# JODY BERLAND North of Empire



Essays on the Cultural Technologies of Space

North of Empire



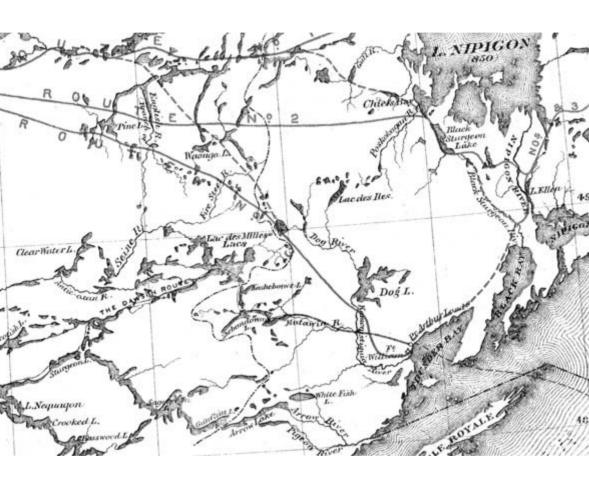
# North of Empire

Essays on the Cultural Technologies of Space

Jody Berland

DUKE UNIVERSITY PRESS

Durham and London 2009



© 2009 Duke University Press. All rights reserved. Printed in the United States of America on acid-free paper. ∞ Designed by Jennifer Hill, typeset in Amo Pro by Achorn International. Library of Congress Cataloging-in-Publication Data appear on the last printed page of this book.

This book is dedicated to my dear parents, Jayne and Alwyn Berland.

Nature and history seem to have agreed to designate us in Canada for a corporate, artistic role. As the U.S.A. becomes a world environment through its resources, technology, and enterprises, Canada takes on the function of making that world environment perceptible to those who occupy it. Any environment tends to be imperceptible to its users and occupants except to the degree that counter-environments are created by the artist.—MARSHALL MCLUHAN, Canada: The Borderline Case

The question of "speaking as" involves a distancing from oneself. The moment I have to think of the ways in which I will speak as an Indian, or as a feminist, the ways in which I will speak as a woman, what I am trying to do is trying to generalize myself, make myself a representative, trying to distance myself from some kind of inchoate speaking as such. There are many subject positions which one must inhabit; one is not just one thing. That is when a political consciousness comes in.—GYATRI SPIVAK, *The Postcolonial Critic* 

My theorem that there is no philosophical "first thing" is coming back to haunt me. Much as I might be tempted, I cannot now proceed to construct a universe of reasoning in the usual orderly fashion. Instead I have to put together a whole from a series of partial complexes which are concentrically arranged and have the same weight and relevance. It is the constellation, not the succession one by one, of these partial complexes which has to make sense.—THEODOR ADORNO, correspondence, in *Aesthetic Theory* 

Acknowledgments	xi
Introduction MAPPING NORTH OF EMPIRE	1
One Writing on the Border	29
Two SPACE AT THE MARGINS  Colonial Spatiality and Critical Theory after Innis	65
Three SPATIAL NARRATIVES IN THE CANADIAN IMAGINARY	98
Four ANGELS DANCING Cultural Technologies and the Production of Space	130
Five THE MUSICKING MACHINE	155
Six locating listening	185
Seven WEATHERING THE NORTH	210

#### x Contents

Eight MAPPING SPACE	242
Imaging Technologies and the Planetary Bo	ody
Nine CULTURAL TECHNOLOGIES AND THE "	EVOLUTION"
OF TECHNOLOGICAL CULTURES	273
Postscript	300
Notes	309
Bibliography	341
Index	369

There were times when the pleasant prospect of acknowledging my debts was the only thing that kept me interested in finishing this project. Every book is testimony to the generosity of the author's mentors, teachers, colleagues, friends, relatives, and editors, who make its completion possible and its pages intelligible. My parents, Jayne and Alwyn Berland, have been all of these. I also write in remembrance of Ioan Davies and Alex Wilson, who shared their gifts with so many of us, and of my mother, whose heart still beats.

This writing has benefited from the critical insight of Katey Anderson, Alwyn Berland, Marcus Breen, Rosemary Donegan, Zoe Druick, Greg Elmer, Len Findlay, Jean Franco, Simon Frith, Barbara Godard, Larry Grossberg, James Hay, Brenda Longfellow, Richard Maxwell, Scott McCracken, Richard Rathwell, Ned Rossiter, Robinder Kaur Sehdev, Ato Sekyi-Otu, Sarah Sharma, Jennifer Daryl Slack, Cheryl Sourkes, Will Straw, Susan Willis, Greg Wise, and Bob Wright. I am grateful to the book's anonymous reviewers for their kind and constructive insight, to Ken Wissoker and Courtney Berger at Duke University Press for their wisdom and patience, and to Mark Mastromarino for his thoughtful editing. They did their best with me.

I would also like to thank David McKie, Brian Shoesmith, the Department of Media Studies, Edith Cowan University; Ien Ang; Tony Bennett; the Social Sciences and Humanities Research Council of Canada; the Department of Communication Studies, Concordia University; Atkinson College, the Office of Research Administration, the Faculty of Graduate Studies, the Graduate Program in Culture and Communication, the Division of Humanities, and the Faculty of Arts, York University, for their academic support.

These chapters were written and rewritten over a period of time in which technological, political, and cultural changes have both clarified and deranged my thought. Editors are never unsung heroes in my world. Earlier versions appeared in the following publications.

"Writing on the Border," CR: The New Centennial Review 1, no. 2 (2001): 139–69. Published by Michigan State University Press.

"Space at the Margins: Colonial Spatiality and Critical Theory after Innis," TOPIA: Canadian Journal of Cultural Studies 1 (1997): 55–82; and in Harold Innis in the New Century: Reflections and Refractions, edited by Charles Acland and William Buxton (Montreal: McGill-Queens University Press, 2000). Used by permission of McGill-Queen's University Press.

"Spatial Narratives in the Canadian Imaginary," *New Formations: A Journal of Culture/Theory Politics* 57, theme issue *The Spatial Imaginary* (2005/2006). Used by permission of Lawrence and Wishart.

"Angels Dancing: Cultural Technologies and the Production of Space," in *Cultural Studies*, edited by Lawrence Grossberg, Cary Nelson, and Paula Treichler (New York: Routledge, 1991). Used by permission of Taylor & Francis Books.

"The Musicking Machine," in *Residual Media*, edited by Charles Acland. (Minneapolis: University of Minnesota Press, 2007).

"Locating Listening: Technological Space, Popular Music, Canadian Mediations," *Cultural Studies 2*, no. 3 (1988); and in *The Place of Music*, edited by Andrew Leyshon, David Matless, and George Revill (New York: Guilford Press, 1998). Used by permission of Guilford Press.

"Weathering the North: Climate, Colonialism, and the Mediated Body," *Provincial Essays* 8 (1989), theme issue *Shifting Fields: Images of Colonialism and the Look of the Postcolonial*; and in *Relocating Cultural Studies*, edited by Valda Blundell, John Shepherd, and Ian Taylor (London: Routledge, 1993). Used by permission of Taylor & Francis Books.

"Mapping Space: Imaging Technologies and the Planetary Body," Found Object 5 (spring 1995): 7–19, theme issue TechnoScience/Cyberculture; and in Technoscience and Cyberculture, edited by Stanley Aronowitz, Barbara Martinson, and Michael Menser (New York: Routledge, 1996). Used by permission of Taylor & Francis Books.

"Cultural Technologies and the 'Evolution' of Technological Cultures," in *Contemporary Cultural Theory and the World Wide Web*, edited by Andrew Herman and Thomas Swiss (New York: Routledge, 2001). Used by permission of Taylor & Francis Books.

There is nothing more wonderful than the exchange of ideas, and I hope the twenty-first century university will continue to offer a place for that to happen. I am grateful for the perspicacity and generosity of graduate students and research assistants over the years: Neil Balan, Natallia Barykina, Kelly Bronson, Yolande Daley, Murray Forman, Daniel Hadley, Mike Hunter, Rob Kerford, Jean Koo, Jess Malkin, Tanner Mirlees, Marcia Ostashewska, Robinder Kaur Sehdev, Sarah Sharma, Lyndon Way, and Lesley Williams. This book took a long time to complete as a consequence of illness. I thank Dr Alison Bested, many talented health workers, and Canada's health system for making it possible.

Special thanks to Bob Hanke, my sweetheart, critic, comrade, and culinary magician.

# Mapping North of Empire

I want to begin with a quite central theoretical point which to me is at the heart of Cultural Studies but which has not always been remembered in it. And this is that you cannot understand an intellectual or artistic project without also understanding its formation; that the relation between a project and a formation is always decisive; and that the emphasis of Cultural Studies is precisely that it engages with both, rather than specializing itself to one or the other.—RAYMOND WILLIAMS, "The Future of Cultural Studies," The Politics of Modernism

Just as none of us is outside or beyond geography, none of us is completely free from the struggle over geography. That struggle is complex and interesting because it is not only about soldiers and cannons but also about ideas, about forms, about images and imaginings.—EDWARD SAID, Culture and Empire

The movie American Dreamz (Paul Weitz, 2006) opens with the delightful premise that the president of the United States wishes to catch up on his reading. The day after reelection to his second term, he decides to lie in bed and read the newspapers. As attention switches to the television Mr. President isn't watching, we discover that weeks have passed and he has disappeared from public view. There are rumors he has suffered a nervous breakdown. As we return to the presidential bedroom, the chief of staff, a perfect ringer for Dick Cheney, storms into the room and demands to know what the president, now surrounded by paper, is up to. "You want to be careful with that pile," the president cautions. "That is the Canadian Press." The chief of staff is dumbfounded. "Who outside of Canada gives a shit about the Canadian Press?" he wants to know. "They are our neighbor," Mr. President mumbles, "and . . ." Before you know it, he is on "happy pills" and wearing a ventriloquist's earpiece.

In recent years, there is no surer sign of satiric intent in American films and late night television than a reference to Canada. In *American Dreamz*, reading the Canadian press is prima facie evidence of mental instability in the Oval Office. In *South Park: The Movie* (Trey Parker, 1999), American

#### 2 Introduction

parents panic about Canadian pornography creeping across the border and demand that the army wage war against the corruptors. "They're not even a real country," they warble in South Park's Academy Award-winning song, "Blame Canada." In Canadian Bacon (Michael Moore, 1995), in which several concerned Americans charge the border and attack the enemy in Toronto, Jim Belushi jokes about the cities lined up on the Canadian border to forestall an American invasion.1 In The Daily Show, reference to Canada signals a moment of political panic or gay fantasy detour before the performer takes a breath and returns to normal. "Canada" stands in here for both the absence of politics and despair about politics; the joke expresses a strongly ambivalent affect that can safely be discharged against the one group who will never demand retribution. It is easy to forget that the United States did in fact invent a war for electoral purposes (against the Philippines, in the late 1880s), that Belushi is not altogether mistaken about the cities built along the U.S. border, and that Canadian newspapers sometimes have, you know, different perspectives on world affairs. So what makes these jokes funny?

Aside from providing American entertainment with crucial natural resources—humor and talent—Canada appears in postwar transnational media culture in two distinct discursive contexts. In the first, Canada is a model international citizen responsible for founding the United Nations and initiating an international peacekeeping force that travels the world enforcing truces. Here Canada stands for political moderation, tolerance, multiculturalism, and sophisticated mediation skills personified by its writers and politicians, one of whom, former prime minister Lester Pearson, won a Nobel Peace Prize for his work for the UN. This image of exemplary cosmopolitanism has been refurbished since Canada legalized same-sex marriage and decriminalized marijuana, refused to join the war against Iraq, and salvaged the touring career of the Dixie Chicks. In the second discourse, Canada is a poignant instance of what happens when a country loses control of its media and natural resources. Here Canada is a colony that struggled to become a nation and disappeared back into a colony. Early researchers in the media imperialism school warned of the dangers of "Canadianization": the loss of sovereignty that arises when you see the world through another country's eyes. In a "tragic paradox" Canada built a cross-country public media infrastructure only to lose control of its contents.<sup>2</sup> In both of these simplified accounts, the country is characterized by fluid boundaries with either positive or negative effects. American political humor seems to bring these two meanings together. We could invade Canada, but it wouldn't matter, and anyway we already have. And yet, the subject keeps coming up. Evidently there is something about that border. . . .

This border is the subject of the first chapter of North of Empire. "Writing on the Border," proposes that Canadians experience a form of double consciousness similar to yet profoundly different from the "doubling" of black consciousness described by race theorists such as W. E. B. Du Bois, Frantz Fanon, and Paul Gilroy.<sup>3</sup> In this writing, the black person sees himself from the vantage point of both the other and himself, and experiences an irresolvable schism between the two perceptions. Rather than remaining invisible behind the veil of the raced body, the Canadian hides behind verisimilitude, "passing" as the other while recognizing the other as not oneself. This vantage point is double-reflected through a one-way mirror in which "America" does not see Canada at all. The nonknowing of the other is part of what the Canadian knows, and it shapes her scholarship and art. In the first epigraph to this book, Marshall McLuhan argues that the porous quality of Canada's borders provides Canada's thinkers with particular insights on the media age. "Nature and history seem to have agreed to designate us in Canada for a corporate, artistic role," he suggests. "As the U.S.A. becomes a world environment through its resources, technology, and enterprises, Canada takes on the function of making that world environment perceptible to those who occupy it. Any environment tends to be imperceptible to its users and occupants except to the degree that counter-environments are created by the artist." Could it be this creative counterreflection that so compels Hollywood scriptwriters to joke about invading the country to their north? Only psychoanalysis can unravel the unconscious acts through which humor, revenge, power, and ambivalence reiterate their logic in the relationship between the two countries. Categorically, as everyone knows, "No one in 'America' loves an anti-American";5 this causes difficulties for Canada, which is "in 'America'" and yet not. Under the circumstances, the best solution is to be "as Canadian as possible, under the circumstances."

North of Empire addresses the politics of media culture in connection to a border that separates different approaches to the study of both media and space. On the northern side, scholarship has tended to understand culture in terms of a longstanding struggle around sovereignty and space, while to the south, a growing literature on culture and globalization holds the very premise of borders open to question. Canadian research foregrounds media

#### Introduction

technologies as agents in the production of space, knowledge, and power, while Anglo-American cultural studies considers the focus on media technology suspect or simplistic. Negotiating this double duality counteracts blind spots on both sides of the border. There are theoretically sophisticated authors who consider Canada too provincial to produce its own complex accounts and the United States too universal to require them. Some scholars "apply" contemporary theory to support the claim that Canada imposes a narrative of singular identity by the elementary fact of being a nation. They impose a universalizing narrative on a space whose history they forgot, while scholars on the other side of the border and the ocean forget the space and its history altogether. Hoping for a different kind of dialogue with these ideas, I explore both the concept of media space and the space in which this concept emerged in connection with the study of empire. I connect this inquiry to culture and power through an analysis of cultural technologies that mediate and shape our sense of ourselves and the places and times of everyday life. In this introduction, I review these methodological and political commitments and consider how they inform and trouble one another.

This book began as a collection of essays that traveled across (a decade of) time and (a country away of) space to find a publisher. Its vantage point from the margin or "counterenvironment" is in this context both actual and symbolic. My first prospective publisher in the United States determined that Canada was not part of the Americas after all, and returned the manuscript. My second and third attempts failed because the publishers were in Canada, a country whose cultural industries are over 90 percent foreign owned; with the smaller market, publishing an academic book, like producing a film or recording an album, requires government subvention. A manuscript like this one containing more than 30 percent previously published material is ineligible for such support. Formative (for me) essay collections by Harold Innis, Theodor Adorno, Walter Benjamin, Roland Barthes, Michel Foucault, James Carey, Stuart Hall, Gayatri Spivak, Homi Bhabha, Donna Haraway, Doreen Massey, Meaghan Morris, Larry Grossberg, Andrew Ross, or Rey Chow, for instance, would not be eligible for publication under this policy. Meanwhile, my colleagues and I are accustomed to receiving letters from American and British editors saying that our work might be of interest if references to Canada could be removed. This power/knowledge complex can be quite discouraging. Fortunately, Duke University Press welcomes Canadian scholarship, and I have been able to revise this work for the press without abandoning its origins.

This story reiterates the trajectory of a capitalist Second World country which functions as both colonizer and colonized. This trajectory invites a translation of media analysis into postcolonial critique and vice versa through dialogue with cultural studies and Canadian communication theory. North of Empire explores the fragmented and globalized landscapes of "teletopographic" culture; that is to say, the technical, historical, and discursive shaping of cultural practices in which distance is simultaneously inscribed in and overcome by mediating technologies, and considers the role of such teletopographic practices in shaping (as they are shaped by) concepts of identity and justice. This project elaborates Innis's premise that empire is constituted through means of communication, a theme explored at length in "Space at the Margins" (chapter 2), and McLuhan's related premise that the media must be understood in relation to changing topographies of space, a theme that underscores this book as a whole. Like others informed by their work, I have learned to think about culture in the context of a complicated social and material process that reproduces and extends itself in space and time.<sup>7</sup>

In McLuhan's cartography, nations and neighborhoods have become equally irrelevant, the planet shrunk irrevocably to the space of a screen by the electronic pathways of contemporary media. In calling this new entity a "global village," McLuhan joins the influences of his Catholic faith with the assumption popular in the 1960s that television's real-time representation of suffering in one part of the world would inevitably produce empathy and action in another. "In a culture like ours, long accustomed to splitting and dividing all things as a means of control," begins Understanding Media, "it is sometimes a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium—that is, of any extension of ourselves—result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology."8 Anglo-American cultural studies scholars have largely sided with Raymond Williams's critique of McLuhan for overstating the consequences of the medium. As Williams argues, media technologies are agents in a complex and often unpredictable social process in which we are not passive entities.9 McLuhan's claim that television creates a global village betrays the shortcomings of his media formalism. But

#### 6 Introduction

his premise that each new medium reorganizes the communication system as a whole, alters social space and scale, and realigns the human senses is nonetheless incontrovertible. This premise is one of the pillars of Canadian communication theory, which posits that you can acknowledge the codeterminant forces of capitalist relations and geopolitical contexts while insisting that each medium has specific material properties which extend and alter the knowledge and perception of its users.

"We can perhaps assume," Innis ponders, "that the use of a medium of communication over a long period will to some extent determine the character of knowledge to be communicated and suggest that its pervasive influence will eventually create a civilization where life and flexibility will become exceedingly difficult to maintain." A new medium can unleash creativity but if left unchecked can result in a monopoly of knowledge forms and inflexibility in the forms, relations, and spaces of communication. In Carey's summary of Innis's approach, changes in technologies of communication affect culture by altering the structure of interests (the things thought about), the character of symbols (the things thought with), and the nature of community (the arena in which thought developed).11 Anticipating the idea that "all technology is biotechnology," these scholars subvert the dualism that separates idealist and materialist historiography because they "never consider human history as anything else than an embodied history inscribed upon the communis sensus. History is human history or biotextual because it alters our sensory and cognitive ratios but always in concert with the history of our land, its rivers and forests, its fish, fur and minerals." This tradition locates communication as a material practice; distance, land, and proximity as conditions and outcomes of this practice; and eyes and ears as biosocial mediators of their own prosthetic histories.

This understanding of history reminds us of the dangers of measuring new technologies by what their users say about them. To rely on such accounts is to "remain divorced from a relation to subsequent production, which is the actual, historically effective measure of reception." In "Angels Dancing" and the chapters that follow, I explore technological changes in culture in connection with this idea. While electronic communication makes space increasingly homogeneous and heterogeneous, the regulation of space is central, in ways that users may not recognize, to the practices of power. Part of the constitution of mediated or teletopographic geopolitical space is the growing distance between those who cannot discern these

connections and those for whom such connections are fundamental. This difference is one meaning I have in mind when I use the term *culture*.

### Reflections on Culture

A few hundred years ago, culture was peripheral to the philosophical exploration of meaning. With the rise of modern means of reproduction and academic disciplines, it now occupies the center of such inquiry. As Michel Foucault demonstrates in *History of Sexuality*, a proliferation of discourse suggests an underlying governmental project that is as important as any explicit purpose manifested in the texts. This idea has particular poignancy with respect to culture, for the more that media culture produces and circulates meanings, the less people seem to know or care about what "meaning" is. In part we can attribute this dilemma to the culture industry, through which the tangible, affective issues experienced in peoples' ordinary lives are condensed and crystallized into charismatic textual operations in increasingly large-scale spatial and economic contexts. In coining the term "culture industry," Theodor Adorno and Max Horkheimer also anticipated these Canadian critiques of modernity, arguing that "the technical contrast between the few production centers and the large number of widely dispersed consumption points" is simply evidence of the fact that "a technological rationale is the rationale of domination itself." As a consequence, "the gigantic fact that speech penetrates everywhere replaces its content." <sup>14</sup> In these accounts, modern culture is both where such effects are produced and the realm within which we learn to feel and assess such effects. Modernity thus produces a dazzling field of self-referentiality that these authors exemplify and sometimes misunderstand.

Thinking about culture in the context of these issues requires a double consciousness in which the thinker is—or I am—obliged to think about how (and where) I think when I think about culture. As Williams so famously noted, "Culture is ordinary"; <sup>15</sup> it is the part of everyday life through which we understand and feel our solidarities and differences with others. But this observation may now disguise as much as it illuminates. We live with increasing proliferation of cultural experiences, affects, commodities, and mediations which face the challenge of supporting a mundane and often disappointing everyday life while simultaneously offering a virtual mode of transport out of it. Ordinariness shifts and doubles back on itself. Signs

#### 8 Introduction

(brands, symbols, interfaces, digital tools) seem more alive than what they represent. Such liveliness can reconcile a listener with her afternoon or persuade her never to live that afternoon again. In the shadow of the modern and morphing spaces of empire, culture still produces diverse implications and effects.

My analysis of these issues draws on Canadian communication theory and critical theory as intellectual traditions posing powerful challenges to discourses of economic rationality and technological progress, and like them I link these aspects of modernity to conquest, colonization, and empire. Both schools of thought deploy multiple analytical perspectives to probe these processes from a self-consciously decentered or marginal vantage point. To do so they had to be "theorists against themselves"; they had to find ways to assess their own knowledge production reflexively in relation to the overwhelming technological bias, present-mindedness, and economic instrumentalism of Western capitalist modernity.

These ideas shape my thinking and challenge me at every step. If my knowledge of the world is shaped by technological mediation, how is it possible to rethink it? If Western culture is dominated by spatial perspectives and ambitions, what defines a critical politics of space? If culture is about belonging, and there is so much culture, why is belonging so fraught? If place is problematic, can I love and hate my own? And finally, who or what determines the answers to these questions? *Culture* is not an answer to these questions, but a term that has organized how Western intellectuals have posed them and what is thought to be at stake in doing so. To address such questions reflexively is to acknowledge the uses and the limits of culture as we generally understand it, and to reopen these interpretive and political debates.

McLuhan's concern is not symbolic culture but rather the heretofore invisible grammar of media such as print and television and their shaping of human perception. "The man in a literate and homogenized society ceases to be sensitive to the diverse and discontinuous life of forms. He acquires the illusion of the third dimension and the 'private point of view' as part of his Narcissus fixation, and is quite shut off from Blake's awareness or that of the Psalmist, that we become what we behold." Even "after" print, we are subject to multiple forces that reproduce this privatized perspective. In "probing" intellectuals who consider themselves exempt from the perspectives they critique, McLuhan draws on Innis's recognition that

We must all be aware of the extraordinary, perhaps insuperable, difficulty of assessing the quality of a culture of which we are a part or of assessing the quality of a culture of which we are not a part. In using other cultures as mirrors in which we may see our own culture we are affected by the astigma of our own eyesight and the defects of the mirror, with the result that we are apt to see nothing in other cultures but the virtues of our own. I shall assume that cultural values, or the way in which or the reasons why people of a culture think about themselves, are part of the culture.<sup>20</sup>

Here culture is not just a symbolic system within a representational field; like Williams, McLuhan is concerned with a larger field of ontology and power/knowledge complex that shapes, and is shaped by, the properties of knowledge transmission. These ideas challenge us to think through, beyond, and against the systems of symbolic meaning and expression that dominate our study of the realm of culture. McLuhan foregrounds the sensory and ontological grammar of the media in order to emphasize its role in producing and disguising epochal changes in Western culture. Adorno evokes "culture" only to interrogate the fetish that cultural criticism makes of its forms and purposes.<sup>21</sup> Signifying "English Canada" follows an analogous logic; it asserts national identity but rejects the logic of identity through which the modern nation-state "others" the world. In North of Empire I take account of these three moves—the foregrounding of material media properties, the reflexive questioning of the discursive codes of cultural analysis, and the challenging of the logic of identity—as not just analogous, but also deeply interconnected. The book pursues this theme across a range of cultural forms and practices.

Canada's formative literature on culture joins the idea of culture to political goals of nation-building and political sovereignty, and, within these definite constraints, to the idea of justice and equity in difference. The energetic history of this literature inspired me to pay close attention to changing imbrications of culture and government. If culture is a mode of government within which identity and subjectivity are produced and regulated, where does utopian imagination or transformative solidarity arise? Where can it take us? Innis warned academics to resist the orientation toward management needs, as this would transform the university into "reserve pools of labour to supply political parties" (or more currently,

telecommunication companies and creative industries). Overwhelmed by perceived parallels between culture administration and fascism (a less bizarre claim than it appeared to foundational thinkers in what we now call cultural studies), Adorno posits the negative dialectic as the only truly ethical response. Wary of the elitism of mass-culture critique, Tony Bennett proposes a strategy of institutional research dedicated to the reform and administration of specific cultural technologies. You might call these probes, prisms, and pragmatics long-term and short-term approaches to the problem of criticizing the culture of which one is a part. Each seeks to shed light, as Judith Stamps suggests, on "the interplay of the material and ideal forces that led to the eclipse of dialogue and dialectical processes in the West."

The corporate transformation of the academy represents one such interplay in our contemporary environment. Another is the ever-increasing mobility of cultural commodities, texts, practices, values, and subjects as they flow across the existing borders of language, discipline, state, and global space. Such movement changes the nature of (but does not eliminate) borders and boundaries and the identities and discourses constituted by them. This process is generated within and without these borders. Underlying the problematic interplay of material and ideal forces is the continuous innovation of technologies that mediate our spaces and subjectivities. If technological environments remain opaque when we are accustomed to them, rapid technological change shocks our sense-making strategies and destabilizes our cultural, sensory, and collective modalities.

The division of faculties which results from the technological dilation or externalization of one or another sense is so pervasive a feature of the past century that today we have become conscious, for the first time in history, of how these mutations of culture are initiated. Those who experience the first onset of a new technology, whether it be alphabet or radio, respond most emphatically because the new sense ratios set up at once by the technological dilation of eye or ear, present men with a surprising new world, which evokes a vigourous new "closure," or novel pattern of interplay, among all of the senses together. But the initial shock gradually dissipates as the entire community absorbs the new habit of perception into all of its areas of work and association.<sup>25</sup>

Despite McLuhan's prognosis of numb absorption, anxiety is the inescapable companion of information altered and transmitted at the speed of

light.<sup>26</sup> Individuals must exert considerable effort and thought to persuade themselves that they are the agents of such change. In fact contemporary scholarship theorizes agency differently in the wake of such technological change. Social and cultural studies of technology concur that we share our human agency with keyboards, software, and implants (if less comfortably with the hands that assemble such technologies or recycle them as toxic trash). New technologies present compelling opportunities (for some) to revive their sense of agency and personal freedom. Through this process, as I show in "The Musicking Machine" (chapter 5) and "Weathering the North" (chapter 7), skill and agency are constantly redefined along with the processes through which we valorize and transmit them. The reflexivity offered by postcolonial theory, Canadian communication theory, and environmental politics shows that we are exercising a will to power whose satisfaction comes with a price. The dark side of modernity demands that we calculate the costs as clearly as the benefits so insistently paraded before us.

# Reading Cultural Technologies

Rather than theorizing culture in the abstract, as part of a social or ideological totality, or as the arbitrary outcome of diverse techniques of identity and subject formation, *North of Empire* investigates the trajectory of specific cultural technologies as they mediate and alter relations between human bodies, technology, space, and empire. This gives "space" a substantial theoretical mandate which can only be met through connection with the other terms. I explore such connections through a range of practices: from nation-building to pianos, music recording, the television weather forecast, the Internet, and satellite-imaging technologies through which our global sensorium is extended ever upward and out.

The concept of cultural technology is commonly traced to Foucault's work on "governmentality," and signals the intent to address a wider field of interactions than the discussion of communication technology ordinarily invokes. Jim McGuigan understands the term "to reference the 'machinery' of institutional and organizational structures and processes that produce particular configurations of knowledge and power." When Bennett approaches the museum as a "cultural technology" of history, he locates the museum as a governmental institution responsible for the regulation of knowledge and social conduct. <sup>28</sup> In *Technologies of Gender*, Teresa de

Lauretis points out that feminist film theorists were approaching cinema as a "social technology" or "cinematic apparatus" contemporaneously with but independently of Foucault's work; she emphasizes "not only how the representation of gender is constructed by the given technology, but also how it becomes absorbed subjectively by each individual whom that technology addresses." Thus, "the F next to the little box, which we marked in filling out the form, has stuck to us like a wet silk dress. . . . The construction of gender is the product and the process of both representation and self-representation."<sup>29</sup>

My use of the term draws on and elaborates these various senses of the term. It refers to the formal, phenomenological, and social properties of media technologies together with the machineries of knowledge and power through which they emerge and within which they work, and it acknowledges the subjects and subjectivities produced through interaction with these technologies along with their heterogeneity and ambivalence. The term cultural technology connects the various processes and practices that comprise culture: the materialities that produce it (radios, televisions, photographs, pianos, satellites, computers, networks, and books like this one); the geopolitical contexts within which such media emerge; the complex machineries of spatial dissemination through which their structures and materialities circulate and are put to use; the discourses and narratives through which such processes are made meaningful and familiar; the symbolic practices, disciplines, and forms of literacy and skill that arise in connection with them; the modes of political and corporate governmentality that define and order these contexts; the responsive subjectivities acting within them; and the fissures and spaces in which oppositions or alternatives are inspired and imagined. Addressing these processes and practices in relation to a critique of empire acknowledges that these technologies, machineries, practices, and subjectivities do not proliferate randomly or endlessly, but emerge within and are shaped by specific geopolitical regimes.

In *North of Empire*, the stories we tell, contest, and enact are important agents in the fabrication of ourselves and of the spaces we inhabit. Media technologies secure a working relationship with the practices, needs, and understandings of people who employ them. These interactions are shaped by narrative frameworks and technological forms. "Whatever human rationality consists in, it is certainly tied up with narrative structure and the question of narrative unity."<sup>30</sup> The search to reestablish narrative unity in the

face of technological velocity is an important impulse in the "ordinary" production of culture. As I show, the ascendancy of neoliberalism has relied on a concerted mobilization of narratives: the frontier, progress, sovereignty, entertainment, convenience, mobility, globalization, evolution, freedom. Understanding these narratives as part of the assemblage of cultural technologies helps to contest the way they are being mobilized irrationally to promote so-called rational technological or other ends.

Heidegger famously argues that "the essence of technology is by no means anything technological. Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it."31 This insight can be usefully extended to a critique of the literature on globalization, which commonly attributes this process to the proliferating speed and scale of information and computing technologies. "Although communication technologies are absolutely central to the globalization process, their development is clearly not identical with cultural globalization." While technology is expanding instrumentally and symbolically through globalization, "the media form only part of the total process by which symbolic meaning construction proceeds and only one of the forms in which globalization is experienced culturally."32 If globalization is taken up by Western scholars in terms of the expansion of media and electronic space, it is equally the product of corporate expansion and economic "re-structuring," political revision, transnational migration, and cultural practice. "Just as there can be no cultural transmission without technological means," Regis Debray emphasizes, "so there is no purely technological transmission." <sup>33</sup> Media may be inseparable from their technical properties, but media technologies succeed for reasons that are not purely technological. Similarly, it is possible to analyze specific national contexts without overdetermining the administrative agency of the nation-state.

As part of the modernization and postmodernization of society, cultural technologies are implicated in changing structurations of space and time in the forming and fragmentation of communities; the development and transformation of national communities; the transmission of collective values and memories; the spectacular translation of information to image; the exploitation and management of the physical environment; the administration of wealth, poverty, industry, and war; the social adoption of new information technologies; and the spatial and discursive contexts in and

#### Introduction

14

through which these activities and experiences take place. To emphasize the degree to which cultural technologies connect these domains is not to say that they pursue an entirely utilitarian logic. Like the idea of culture, the term has the potential to "face both ways," and to provide a critical ground for immanent critique.<sup>34</sup>

To historicize technological assemblages such as that among pianos, piano rolls, sheet music, and magazines or among satellites, image processing, digital graphics, prediction software, and television, is to engage with these issues. Building on the questions Williams brought to television as a cultural technology, they broaden our understanding of the media's dynamic capacities to organize historically significant social-technical assemblages. What were their conditions of emergence? What institutions were involved, and how did they change? What narratives and desires fueled their emergence and dissemination, and how were they taken up by diverse interests? To what extent have these technologies shaped the modes of attention or structures of thought that contemplate their effects? To what extent are they shaped by their imbrication with one another? Can their analysis shed any light on relations of power or positive transformation?

## Cultural Technologies of Space

The promise that technology will enhance freedom has repeatedly legitimated the extension of technological systems across and into private and public space. Because technology is such a powerful myth whether in the broader sense of organizing beliefs or in Barthes's particular sense of "dehistoricizing speech," it is not possible to advance the cause of citizenship or justice without a critique of that myth. This requires rethinking of the relationship between technology, space, and discourse through which thought acquires its worldly dimensions. As Terry Eagleton writes, "The very word *culture* contains a tension between making and being made, rationality and spontaneity, which upbraids the disembodied intellect of the Enlightenment as much as it defies the cultural reductionism of so much contemporary thought": Like "culture" and "gender," "space" contains tensions between process and object, being and being made.<sup>37</sup>

A similar rethinking of process and object has changed our understanding of space. "Is space a social relationship?" Lefebvre asks.

Certainly—but one which is inherent to property relationships (especially the ownership of the earth, of land) and also closely bound up with the forces of production (which impose a form on that earth or land); here we see the polyvalence of social space, its "reality" at once formal and material. Though a product to be used, to be consumed, [space] is also a means of production; networks of exchange and flows of raw materials and energy fashion space and are determined by it. Thus this means of production, produced as such, cannot be separated either from the productive forces, including technology and knowledge, or from the social division of labour which shapes it, or from the state and the superstructures of society.

In capitalist space, nature's space is replaced by space-qua-product, to the degree that space becomes a central category for connecting matter and thought. "In this way, reflexive thought passes from produced space, from the space of production (the production of things in space) to the production of space as such." 38

North of Empire elaborates this idea by situating cultural technologies in the context of their role in forming the spaces of empire. Said defines imperialism as "the practice, the theory, and the attitudes of a dominant metropolitan center ruling a distant territory."39 Such practices and attitudes are lived as complicated everyday realities. As Massey demonstrates, the time-space compression of the planet involves an unequal "powergeometry" through which people are placed and mobilized differently, often reinforcing power imbalances that were there already.<sup>40</sup> The growing multinationalism of capital production involves "the stretching out of different kinds of social relationships over space, [which] means also the stretching out over space of relations of power. . . . Along with the chaos and disorder which characterize the new relations there is also a new ordering of clear global-level hierarchies."41 Extending this thought, Canada and the United States both exist because European settlers pillaged and foraged indigenous lands and populations. But Canada has been "ordered" as both subject and object of empire. Canada is now more closely tied to the American economy than is any other Western nation, and as its closest neighbor and largest trading partner has experienced greater vulnerability to American politics, finances, military investments, and cultural industries than any other country.<sup>42</sup> The sense of being marginal to a "dominant metropolitan center" and divided within its borders—the "split screen" described in "Locating Listening" (chapter 6)—is formative to its constitution.

My work on cultural technologies of space began with my interest in the electronic reproduction of music, and particularly the ways that it mediates listeners' relations with their surroundings.<sup>43</sup> The more media technologies alter space, my research suggested, the more they seem to speak to the question of where we "belong." Music's temporal preponderance in radio and subsequent media accentuates the importance of producing a sense of belonging through the changing triangulation of technology, artistry, and pace. Changes in the mediation of sound introduce changes in other media and in the practices of listening. Just as the automated piano finds a home in the domestic space it helps to create, as I argue in "The Musicking Machine" (chapter 5), so radio history arises from and helps to create the mediation of musical forms, publics, and social spaces, as I show in "Locating Listening" (chapter 6). "Radiophonic" space is not one thing: it emerges from a particular conjunction of music cultures, sound recording technologies, modes of dissemination, and techniques of administrative and demographic production which together with the spaces and feelings of everyday life constitute the cultural technologies of listening.

Like music, weather mediates connections between our bodies and our social and natural environments. As I show in chapters 7 and 8, this mediation is itself mediated by technocultural forms, practices, and desires. Playing or listening to music and watching the weather forecast both depend on communication media joining together diverse technologies and forms of knowledge in specific sites of convergence. These cultural technologies work in conjunction with one another to shape the world within a larger media ecology (in McLuhan's terms) or historical conjuncture (to use a familiar term in cultural studies). They play a significant role in shaping how we understand and experience our environments. Acknowledging the continuities and sometimes unpredictable discontinuities in their history provides a valuable counterpoint to the shadow of technological determinism that haunts medium theory.

I employ the concept of the topos to extend the question of technology to encompass and connect the materialities of communication, long-standing habits of expression and feeling, and meanings of place. Communication technology, colonial history, popular culture, and administrative

knowledge are different knowledge systems that overlap and intersect to form the topos. What Belton describes as the "dialectic between the description of a place and its production as a space" overturns the idea that a space *precedes* its interaction with these knowledges and practices. Rather, the topos is formed by

the interaction of a literary system of scientific, academic and novelistic narratives with global systemic capitalism. These interactions worked to produce and distribute knowledge about that system's periphery. The distribution of this knowledge—a process intimately associated with the extension of concepts of modernity and development—has over time produced an historically layered and sometimes contradictory archive of information. Narratives within this archive that refer to specific regions and places provide raw data that helps to form the *topos* (imaginary cultural image) of a place.<sup>44</sup>

Corporations and nation-states deploy powerful and sometimes competing cultural technologies to reconstitute the topos at various scales while seeming to responding to citizens' desire for community and belonging. To think about technology in its relationship to topos is to draw attention to the contradictory logic of the spatial imaginary.

This project has particular relevance for a "new world" which comes into representation through the mediation of modern communication systems. Margaret Turner describes the writing of this so-called new world as an "infinite rehearsal," through which "the simultaneous construction and representation of the culture results in a continual remaking of the discursive place, or recreation of cultural space in which, as Paul Carter puts it, places might eventually be found."<sup>45</sup> As her comment illustrates, Canada's discourse on space continuously elaborates ideas about place, ethics, history, and belonging, and explores their role in binding together inhabitants who lack a shared history. Writers suggest that such discussions mark Canada as the exemplar of the postmodern nation (see chapter 1, "Writing on the Border," and chapter 3, "Spatial Narratives in the Canadian Imaginary"). <sup>46</sup> It is certainly the most teletopographic, given the degree to which it has been lived and archived in terms of the inscribed interdependency of technology and distance.

Technically, "teletopography" describes the practice of determining coordinates, altitudes and heights, distances, and "true (geographic, not

magnetic) north for geographical azimuths."47 Having resolved to unify a large land mass with regionally dispersed settler communities, Canada famously relied on space-conquering technologies to assemble a nation-state.<sup>48</sup> The connection between landscape and technique is continuously reaffirmed in the iconographic languages of Canadian nationalism. The technologies of valorizing and overcoming distance, and the ways these technologies produce the spaces they simultaneously represent, are a central part of the Canadian topos. Because explorers traversed, conquered, and mapped this vast landscape, because this teletopographic work was foundational to nation-building, and because imaging technologies are now enveloped in a continental apparatus, Canada occupies a secure niche in the militaryindustrial complex, wherein it specializes in optical technologies, continental aerospace surveillance, and outer space robotics (see chapter 8, "Mapping Space"). Technology thus represents both the precondition for social connection and the continuous geopolitical mobilization of power/ knowledge that defers and diffuses such connection.

The connection between teletopography and the North offers irresistible ground for metaphorical play. The North appears in the cultural imaginary as a mythic topos in which distance is part of its representational vocabulary. Because we "have" the North, "we" are the north. There is an obvious disconnect between this imaginary of the North and the experience of those who live there. That said, it is possible to describe the country's "coordinates" as teletopographic in three respects: in terms of Canada's reliance on technology as a material solution to the settlement of a small colonial population over a large land mass; in terms of its status as a satellite of the United States, whose cultural products are widely disseminated and consumed via that same technology; and in terms of the complicated translation of these technomaterial realities into the discursive structures, symbolic landscapes, modes of knowing and speaking, and shared experience that constitute what we call culture. This translation inspires artists, philosophers, satirists, and communication theorists to return frequently to the narrative and technological inscription of space, as I show in "Writing on the Border" (chapter 1) and "Spatial Narratives in the Canadian Imaginary" (chapter 3).

Space, Foucault suggests, is a relation between sites.<sup>49</sup> Nowhere is this more salient than in Canada, a country formed by competing British and French imperial ambition which opened its doors to the United States in aid of sovereign economic development and then sought to develop multi-

lateral political institutions to offset American influence. Not surprisingly, Canadians claim to feel as if they belong to more than one space, "more than one history and more than one group."50 The country is comprised of at least three founding nations; the French and English, who are recalled daily in both official languages, and the First Nations, who are rising up to reclaim their stolen lands. In this topos, globalization is a powerful process within as well as outside the country's borders. If Canada and the United States are both colonial projects, their approaches to technology and space have followed different trajectories. For instance (although this is not an instance, but a central argument), the nineteenth-century idea of an endlessly receding horizon advanced by America's "Manifest Destiny" reappears in the twentieth-century vision of a new respatialized frontier in cyberspace, and fuels twenty-first century ideas about transformation through digital technologies. As I show in "Cultural Technologies and the 'Evolution' of Technological Cultures" (chapter 9), the frontier's geopolitical history is extended through cyberpolitics and the militarization of space. "America" is constituted by a longstanding preoccupation with frontiers and an optimistic view of technology as a solution to its manifest difficulties. English Canadian cultural theory resists both ideas by elaborating the connections between them

# North of Empire

For philosopher George Grant, writing in the 1960s, Canada's difference held out the possibility of living outside the technological consensus of capitalist liberalism. Here the question of culture is founded in the critique of technology which prizes open unacknowledged contradictions in liberal capitalism. "The frenzied drive to 'freedom through technique' is, in a word, the horizon of modern culture," he writes. "And as with any horizon which serves, after all, to envelop the human project in a coherent system of meaning, we can never be certain of our ability to think against and beyond the horizon of technical reason." In this horizon, reflexivity is a tragically lost opportunity. As Darin Barney writes,

This symbiotic relationship between liberal politics and technology underscores the reality that liberalism is not, as many of its contemporary exponents would claim, a purely procedural constitutional order devoid of substantive preferences and content. Liberalism is a politics of getting-out-of-the-way of technological mastery and the material progress it always promises and sometimes delivers. . . . The public good is equated with the economically rational, which, in any given instance, is defined by either individual accumulation or corporate efficiency [in which] legitimate public purposes are those that are amenable to technological solutions. <sup>51</sup>

In Grant's portrayal of American liberalism (a prescient description of university research policies today), technological "progress" and American imperialism are justified through the idea of a universal culture founded on an open market. Since this universal culture stands in for and helps to advance a neoliberal model of progress and freedom, resistance to it seems inexplicable; it suggests failure to understand the relationship between capitalism and democracy which America so generously shares with the rest of us.

From the rise of the frontier mythology as an early narrative of American destiny,53 to Michael Hardt's and Antonio Negri's Empire (2000), limits to America have been targeted as a function of the nature America was meant to conquer. Ian Angus argues that these texts share with the Monroe Doctrine the readiness to justify the transborder extension of the U.S. constitutional project by reference to the legacy of the frontier. "'The great open American spaces ran out," Hardt and Negri explain; "the open terrain had been used up,' closing off the 'boundless frontier of freedom." 54 Hardt and Negri have acknowledged the controversy created by their claim that there is no outside to empire. "This Empire has no center and it has no outside," they explain in a 2001 interview. "(We do recognize, on the other hand, that us history does occupy a privileged position in the formation of Empire and that is where our analysis of the US role becomes more complex, but that is a somewhat different matter and allow us to set that aside for the moment.)"55 But it is one thing to set aside the position of the United States parenthetically and another to reproduce its logic. This discussion perpetuates the idea of a limitless horizon of new technological capacities in which geography means everything and nothing. This strange dissemination has a long history. "The open space just ran out," Angus muses in his commentary on Empire:

Not a geo-political or geo-cultural space, but a simply geographical space that is the only one that can "run out" or be "used up" in this way. The

politico-cultural discourse is brought to a decision-point because of an entirely non-political, non-cultural, geographical determinism. They do not consider that it might have been first opposed and then displaced—onto the space race as the "final frontier," for example—and still today be a constituent component of U.S. political culture. <sup>56</sup>

The rhetoric of natural ending displaces the contingencies of history and represses the recognition that this history unfolds into the present, where it is represented by the rhetoric of technology. A critical project that cannot confront its own legacy must fail to acknowledge the political subjects who enacted this original "decision-point" in the form of a border. The frontier remains a continuous "frontier of liberty" which (as Angus puts it) "the Yankees have been so kind as to export."

Of course Canada had its own frontier (so to speak) and its own history of dispossession in the making of it, and the narrative logic of Canadian nation-building is also complicit with this history. Angus's point is that the American frontier ended at the 49th Parallel to the north and the Rio Grande to the south because of politics, not a predetermined geographical space. The denial of this outcome appears in the name the country gives itself, America; the frontier myth persists in the fact that America cannot offer an intelligible account of its borders, but projects across them the terror that insidiously threatens its freedom. This inscription of space differs markedly from that animated by the British Commonwealth, whose model of empire depended on the identification of others to whom progress and civilization could be brought.

Hardt and Negri draw on Gilles Deleuze's and Felix Guattari's analysis of deterritorialization and reterritorialization as the inevitable outcome of capitalism and view strategies of reterritorialization as mainly reactive, artificial, and perverted. In this antiteleological teleology, there is little space for a positive politics of place. This idea has a larger circumference than their argument suggests. It is a convention in the literature on globalization from both the Left and the Right to argue that national borders have lost their relevance to the lives of people worldwide. Ulrich Beck presents the rhetorically familiar picture of an irreversibly globalized world:

Globalization means that borders become markedly less relevant to everyday behaviour in the various dimensions of economics, information, ecology, technology, cross-cultural conflict and civil society. It points

to something not understood and hard to understand yet at the same time familiar, which is changing everyday life with considerable force and compelling everyone to adapt and respond in various ways. Money, technologies, commodities, information and toxins "cross" frontiers as if they did not exist.<sup>59</sup>

The question is not so much whether this is true, but what it means for thinking about the territories being crossed. For Beck, globalization presents an opportunity to confront the global challenges of environmental crisis without worrying about the demise of the nation-state. In other accounts global networks make nations obsolete, along with laws and governments which nonetheless participate in and reap the benefits from global networking technologies. In such accounts the concept of place is associated with "status and nostalgia, and with an enclosed security," Massey observes; 60 writers need to "face up to—rather than simply deny—people's need for attachment of some sort, whether through place or anything else."61 It is no accident that this superior stance is so often linked to poststructuralist theory, with its tendency to "conflate the mobility or instability of the sign with existential freedom, and to confine the practice of critically nuanced thinking within specific ethnic parameters."62 This paradigm infers that government and "public interest," are irrelevant, and that imperialism has no discernable geography. Like place, these concepts are relegated to the dusty bins of nostalgia and conservative regret.

Such dismissals reduce the role of government to the security state. In so doing they replicate the ambitions of transnational corporations while depriving activists of one axis of resistance to them. As Saskia Sassen argues, the transformation of the world economy does not displace national governments but transforms their functions. "Much of the writing on globalization has failed to recognize [the work of national legislatures and judiciaries, firms and markets, actors and processes] and has privileged outcomes that are self-evidently global." In her analysis of the U.S. state since the 1980s, the processes identified with globalization—privatization, deregulation, marketization of public functions—actually "effected a significant shift of power to the executive . . . [and] an increased inequality in the power of different parts of the government." Needless to say, the U.S. state apparatus has fought energetically to ensure that such administrative changes extend beyond its borders.

In any case, the paradigmatic experience of globalization for many people is not rapid mobility over long distances but displacement in one place. The history of this process precedes modern means of communication, since the First Nations were violently conquered and to some extent demobilized by settlers fighting to bring the "New World" into being. For Massey, "This point concerns not merely the issue of who moves and who doesn't, although that is an important element of it; it is also about power in relation to the flows and the movement. Globalization doesn't implicate everyone equally; there are powerful and disempowered parts of the planet, and there are rich and poor, fast and slow classes within them. Canada's banks and oil and gas extraction industry are earning unprecedented billions in profits, while UNESCO scolds its government for the millions of children who live in poverty. For many people, government still matters. The places, rights, and resources that frame their lives matter, even or especially when they are being so visibly rewritten.

Or not so visibly. In a series of secret meetings initiated in Banff, Alberta, in 2006, "High-level politicians and business elite from Canada, the United States and Mexico discussed whether openness about their goals or continued secrecy called 'evolution by stealth' better suited their plans for strengthening border infrastructure." Their social Darwinist narrative reinforces a topos of continental integration to advance corporate interests and the political agenda of the Right. Like the terrorism that defines America's monster, Canada's monster can no longer be projected outward to an external enemy. Globalization was here from the beginning, not something that came from elsewhere. The emphasis on "evolution" advanced in these proceedings shows how problematic the *post* in *postmodern* (if this is what Canada is) can be.

# The Arguments

The encounter between Canadian communication theory and cultural studies offers an opportunity for reimagining the hermeneutic loop between place, culture, technology, and theory that so beguiles us north of the 49th. This imbrication arises from a history of struggles around culture where more than culture is at stake. The first three chapters address the paradoxical articulation of cultural technologies of space with the formation of

Canadian nationhood. The second group of chapters extends these ideas to music, sound technologies, and the production of space. The cultural technologies of music locate listeners in a diverse range of locations, contexts, and dispositions. Such technologies redefine *musicking* while contributing to and legitimizing their own spatial and discursive expansion. Echoing this theme, "Weathering the North" (chapter 7) and "Mapping Space" (chapter 8) explore technologies of mediation between nature and culture related to the weather forecast. "Cultural Technologies and the 'Evolution' of Technological Cultures" (chapter 9) connects these themes to the influential narrative of technological evolution. Extending the idea of the frontier through cyberspace and beyond, these final chapters draw our attention to where we must all learn to look: the increasingly militarized terrain of outer space.

These chapters advance three principal arguments concerning culture, space, and empire. The first is that electronic mediation is central to the constitution of social space, and that such mediation is pivotal to an anti-imperialist critique. To struggle against the ossification of centers and margins, it is necessary to reject a mimetic relationship between technological enhancement and future redemption (progress = progress, etc.), and to acknowledge that such enhancement disguises and impedes as well as precipitates social change. Forgetting this turns space into a metaphor, imperialism into a ghost, and culture into a lucrative pastime.

My second argument is that the continuity of this theme warrants a serious examination of narrative practices and their current efficacy. In Canadian writing and artistic practice, "space" functions metonymically (as it does more broadly in cultural studies after the "spatial turn") to describe connections between politics and culture. As a narrative moving across disciplines, genres, and media forms, this tradition encourages a reflexive and open-ended practice of storytelling, rather than a ritualistic reiteration of a fixed story already told. Stories matter. We inhabit them when we check the "F" box and when we see Canada represented as the snowy or feminine side of a continental system. There is a connection between how space is traversed, how it is narrated, and how it is used. I trace this principle at work in mapping (in the order in which they appear) the border, the margin, the landscape, the radio, the railway, the home, the weather, the sky, and cyberspace, as topos constituted by narrative and through the cultural technologies of space.

Like "sexuality," "technology," or "culture," space rehearses a powerful discourse of diverse meanings. Reflexivity aims to bring space down to earth and to the level of bodies that matter. The importance of feminist theory in bringing forward the interconnections of human and other bodies, forms of power, and the substance of representation, cannot be overstated. Feminist environmentalism builds on this legacy with its awareness of embodiment, the destruction of nature, and the lassitude of governments that sign away our futures. These are vital challenges, not all of them external to our endeavors as researchers in communication and culture. Cultural studies has been exceptionally slow to acknowledge the challenges posed by the physical environment.

My third argument thus concerns the spaces constituted by matter. David Harvey proposes that "all socio-political projects are ecological projects and vice versa"; thus "some conception of 'nature' and 'environment' is omnipresent in everything we say and do."69 For Felix Guattari, "Without modifications to the social and material environment, there can be no change in mentalities. Here, we are in the presence of a circle that leads me to postulate the necessity of founding an 'ecosophy' that would link environmental ecology to social ecology and to mental ecology."<sup>70</sup> However placeless the world looks, however teletopogaphic the view, we still depend on water, air, and land. Communities can only partially be reconstituted through memories and stories. My computer will join millions of tons of toxic waste generated each year by communicating technologies. What we do in society, we do in the natural world that we inhabit and exploit. The natural world is also being speeded up, spectacularized, recommodified, damaged, poisoned, and forgotten. It too is perilously threatened by the neoliberal commodification of everything, including life. As computer and digital device manufacturers greedily plunder the world's natural resources and clutter up its landfill, our food and water poisons us, our weather confounds us, our future threatens us, and our animals break our hearts. We manipulate dualistic categories, but we cannot defend them.<sup>71</sup> We need better conceptual maps to cultivate and sustain the social and cultural diversities that are required to defeat nonsustainable ideas, technologies, and ways of life.72 The desire to connect these matters owes something to the teletopographic subject. It knows how to inhabit several places at the same time, how to hold contradictory thoughts together in a single trope. This "amphibology" is the source of Canada's popular internationalism,<sup>73</sup> its relative racial and sexual tolerance, its attractive sense of irony, and its hypocritical parading of progressive social values while millions of children starve.

# Postscript on Method

We live in an invented state, but we don't agree on what is meant by "state," or by "nation," "globalization," or "culture." To counter this confusion, many academics use analytical terms as substantive terms: globalization, postcolonialism, subject, hegemony. These are complicated dynamic processes layered on one another, not concrete or discrete entities. The use of these terms to substitute for analysis is not so different from the obfuscation we critique in the Right: terrorism, unnatural, taxpayer, national interest. Every subject has a history; every history stores—even where it seeks to hide—traces of conflict. In the ahistorical cultures of the new world, it is easy to be dazzled by and to collaborate with the rhetorics of the new. To critique the compulsions of modernity (as I argue in the final chapter) is to abandon the rhetoric of inevitability. It takes time to think through histories and spaces and the relations between them.

To understand the present, I believe you need to listen. To listen, you need to talk. <sup>74</sup> I talk to people anywhere there is an opportunity. I try to remain alert to subjects and moods as they drift through the diverse situations of journalists, shopkeepers, taxi drivers, artists, hairdressers, activists, students, neighbors, transport workers, relatives, and the academy. I am interested in what makes people angry, hopeful, companionable, ambitious, indifferent. When Israel invaded Lebanon and the death toll mounted, I couldn't leave the house without losing half a day. The pet food salesman talked for half an hour; neighbors and salespeople could not contain their outrage. In being present to the world, there is no escaping it.

My Toronto neighborhood encompasses McLuhan's spacious family home and an economically and ethnically diverse part of Toronto recently nicknamed "the world." The energies that connect and divide this neighborhood can point us toward a rethinking of the cultural technologies of space. Cultural studies is dedicated not only to the elaboration of meaning, but also to the exploration of the "resources of hope." In a late essay, Williams argues that "the habit of separating the different kinds of good from each other is entirely a consequence of a deformed social order." Identifying