quesnel to take what the British Columbia Mining Journal describes as the "Poor Man's Route":

> It follows what is known as the old 'Telegraph Trail' -- a great swath 120 feet wide cut straight through the forest...The great 120 feet wide swath is now much overgrown, of course, but through the centre of it there runs a wide, smooth path, over which I myself rode a great many miles'. (BCMJ, 24 October 1898, reprint from a story filed by W.M. Pindell in the New York World)

Much to Hamilton's dismay, the journey was an arduous one. He reports that of the 1,500 men and 3,000 horses that left for the gold fields "only six men and no horses reached the Klondike" (1964: p. 8). The following Spring, their trail would become a path followed by the Yukon line (see Appendix 1).[94] Distinguished by topographical features such as, Telegraph Creek, Telegraph Point, and the Telegraph Range (British Columbia

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[94]And it really was a path. Not only did pack-trains use the line to supply remote stations (see Jenness, 1930: p. 699), but on occassion, individuals took it as a byway. In 1926, for instance, Lillian Olam left Vancouver to walk home to St. Dominiquez, Poland via Nome Alaska. Appendix 5 shows her near the eighth cabin in July, 1927.

Geographic Gazette, 1930: p. 256), the line would be punctuated by stations, and refuge huts (see Appendix 2 & 3) and characterized by its Agents and their stories. The nature of the latter proposed a marginal difference.

In 1928, Louis Le Bourdais felt that it was time that the real story about the Yukon line was told. The portrayal of the Government's Yukon operations had been embellished beyond recognition and Le Bourdais saw the need for a first-hand telling.[95] The 29 March 1925 edition of the Vancouver Sunday Province, for instance, treats its subscribers to an intimate look at the Yukon telegraphs. Following the caption "Yukon Telegraph Service is World's Link With Settlements Which Fringe Arctic," readers learn about "he-men types" who have bears for friends, who are fiercely loyal, and who maintain perfect health in spite of their lonely and inhospitable environment (p. 4). Similarly, F.W. Dowling, Le Bourdais's former Supervisor, responds to his request for story ideas by suggesting this focus:

> You could touch on the pioneering work of the line in Northern B.C., the romantic character of its services, and wonderful fortitude and fidelity of its employees scattered along the lonely trail of its route, their long vigils in the lonely stations, and their respective section, etc. etc. (Le Bourdais, Vol. 12, File 3, 21 June 1928)

But, Louis Le Bourdais, a DGT employee from the age of 16,

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[95]Le Bourdais' ambition to write a book based on his and others' experiences on the line was never realized. Instead, he penned numerous short articles. In 1942, Guy Lawrence, another former GTS employee corresponds with Le Bourdais about a similar project. Lawrence's book, 40 Years on the Yukon Telegraph, is published in 1965.

remembered just how difficult it was to get "operators to go into lonely cabins in [the] North" (Box 12, folder 3). Granted holidays only once every three years (Cotton, 20 December 1931), paid less than NWMP housekeeping staff (Debates, 26 May 1903: p. 3510), faced with running "rapids in the ice floes," and with subsisting on "mouldy bacon, wormy fruit, and weavily flour supplied by the wholesale in Vancouver" (Boss, 1948: p. 127), and generally known as "great migrators" (Lawrence, 1965: p. 42), the average DGT employee exhibited more of a willingness to serve than an ability to do so. Accordingly, they often experienced what one operator called "bad luck episodes." "Most of them would make good telling some evening around the fire," Homer Coner writes, "but I doubt if they would look very well in print and I also doubt if the principals concerned would appreciate having their names used (Coner to Le Bourdais, 3 February 1931, Box 12, file 3). These stories, however, tell of life in a back region 1,600 miles long and only fifty to one hundred feet wide, circulating within the margin though rarely escaping its enclosures.[96] As such, they constitute a peripheral biography of human movement and interest.

Stories about Operators on the Yukon line contain three elements. Each story presumes a pre-dominance of nature,

[96]And circulation was not restricted to correspondence. It was often instantaneous. For example, Louis Le Bourdais recalls: "When the wire was not busy, which was seldom in those first few years, the Operators conversed with one another" (Le Bourdais, vol. 12, box 3), and Lawrence records: "One thing I noticed is that Operators chatter back and forth when the line isn't busy" (1965: p. 51).

establishes the frailty/agency of human being and, of course, is managed by a third variable, the telegraph. The certainty of bad weather is a typical representation of the force of nature.[97] In some cases, severe weather illustrates a common hardship that must be endured silently and anonymously. Le Bourdais recalls this instance:

> Once in early morning just as getting daylight, operators along line who happened to be listening heard in faltering dots as if someone sending whose fingers stiff or unused to handling key. Morning was intensely cold, thermometer hovering around sixty [below]. Instruments ticked out: 'HOW COLD IS IT FOR KRISST'S SAKE'. Operators had to laugh in spite of tragedy of the thing. (Box 12, no. 3)

Otherwise, weather -- particularly heavy snow -- silences the line and imposes a threat to also silence its Agents. The DGT's Fort Simpson Operator, Mattie Boss, explains that "during the winter after a storm, it was not unusual to report 50 to 100 breaks or grounds" (1948: p. 127), and relates how this reality affected family life:

> Mother worried a good deal about the boys and especially when the line went down. She kept very close to the office in case anything had happened to them in a storm. I remember one evening at dusk, she was 'standing by' and Wiggs cut in to report a break on the wire. After doing so, he left the line open for a short time and then added 'Did mother think I had fallen off the pole'. (1948: p. 131)

Both stories denote a loss of bodily control in nature,

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[97]Weather is also the most substantial aspect of regional story-making. It is a snow storm in 1936 that closes the Yukon line forever. Thereafter remote services are continued via shortwave.

hypothermia, for instance. But each also suggests that the possiblity to express and share this anxiety with others, via the telegraph, is in some way tied to survival.

Another theme that runs through these stories is the reversible character of human presence. The remoteness of the stations made the Operators both vulnerable to the exigencies of isolation and privileged them with an unfettered agency. Bill Hinze [also recorded as Hines and Hynes], for instance, is said to have died from heartache. After one particularly memorable holiday in Vancouver, "Old Bill" returns "grief-stricken" to his station at Burns Lake. William M. Clark of South Bulkley recalls the circumstances leading up to his demise:

> Bill was out to Vancouver on his holidays. He met a young girl in the red light district: they became great friends. Bill was about 50 years old at that time. She was about 17 years. Bill told me he did not want to marry her....He only wanted to reform her. Poor Bill, he sure had a big job on his hands. (Clark to Le Bourdais, 21 March 1926, vol. 12, folder 3)

Similarly, Guy Lawrence ties Freddy Gorrel's accidental shooting death to his strategy for coping with boredom and loneliness: the hundreds of beer and liquor bottles strewn about the Pike River cabin. After witnessing four days of continuous drinking, Lawrence writes to his Diary on 16 June 1903: "I wish these Johnnies would move on before something serious happens. They seem to have gallons of whiskey and don't seem to be in any hurry" (1965: p. 45). On the other hand, the isolation of DGT employees gave them a great deal of autonomy. For one thing, it

was guaranteed that an employee would never be fired during the Winter because a replacement could not arrive until late in the Spring. A particularly poignant example of, unintended, agency concerns the Alaska-Yukon border. On 3 September 1904, Guy Lawrence relates that a sense of excitement had been building since a decison had been made to use the Yukon line to get a chronometer reading from the Adington Observatory in Washington, D.C. On the first two evenings the experiment failed because stars were not visible at both ends of the line. On the third night, however, the elements were more favourable:

> Sharp at eight o'clock we heard the faint beat of the chronometer -- but not for long. Far down the Yukon River, at Hootalinqua station to be exact, a lone lineman painstakingly hammered on his key, "Has anybody seen Hootalinqua Mary?" Of course, the signals were ruined...Weeks of preparation had gone to naught. (1965: p. 64)

The isolation theme accounts for the most personal aspects of suffering and accommodates the broadest notions of participation and resistance. Moreover, remoteness emphasizes and authenticates the regional integrity of the story, in the sense that the story becomes an engramatic resource that characterizes and contributes to a marginal identity.

The "Meteor" story captures all of these elements in a purely fantastic way.[98] Andy Johnson, a man described as the "world's champion prevaricator and alibier was the hero of the

[98]This story is told by J.J. Dore (Regional Supervisor at Hazelton) to Louis LeBourdais in a 8 Jan. 1937 letter that is labelled "Personal and Confidential" (vol. 12, folder 4).

meteorite incident." Stationed at the Nahlin cabin, Johnson bundles severe weather (temperature), an annual expression of tedium (a drinking party) and an 'act of god' (the meteor) to produce his story. At the same time, the line produces a community of listeners who share anxiety at Andy's absence ("At 4 P.M. one afternoon he accidently opened his telegraph key and it remained open until 11 A.M. next morning. Ominous silence on wire 4 P.M. to 11 A.M. Nothing from Mr. Johnson, line being down on this section"), awareness of his presence ("11 A.M. Strange noises on wire created to give impression Mr. Johnson had located the break and was connecting the line in bitterly cold weather. Actually, he was jiggling the circuit breaker back and forth in his Cabin") and amazement at his excuse:

> About 4 P.M....I was travelling along with my four dogs hitched to the toboggan, bells jingling in the frosty air, 65 below, etc. Suddenly there was a blinding crash, red glare sulpherous fumes, huge dark mass hurtling through the air which landed right in front of me. Dogs and their harness all tangled up. I was knocked unconscious and remained that way until 11 A.M. this morning. Announcement temporarily dazed listeners on wire. Finally, one of them queried him. 'Must have suffered Andy, lying out there in the open at 70 below all night'. Reply. 'Boys you don't get this'. A meteorite, (forget the exact dimensions he gave), fell in front of me boring enormous hole in ground. I was knocked under my toboggan. Heat from meteorite from the bottom of the hole warmed ground for miles around. Snow melted, etc. (Mid summer) I dozed comfortably under the toboggan in the meteorite's glow. Did not come to until 11 A.M. this morning'.

Unlike other stories, however, this one did not stop at the margin. "Incredible as it may seem, Barney Taylor, who was then our Agent at Atlin, who acted as a correspondent to the Alaskan papers, wired the story to Skagway from whence it got to 'outside papers'."

Chapter Summary

Similar to the Government's use of telegraphs to fulfill commitments, to disregard interests, and to respond to perceived responsibilities, the presence of its employees represents a personal investment in remote or marginal public interests (see Appendix 4). Their agency is key to the communication of a sense of place. Accordingly, their experiences became a form of local news and gossip within the region and, for the most part, were necessarily ignored without. Layers of lived distance insulated their back region. However, when stories did leak out and appear 'up-front', the spectacle of each vignette so completely ignored the uncommon or depraved circumstances of the individual or so utterly embellished the routines of staying alive that further layers of vicarious distance were fused to the edge of the front. On the one hand, a tier that is configured by a signature; on the other hand, one which is regulated by an autograph. In each case, it is the history of the DGT which signifies a reliable experience of space. The extreme distances which separated the 'forefront' from the 'deep back' regions of Canada found a middle station in the DGT. In this space a certain amount of levelling occurs. Communities speak back to their governors, marginal

populations experience a loss of position, and agents personify the risks of remote presence and gain access to the timeless station of myth.

AFTERWORD

This thesis analyses a central tendency to extend access to communication and a remote commitment to intervene in this process. The extension of the Dominion Government Telegraph and Signal Service stands out as a formative moment in this regard. The various 'experiences of space' which emerge from this engagement sustain and advance the analytical project. This project is also limited by several factors.

Limitations

The first limitation is one of scope. Although the DGT was a truly national service this thesis focuses on the Western portion. Lines in southwestern Ontario, Northern Québec, Labrador, and the Maritimes are not discussed at all. The time necessary to conduct centre/margin analyses in each of these regions would have enormously extended the completion date of this thesis and bankrupted the researcher.

Another limitation of this research is that the timeliness of telegraphic communication often meant that telegrams would be read and then destroyed, discarded, or transcribed into another form. Accordingly, important primary data -- what was said -- is irretrievable. Telegraphic exchanges among operators, messages between merchants and suppliers, and flashes from community leaders to government officials, have escaped preservation. Save for the examples presented in this thesis and personal collections that the writer is unaware of, this rich resource has all but disappeared.

A final limitation of this thesis lies in its proximity to the present. The subject matter is old enough so as to ensure the death of the principals, yet recent enough to withstand much close or critical attention. Although a great deal of literature surrounds the failure of the Collins project academic treatments of the DGT are few. In addition, the line is privileged with innumerable personal tellings. These 'modern' constraints made verification a difficult and time consuming exercise. As a result, most of the historical data reported in this thesis is 'new' and merits further consideration.

Directions for Future Research

As mentioned above, the DGT was a widespread organization that reached into communities and settlements from coast-to-coast. The presence of these other lines permit regional differences and similarities to emerge. What motivated the extension of services to the North Shore of Québec? How did the Federal government maintain its public interest in the Maritime service? How did communities use this service to extend their interests? In what way did the Government's telegraph service affect contemporary means of transportation and communication in those regions? These questions extend the project begun here and propose a broader comparative base.

The DGT also presents a historical model for understanding the development of national media institutions in Canada. About 1880, for instance, the DGT initiated a government telephone service and early in the twentieth century it began replacing

poles with a wireless service. Here, the DGT anticipates later developments such as the Canadian Broadcasting Corporation and current debates over the fairness of access, what constitutes local services, and the devolution of Federal responsibilities.

In a broader sense, the DGT anchors recent theoretical formulations that feature the relationship between new media and space or spatiality; particularly a deeper regard for the issues developed by Meyrowitz. His argument for the televisual transformation of situations, for instance, would be strengthened by an application of a telegraphic model.

Finally, this case study extends interest in the relationship between communication and history. On the one hand, it captures a social and cultural expression of experience; on another hand, it features the role that systems of communication play in the determination of 'modernity'. Accordingly, this approach contributes to a small but growing body of literature which reflects upon communication in history.

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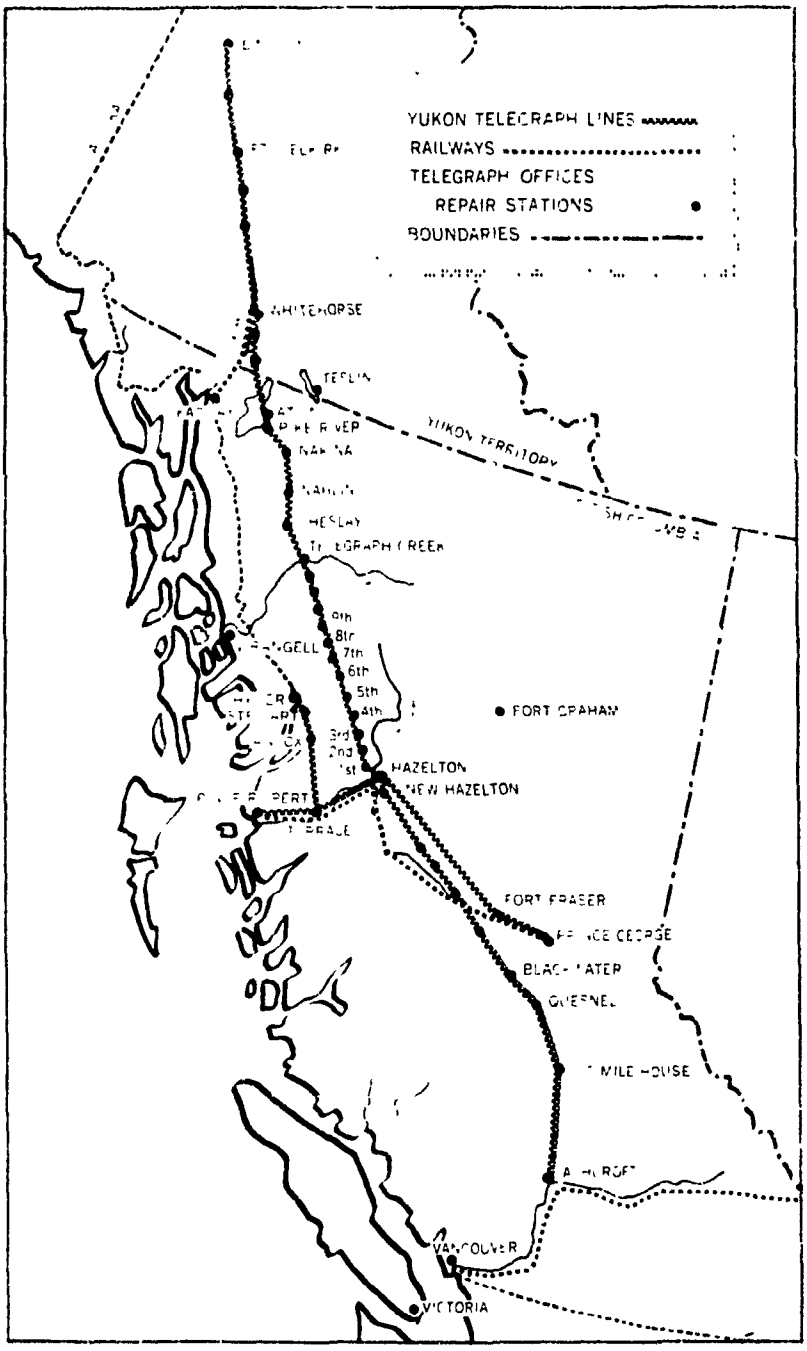
Appendix 1



FROM JENNESS, 1930

Appendix 2

LE BOURDAIS: Vol. 12, Folder 4

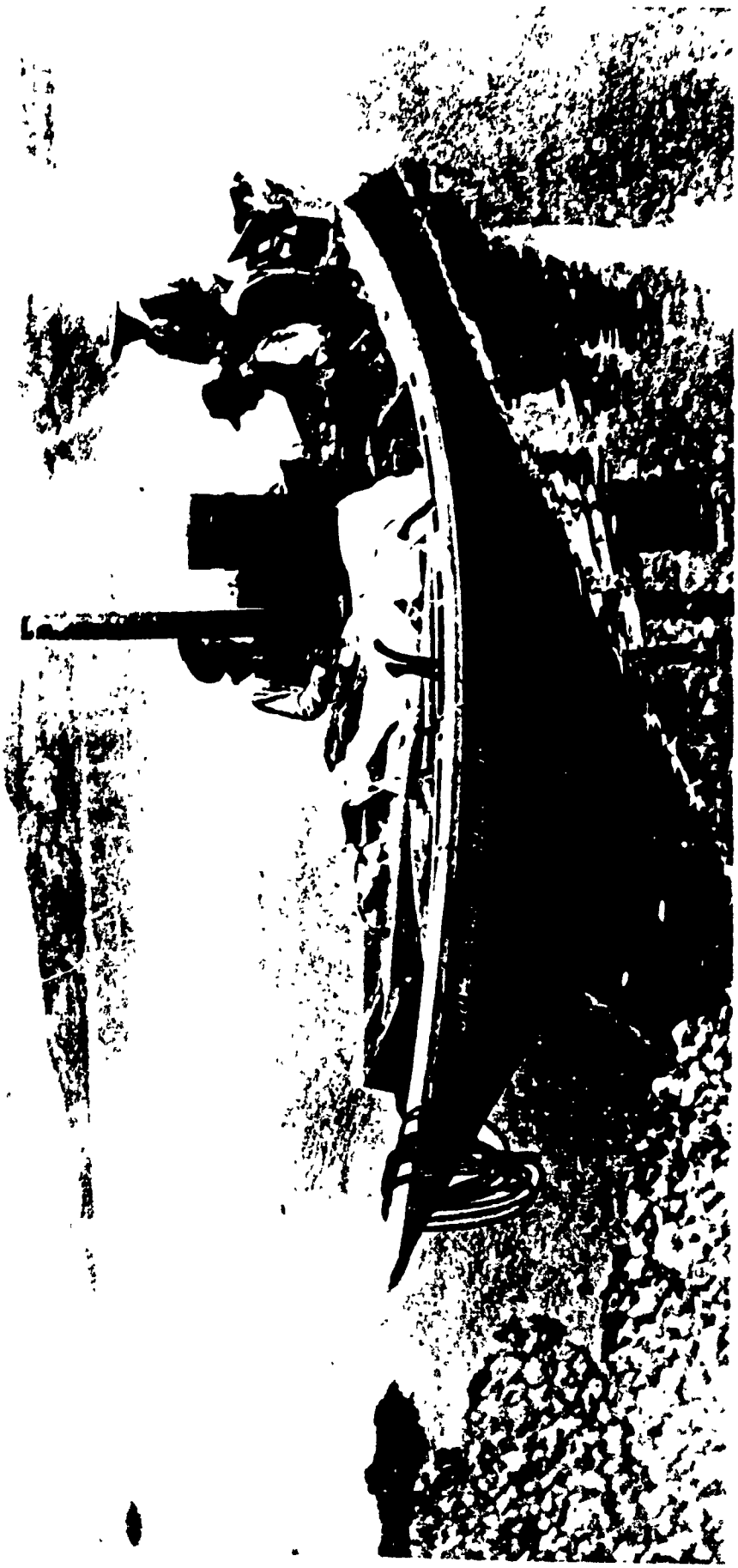
Appendix 3

LEBOURDAIS: VOL. 12, FOLDER 2

Appendix 5

LEBOURDAIS: VOL. 12, FOLDER 2

Appendix 4



LEBOURDAIS: VOL. 12, FOLDER 2