A Nation of Fur, Fish, and Fuel: Documenting Resource Extraction in Canada

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ABSTRACT

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As concerns about the environmental and uneven social impacts of human industry mount, humanities scholarship has sought to re-examine assemblages of energy cultures, Western epistemologies of the nature-culture divide, colonialism, and ecology. Against these considerations, this thesis seeks to historicize natural resource extraction as a localized, national, and imperial phenomenon within twentieth-century capitalism. The project focuses on Canadian moving image production in relation to the country's historical resource economy and cultural attachment to landscape. Examining a range of private- and public-sector nontheatrical and documentary films released between 1920 and 1985, the thesis theorizes these productions as examples of "resource cinema," given their entanglements with industrial-scale resource extraction on the level of production, narrative, and discourse. The notion of "entanglement" emerges as a framing concept for the project, expressing the shifting yet intimate relations between cultural production, economy, and environments. This term derives from Anna Tsing's theorization of environmental-economic entanglements within late capitalism.

Each chapter of this comparative study concentrates on films from a different historical period to trace the changing depictions of the geographies, infrastructures, and social practices entwined with natural resource extraction. These include sponsored films about the Northern fur trade (Chapter 2); petroleum, geology, and mining films in Western Canada (Chapter 3); and films interrogating community, sustainability, and energy futures in the Atlantic offshore oil and fishing industries (Chapter 4). The thesis is also invested in contributing to broader interdisciplinary conversations about media and environments. Each chapter theorizes the ways in which these cinematic histories help constitute geo-biological materials as "natural" resource commodities, as a microcosm of capitalism's wider engagements with nature. The thesis also argues that fur, petroleum, and fish function concomitantly as fuels, in that they power not only the movement of human and nonhuman bodies, but also cinematic imaginaries and the emergence of social, political, and infrastructural practices. In demonstrating how cinema was used as a communication technology and documentary practice, as well as a resource in itself, the project contributes to the emergent fields of energy and environmental humanities, Canadian cultural studies, and Canadian and settler colonial cinemas.

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INTRODUCTION

Thinking about natural resource extraction leads one into a tangled web of relations. Extraction, as an industrial-scale process, involves the removal of minerals, hydrocarbons, and other geological substances from the earth, which are typically then used for the manufacture of industrial or consumer goods. Extraction therefore functions as a mode of accumulation, emerging historically as part of the capitalist world economy. The expansion of input-intensive energy technologies (from coal-powered industry to the internal combustion engine) depended upon the supply of fuels on an enormous scale, procured through extractive industries like coal mining and oil drilling. However, extraction also participates in the social, cultural, and political processes of how we define the nonhuman world as "nature." By transforming complex matter into the ontologically-flat category of a "resource," extractive industries help to appraise nature's financial value within market economies.

At the same time, extraction is also a fundamental component of conquest and colonialism, as European and other imperial powers sought out raw materials to fuel their nascent capitalist economies in the Americas, Asia, and Africa.² The wide-scale abstraction of resources, from timber and petroleum to human labour, formed the basis of the Global North's industrial development and prosperity.³ While many contemporary scholars have sought to "excavate" the logics of extraction at play in neoliberal capitalism, Leanne Betasamosake Simpson argues that these extractive substructures date back to colonial periods, as European empires transformed Indigenous and colonized peoples into "resources" to profit from.⁴ In a 2013 interview with Naomi Klein, Simpson states that assimilation and extraction "go together"

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¹ Alberto Acosta, "Extractivism and Neoextractivism: Two Sides of the Same Curse," in *Beyond Development: Alternative Visions from Latin America*, ed. Miriam Lang, Lyda Fernando, and Nick Buxton, trans. Sara Shields and Rosemary Underhay (Quito and Amsterdam: Transnational Institute / Fundación Rosa Luxemburg, 2013), 62.

² Acosta, 62.

³ Acosta, 63.

⁴ Imre Szeman, "On the Politics of Extraction," *Cultural Studies* 31, no. 2–3 (March 15, 2017): 440–47; Sandro Mezzadra and Brett Neilson, "On the Multiple Frontiers of Extraction: Excavating Contemporary Capitalism," *Cultural Studies* 31, no. 2–3 (2017): 185–204.

to form the foundations of colonialism and capitalism.⁵ Such practices do not only pertain to land and minerals. Indigenous cultures, traditional knowledge, and forms of life (human, plants, and nonhuman animals) are withdrawn from the relationships that surround them, transformed into raw materials for profit and power. Given this, we might approach extraction as both an ideology—"an approach to nature, to ideas, to people" asserts Naomi Klein in the same interview—and a short hand for the industrial-economic mechanisms of appropriating value from environments, bodies, and cultures.⁶

This thesis seeks to unpack some of the entangled relations that natural resource extraction entails by examining the role of cinema to document, communicate, and uphold extractive industries. I focus here on films made in Canada, as a country with a centuries-long history of resource-based economies. The interview between Klein and Simpson, two of Canada's prominent authors and public intellectuals, unfolds a number of issues that lie at the centre of this project. Natural resource extraction is profoundly woven into the fabric of Canadian national identity, as well as its economy and political systems. Approached by European empires as "wilderness" to be explored, claimed under European laws as *terra nullius*, and then exploited, Canada's economic development is closely intertwined with its emergence as a settler colonial nation. Thinking through these multifaceted aspects of extraction—refracted through histories of capitalism, settler colonialism, and environmental use—this thesis is motivated by the question of how these practices are communicated through cinema as one aspect of Canadian culture. How have states and resource industries taken up cinema to represent, promote, or reassess resource extraction?

Taking up Jason Moore's contention that resources must be recognized as "bundles of relations" rather than *a priori* "geo-biological properties," I seek to analyze how these relational assemblies are socially and culturally formed in Canada through nontheatrical and industrial filmmaking. Extraction, as Mona Damluji has shown in relation to petroleum developments in

⁵ Naomi Klein, "Dancing the World into Being: A Conversation with Idle No More's Leanne Simpson," *Yes! Magazine*, March 5, 2013, http://www.yesmagazine.org/peace-justice/dancing-the-world-into-being-a-conversation-with-idle-no-more-leanne-simpson.

[°] Klein

⁷ Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London and New York: Verso, 2015), 196.

the Middle East, has historically involved collaborations between states and industry. As an economic system, it also requires far-reaching transportation systems to move raw materials to market and workers to extraction sites: railways, pipelines, roads, and tanker routes. Theorizing natural resource extraction or extractivism also requires us to attend to the ways in which "nature"—a term that encompasses both the physical world and socially-determined constructions of environments existing beyond the permeable boundary of human skin—has been used, transformed, and commodified. Most significantly for this project, large-scale extractive projects have also relied upon communication media to advertise and build markets for these products, educate citizen-consumers about the benefits of a given resource to their way of life, and bolster public support for these developments. Building upon prior studies of film and visual media sponsored by resource industries and states, and studies of the visual culture of energy, this thesis examines how Canadian public institutions and corporations took up cinema as a communication medium, evidentiary device, and representational practice during the twentieth century.

In the chapters that follow, I examine films produced by the National Film Board of Canada (NFB), the Hudson's Bay Company (HBC), The Imperial Oil Company (Imperial Oil), and Memorial University of Newfoundland Extension Service (MUN Extension). Proposing the category of "resource cinema" to characterize a diverse corpus of public and private sector films about resource industries, I show how nontheatrical, documentary, and industrial resource films were regarded as an important means of communicating models of economic activity predicated upon the extraction of capital from environments in the form of natural resources. Taking up three of Canada's most prominent resource industries—fur, fossil fuels, and fisheries—I examine some of the different ways in which economic and environmental entanglements were brought to screen. I also attend to cinema's contributions to the production of ideologies and imaginaries

⁸ Mona Damluji, "The Image World of Middle Eastern Oil," in *Subterranean Estates: Life Worlds of Oil and Gas*, ed. Hannah Appel, Arthur Mason, and Michael Watts (Ithaca and London: Cornell University Press, 2015), 147–64.

⁹ Andrew Barry, *Material Politics: Disputes Along the Pipeline* (West Sussex: Wiley Blackwell, 2013); Brian R. Jacobson, "Big Oil's High-Risk Love Affair with Film," *Los Angeles Review of Books*, 2017, https://lareviewofbooks.org/article/big-oils-high-risk-love-affair-with-film/; Sheena Wilson, Adam Carlson, and Imre Szeman, eds., *Petrocultures: Oil, Politics, Culture* (Montreal & Kingston, London and Chicago: McGill-Queen's University Press, 2017); Patrick McCurdy, "From the Natural to the Manmade Environment: The Shifting Advertising Practices of Canada's Oil Sands Industry," *Canadian Journal of Communication* 43, no. 1 (2018): 33–52.

about the natural world, society, a country's wealth, and economic futures. The problematic of how these films document the capitalist "fiction of perpetual growth on a finite planet" also frames my inquiries into cinema's participation within this web of relations.¹⁰

Several prominent themes emerging in relation to large-scale resource developments frame this research. These include: economies' dependence upon environments; extraction as constitutive of Canadian settler colonialism and post-World War Two nation building; the commodification of human and animal life and labour; scientific exploration to identify resource deposits; resource scarcity and conservation; the constitution of community around resources; and the impacts of extractive practices on societies and ecosystems. In particular, I consider moments of emergence and transition between primary resource industries or staples economies, periods which most clearly illuminate the ways in which cinema was mobilized to establish new representational tactics for resource horizons. (While I engage with Harold A. Innis's concept of staples throughout the thesis, it is worth prefacing here that the terms "staples" and "resource" are not synonymous. Rather, "staples" implies specific margin-centre economic relationships and is embedded in the Canadian context, whereas "resource" is a more general concept referring to a commodified raw material or object.)

Films sponsored by the NFB and Imperial Oil depicting the Western oil boom during the 1940s and 1950s which I take up in Chapter 3, for instance, sought to affiliate petroleum with narratives of economic progress and acclimate audiences to this new industry by linking it to preexisting regional industries like ranching and wheat agriculture. In contrast, films about the discovery of offshore oil deposits in the Grand Banks—some of the most bountiful fishing waters in the Atlantic—in the late 1970s frequently took a different approach, inquiring into the potential social and environmental consequences of these developments for Newfoundland fishing communities. These resource films, in other words, offer diverse and at times conflicting perspectives on the extraction and consumption of resources from nature. However, they share in common an investment in cinema's ability to uphold capitalist structures and settler cultural investments in Canadian environments—while reaffirming Canada's continuing and profound entanglements with capitalism.

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¹⁰ Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (New York: Simon & Schuster, 2014), 93.

When focusing on histories of resource extraction in Canada, considering the interview between Klein and Simpson, we must also remain mindful of the ways in which the post-confederation settler state emerged from entangled histories of territorial expansion by Crown corporations like the Hudson's Bay Company and white settlement facilitated by sales of land appropriated from First Nations. Provincial and federal governments have historically supported large-scale developments in the North—such as the James Bay and Churchill Falls hydroelectric projects and oil sands developments in Northern Alberta—often without the consultation or involvement of Indigenous communities on whose land these projects were and are constructed. This historical context is significant to my study on two levels. Resource imperialism and settlement involve practices of land expropriation, intensive resource use, and environmental disruption that disproportionately impact certain populations over others, especially (but not limited to) Inuit and First Nations peoples. These practices inform the narratives of many Canadian resource films, as well as the imaginaries and ideologies at play. I therefore seek to engage with some of these uneven impacts of extraction and resource capitalism in each chapter.

While a Canadian project, my thesis is also invested in contributing to broader interdisciplinary conversations about media and environments. Accordingly, I use these cinematic histories to theorize the ways in which each collection of films participate in the constitution of geo-biological materials into "natural" resource commodities, as a microcosm of capitalism's relation to nature. I also argue that the commodity resources of fur, petroleum, and fish function concomitantly as fuels, in that they power not only the movement of human and nonhuman bodies, but also cinematic imaginaries and the emergence of social, political, and infrastructural practices. In sum, this project demonstrates how cinema was used as a communication technology and documentary practice, as well as a resource in itself. As I argue in Chapter 4, archival prints of many of these resource films have been made publically available through institutions' digital collections, opening the "afterlife" of these texts to potential enclosure, conservation debates, and commercial exploitation. These practices of cinematic "resourcification" offer parallels to histories of natural resource extraction, use, and preservation.

¹¹ Jen Preston, "Neoliberal Settler Colonialism, Canada and the Tar Sands," *Race & Class* 55, no. 2 (2013): 42–59; Shirley Roburn, "Power From the North: The Energized Trajectory of Indigenous Sovereignty Movements," *Canadian Journal of Communication* 43, no. 1 (2018): 167–84.

My research therefore draws upon the emergent fields of energy and environmental humanities to place histories of Canadian, settler colonial, and nontheatrical cinemas in dialogue with animal studies, gendered and racialized labour, energy regimes, and political economy.

Elspeth Probyn, in her recent study of human-fish assemblages, reminds us that matter is always relational. We are always "enmeshed in a variety of relations," which "make for complex interactions." In order to take up the relational complexities and frictions of these cinematic engagements with natural resource extraction in this thesis, I turn to the notion of entanglements, which acknowledges the overlapping and co-constitutive nature of these cultural, material, and economic relations. My conceptualization of entanglement follows from Anna Lowenhaupt Tsing's analysis of late capitalism and the interweaving of ecologies and economies it produces. This notion enables us to attend to different relational structures and practices—or what I call the strands of this entanglement—while maintaining an eye to the shifting, undulating shape of the whole. Extraction creates a messy web. Its strands must be considered as a historically changing whole, which cannot be unpicked or neatly sorted into distinct skeins. At the same time, tracing the constitution of a given strand is as significant as examining the relations arising between them, even if scrutinising a single strand requires a certain level of artificial isolation from the broader picture.

Examining processes of resource extraction through cinema enables us to visualize some of the multiple ways in which economy and ecology are fundamentally entangled, while inquiring into how the cultural production of resources under capitalism feeds into the logic of extractivism. As a metaphor, entanglement offers a way to visualize and frame the myriad, distinct structures of power, historical processes, cultural and economic practices, geological formations, and activities of nonhuman life that collectively shape natural resource extraction. An investigation of entanglements becomes a means of interrogating the ways in which economies, things, and life forms overlap and intertwine. They mutually shape one another, to the extent that they cannot be untangled. We might imagine, for instance, that heavier, thicker strands run alongside and intertwine with thinner, more delicate and fleeting filaments. From these knots, twists, braids, and turbulent flows, friction between these strands offers sites of

¹² Elspeth Probyn, *Eating the Ocean* (Durham and London: Duke University Press, 2016), 11.

¹³ Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton and Oxford: Princeton University Press, 2015).

inquiry into these relations. Yet each also remains distinct enough that it can be traced, to examine how it, through these entanglements, gives form to the conditions of life and industry.

Such an approach aims to consider these entanglements in situ, that is to say, within their respective historical moments and environments. In doing so, we must also attend to the ways in which institutions and systems of power likewise frame this interweaving of economy, environments, and cultural production. We might also reflect upon the ways in which the weight of these interwoven strands impress more forcefully on some human societies and ecosystems rather than others. Given Canada's colonial histories, and the highly damaging realities of subterranean mining and other forms of hyper-extraction, I seek to focus on these sites of colonial contact, and extraction zones in particular, in my delineations of this cinematic history. Lastly, resource entanglements extend through time. Particular industries emerge and recede within the whole as economic frontiers wax and wane, while geological resources form deep within the planet's crust over millennia far beyond the temporalities of human industry and media production. Rather than holding all these components of the relational web in mind at once, each of the subsequent chapters will attempt to track several of these threads, in order to weave a nuanced history of how natural resource extraction has shaped Canadian film production and imaginaries.

Ensnarled histories of empire, capitalism, and the physical world continue to shape the production of documentary and nontheatrical cinema in Canada: from the composition of funding structures and types of films that get financed, to the ways that media-makers respond to environmental and social conditions facing Canadians and First Nations. Yet these entanglements also structure the creation of scholarly research, on micro and macro levels. I was exceptionally fortunate to receive funding to support this doctoral research from the Social Sciences and Humanities Research Council of Canada, which enabled me as a white American citizen to undertake this study of Canadian cinema and resource industries. However, I also recognize that I laboured over this work at a public university built on unceded Indigenous territory, on the Island of Tiohtiá:ke which settlers call Montréal/Montreal. The model of public funding for secondary and post-secondary education from which I have benefited has also historically disadvantaged Indigenous applicants, and sizeable educational and employment gaps between Indigenous and non-Indigenous peoples remain due to funding shortfalls and the inter-

generational traumas of residential schools.¹⁴ I point to these examples of how settler colonialism continues to structure Canadian education and research production to emphasize that the entangled strands of power, resource allocation, and knowledge I trace here are not relegated to the past. Rather, they extend into the present, both within and beyond the humanities.

Contributions to the Field: Film Studies and the Environmental and Energy Humanities

The infrastructural turn in film and media studies, along with an increasing scholarly focus on resources and the cultures and media entangled with them, offers a promising moment to revisit the contributions of communication theorists like Harold A. Innis, who examined staples production in relation to transportation infrastructures, political systems, and communication technologies. At the same time, heightened scholarly interest in the impacts of global climate change on culture, communications, and regimes of knowledge has once again focused our attention on the very real material limits of capitalist accumulation of wealth, based upon the extraction and consumption of natural resources. Because cinema's constituent technologies rely upon the consumption of fossil fuels, light, human labour, and other energy sources, further study is warranted of the ways that cinema as a technology, cultural object, and text is historically bound up with energy cultures. This thesis accordingly aims to build upon these bodies of environmental, infrastructural, and energy studies scholarship by offering a new history of Canadian cinematic engagements industry and the natural world.

This thesis is also deeply rooted in archival research. Excavating prints and production documents from collections around the country—Concordia University's Moving Image Resource Centre (Montreal), Library and Archives Canada (Ottawa), Glenbow Archives (Calgary), the Hudson's Bay Company Archives (Winnipeg), and the Digital Archives Initiative (DAI) at Memorial University Libraries (St. John's)—I curate a corpus of moving image media about Canada's history of extractive industry. By compiling films produced by both public and corporate institutions, a portrait of a nontheatrical "resource cinema" emerges. This mode of filmmaking participates in national imaginaries mobilizing white settler histories and documents resource industries. Through this archival and curatorial work, I seek to intervene into Canadian

¹⁴ Truth and Reconciliation Commission of Canada, "Truth and Reconciliation Commission of Canada: Calls to Action" (Winnipeg, 2015), 1–2, http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls to Action English2.pdf.

film scholarship that has conventionally hewn more closely to nationalist-linguistic debates around Francophone and Anglophone culture. Troubling conventional articulations of Canada as "North" (despite the majority of Canadians living along the country's southern border) and foregrounding Indigenous-white relations, I hope that these interrogations of settler and industrial cinema will propel other scholars to more critically reckon with Canada's colonial past.

By placing film studies in dialogue with environmental media studies and the energy humanities, I also contribute much needed settler colonial and postcolonial interventions into these fields. Inspired by Graham Huggan and Helen Tiffin's Postcolonial Ecocriticism: Literature, Animals, Environment (2010), Peter Limbrick's Making Settler Cinemas: Film and Colonial Encounters in the United States, Australia, and New Zealand (2010), and Elizabeth DeLoughrey, Jill Didur, and Anthony Carrigan's edited collection Global Ecologies and the Environmental Humanities: Postcolonial Approaches (2015), among others, my analysis of the representational strategies used in these films also focuses on how race and colonial settlement have inflected energy regimes and capitalism. Studies of oil and energy cultures, such as Oil Culture (2014), edited by Ross Barrett and Daniel Worden, Stephanie LeMenager's Living Oil: Petroleum Culture in the American Century (2014), and Petrocultures: Oil, Politics, Culture (eds. Sheena Wilson, Adam Carlson, and Imre Szeman, 2017) have tended to concentrate on histories of energy, culture, and empire within the Global North, while critiquing capitalism and Western imaginations. While I share this interest in the multiple intersections of capitalism and resource cultures, I also more explicitly centre issues of race, gender, nonhumans, and settler-Indigenous relations.

Lastly, although my thesis addresses Canada, resource cinema as a category of filmmaking extends beyond the political and cultural boundaries of my study. This project offers a framework that is also transferable to transnational cinema studies. Resource capitalism, and its collaborations with empire, transcends Canadian history. As Imre Szeman notes, "extraction is the paradigmatic mode of capitalism," defining globalization as well as localized manifestations of capitalist economies. ¹⁵ Future studies of non-Canadian resource cinemas might therefore consider the transnational and global entanglements of economic systems, ecologies, and culture. Similarly, one of my aims in writing a comparative study of three resource industries (fur, fish,

¹⁵ Szeman, "On the Politics of Extraction," 444.

and fuel), is to encourage the field to think about fuels and extractive practices not in isolation—as studies of single industries (mining, petroleum) tend to do—but in relation to broader social, cultural, and political systems. Collectively, my chapters build a case for the continuities of these entanglements around resource extraction as they have structured Canadian film history, while also attending to the specificities of each industry and distinctions between depictions.

Methodologies

In this thesis, I use two primary methodologies: historical archival research and socio-historical textual analysis with an attention to representations of environments, labour, energy, economy, and social relations (including Indigenous-settler relations, and animal-human interactions). While the majority of the films I examine explicitly document industrial extraction and resource supply lines, my readings engage with the fissures and contradictions within these texts in order to prompt new readings. Each chapter follows several strands of the entanglements binding these productions and the institutions that finance them, an approach that tacks between reading with and against the grain of individual films. In Chapter 2, for instance, I read the romanticized depictions of the frontier in the HBC's "fur films" back upon economic theories of resource frontiers, to highlight the frictions arising around Indigenous, women's, and animal labour within settler states and market economies. Chapter 3, rather than seeking to rewrite histories of the National Film Board and its collusions with private industry, examines films about subsurface resource extraction both with and against the grain to address the roles of science and energy within these private-public entanglements. The final chapter reads more consistently against the grain, to tease out the impacts of resource scarcity on communities, such as in my analysis of homosocial relations at sea in *Trawler Fishermen* (1966).

These textual readings are indebted to ecocriticism as an interpretative strategy that attends to representations of environments, water, geologies, and animal and plant life within literary or cinematic texts. Anat Pick and Guinevere Narraway put it another way, stating that the goal of ecocriticism is to inscribe ecology and nature back into film studies. This approach, they write, aims to unearth "how political, ethical and formal discourses come to bear on cinema's relation to nonhuman nature and nonhuman beings [... since] aesthetic concerns are inseparable

from [nature's] material and formal possibilities." Building upon ecocritical and postcolonial textual readings, my thesis also augments this method of film analysis with an eye to the production and financing of these pictures. This emphasis on film sponsorship and funding situates these pictures as part of this entangled web of resource relations, rather than depictions removed from them. In Chapters 2 and 4, my archival research also serves to document the production and preservation of my selected films. By combining these methods of research, I theorize the representations of economic, environmental, and cultural entanglements through these films as texts, while also engaging with their status as corporate commodities or public productions.

Furthermore, while I deploy the concept of entanglements metaphorically to tease out the multiple refractions of terms such as resource, frontier, geology, and commons in each chapter, entanglements are also material. These films are the products of public and corporate institutions with varying degrees of financial and ideological investment in sustaining natural resource extraction as an economic model. As such, there is a political necessity to consider these texts in relation to the real-world practices of the energy regimes, settlement, and nation they document. Combining these methods, and approaches to cinema as a text and product, also enables me to situate these theoretical inquiries within concrete histories of Canadian media production, resource practices, and structures of power.

Chapter Breakdown

In what follows, I address the fur trade, subsurface oil and mineral extraction, and offshore oil and fisheries to inquire into the ways in which nonfiction and nontheatrical films produced in Canada between 1920 and 1985 documented and participated in natural resource extraction. The conceptual issues I foreground in each chapter stem from the layered and interconnected relations of resource extraction outlined earlier in the introduction.

The first chapter, "Entangled Relations: Theorizing Resource Cinema," further elaborates on the aims and theoretical interventions of the thesis, by unpacking the concept of resource extraction and its material and historical entanglements with Canadian political economy, nation-building, and settler colonialism. I then expand upon my usage of "entanglements," which I

¹⁶ Anat Pick and Guinevere Narraway, *Screening Nature: Cinema Beyond the Human* (Oxford and New York: Berghahn Books, 2013), 5–6.

adapt from Anna Lowenhaupt Tsing's anthropological study of matsutake mushroom ecology and global trade networks. ¹⁷ Tsing develops a conceptual frame to describe environmental and economical relations around both workers and mushrooms in this industry, and argues that tracing these connections can reveal how workers' living conditions and nonhuman ecologies are made perilous within late capitalism. Taking up this notion of ecological and economic entanglements, I contribute a third strand—cultural production—to examine how films about resource industries are also entwined in such relations. I propose the category of "resource cinema" to describe this practice of filmmaking by institutions with varying degrees of financial and ideological investment in industrial-scale resource development. I unfold the implications of this historical mode of filmmaking, and argue for cinema's location within this web of entangled relations, by looking at the representative example, *This Is Our Canada* (1945). Investigating how the film inscribes Canada's colonial settlement and resource industries within a single narrative of Canada's historical emergence, I show how mid-century settler imaginaries are discursively intertwined with economic progress, and filtered through attachments to the North American landscape.

In Chapter 2, "Fur," I unpack the double articulation of extraction as a capitalist and colonial practice, focusing on the concept and space of the frontier. Building upon Tsing's theorization of economic frontiers as the concentrated edge of a given resource industry and wilderness, I examine frontiers of settlement and the shifting economic boundary of the fur trade through films sponsored by the Hudson's Bay Company between 1919 and 1920. The HBC, then a trading company and fur producer operating in Northern Canada, sponsored American cinematographer Harold M. Wyckoff from The Educational Films Corporation of America along with cinematographer Bill Derr to produce silent pictures for the company's 250th anniversary of its charter as a Crown Corporation. Analyzing two of the resulting "fur films" sponsored by the HBC, I propose that these texts are entangled with the emergence of resource frontiers and extraction of capital from environments on two levels. As corporate productions featuring documentary accounts of the fur trade, settler-Indigenous relations, and Canadian environments, they participate in entanglements of corporate media practices with resource capitalism. Focusing on the concept of the frontier and Innis's theory of Canada's economic development as a producer of raw materials for foreign markets, I trace the shifting relations between economic

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¹⁷ Tsing, The Mushroom at the End of the World.

centres and peripheries, capitalism and nature, and white Canadians and First Nations. Reading these films as documents of colonial conquest and the capitalist commodification of animal life and human labour, I also interrogate the way in which the cinematic constitution of frontiers is predicated upon racialized and gendered forms of human labour, and the reduction of animal life into "fuel." In other words, fur powered empire as well as the expansion of economic frontiers.

Chapter 3, "Oil and Rock," continues this focus on the constitution of fuels by turning to films about petroleum, as well as other subterranean mineral resources. These texts, produced by the National Film Board and Imperial Oil between the 1940s and the 1960s, pivot around geology as a scientific discipline, as well as an exploratory practice and way of understanding the world. Reading this corpus through the lens of geology, I examine the ways in which governmental institutions—the NFB, the Geological Survey of Canada, and the Department of Indian Affairs and Northern Development—and Imperial Oil adopted geological concepts of deep time and sedimentation in their films, in addition to scientific ways of representing these natural processes. In doing so, these films sought to legitimize mining and oil developments by positioning them as part of Canada's postwar economic expansion, and extraction as the basis of a nation's natural wealth. In my analysis, I draw on histories of geology in Canada, and its association with Victorian science and imperial practices of ordering the world, and entanglements of energy infrastructures with science studies. Collectively, these mid-century films situate petroleum, subsurface resource extraction, and pipelines within Canadian national imaginaries by linking these resources and practices to the continent's geology. At the same time, I contend, these institutions sought to deploy the geological sciences for corporate, imperial, and national ends.

The last chapter, "The Offshore," concentrates on a region that is often portrayed as a cultural and geographical periphery to mainland Canada: fishing communities in Newfoundland. The waters off Atlantic Canada, historically abundant fishing grounds, were found in 1979 to also conceal rich petroleum deposits. This chapter focuses on two collections of

¹⁸ The yoking of Labrador and Newfoundland—two geographically distinct landmasses—within one province in 1927 constituted a colonial project, according to Mark Turner. The name of Canada's tenth province only changed in 2001, from "Newfoundland" to "Newfoundland and Labrador." Mark D. Turner, "Dissenting Shadows: A History of Film Policy and Production in Newfoundland and Labrador, 1933-1997" (Ph.D. Dissertation, Centre for Drama, Theatre and Performance Studies, University of Toronto, 2014), 4.

films (from the 1950s and 1960s, and the early 1980s) about these intersecting maritime industries: fish and fossil fuel. Produced by the NFB and Memorial University of Newfoundland Extension Service, these public sector films document the closure and emergence of resource frontiers, and the drastic impacts these industries have on communities economically and culturally intertwined with the sea. I focus on the relations between onshore communities and offshore resources to inquire into the ways in which (in this case, white fishing) communities are formed through their access to shared resources or commons. I then show how offshore oil prompted renewed concerns about resource scarcity, conservation, and communities in the following decade, as well as cinematic meditations upon Newfoundland's potential economic futures. My reading of these texts is inspired by Mario Blaser and Marisol de la Cadena's theorization of "commoning" as a practice, as well as Dean Bavington's study of fisheries management as a means of managing human and nonhuman life. I conclude the chapter on a reflective note, returning to the category of resource cinema proposed at the onset of the thesis. As examples of public-sector filmmaking, which have been preserved by public institutions, these films depict communities organized around resource commons while also functioning as public resources or cultural commons for contemporary audiences.

In tracing entanglements of cultural production, resource industry, and environments through these resource films, this thesis offers, in sum, a comparative analysis of the ways in which the state, corporations, and public institutions mobilized cinema as a "useful" practice. What brings this diverse collection of films together is their shared participation in, and documentation of, the history of resource extraction in Canada. Secondarily, this corpus also reveals the intimate connections between settler colonialist and national projects, as well as state and corporate interests. The entanglements between industry, economy, and environment that these films document remind us of the centrality of environments to Canadian nonfiction cinema and visual culture. Such energy or resource futures are also linked to political or national futures, as imagined both by corporate or mercantile entities and by regional governments.

Introduction

What makes a nation? Or rather, on what ground is a nation forged? These and other similarly persistent questions about the nature(s) of Canadian national identity have fuelled countless debates over the years, within the halls of the Canadian Parliament as well as scholarly, literary, and artistic circles. For Canadian film scholars, the question of national identity has also assumed a prominent significance; traditionally setting the boundaries of conversations around Québécois and Anglophone cinema cultures, the spectre of the nation has come under renewed scrutiny within studies of globalized and transnational cinema cultures. Jerry White, for instance, has sought to renew conversations around what constitutes a national cinema, arguing that this mode of filmmaking should be defined not by films' engagements with nationalism or national identity. Rather, national cinema should address the production of a diverse film culture for a distinct ethno-linguistic community. Nevertheless, as Bill Marshall reminds us, the framework of national cinema is "not a master hermeneutic but a master problematic [...] since it constantly returns, as in a spiral, to undermine its own so provisional categories." Yet from within this spiralling plurality of nationalist forms, we can locate an alternative reply to the question of on what basis a nation is formed? This is Our Canada (dir. Stanley Jackson, 1945) posits that the physical landscape—and Canadians' traditions of trapping, seeding, weeding, drilling, and tilling it—is the genuine foundation of Canadian identity. It is nature, and use value, that contours and binds the nation: culturally, as well as economically.

Picking up on observations from Canadian cultural theory such as Cole Harris's that "English-speaking Canadians tend to explain themselves in terms of land and location," in this chapter I examine how *This is Our Canada* mobilizes the North American landscape and coastal

¹ Jerry White, "National Belonging: Reviewing the Concept of National Cinema for a Global Culture," *New Review of Film and Television Studies* 2, no. 2 (November 2004): 224.

² Bill Marshall, *Quebec National Cinema* (Montreal: McGill-Queen's University Press, 2001), 4.

extremes to narrate the story of Canada.³ Here, the rhythm of Canadian life is joyously depicted as a consequence of the productive harnessing of the continent's rich waters, abundant forests, and stretching agricultural lands. Just as some Canadian historians and cultural figures have "turned to the land to explain the character of Canada," envisioning a nation alternatively formed through the harsh environmental conditions of the North or "forged by the development of northern resources," this picture combines both theories of Canadian identity formation through the land. Produced by the National Film Board and sponsored by the Rehabilitation Information Committee at the conclusion of World War Two, *This is Our Canada* links Canada's success as a prosperous society to the continent's abundant natural resources.

Proclaiming that Canada was "unknown, unexplored" when "Europeans first looked upon these coasts five hundred years ago," the voice-of-god narration draws historical parallels between the courageous and determined settlement (that is to say, the colonization) of the "empty" North American continent and the successful Canadian war effort. This history of Canadian settlement and the carving of a nation out of a hostile, unknown environment is, significantly, narrated through the exploration and harvesting of natural resources. The film's nationalist portrait of Canada and its people commences with an aerial montage of the country spanning the Eastern Seaboard to the West Coast, echoing the east-west orientation of European waves of settlement. Against this imagery, the film recounts the European "discovery" of the Americas by explorers and trappers. When "Europeans first looked upon these coasts five hundred years ago," its narrator proclaims in voice-over, "Canada was unknown, unexplored." Against footage of a man traversing an Arctic environment by dog sled, he continues: "They reported that it was a bleak, desolate land. This wilderness beyond the sea seemed useful only to the trapper who could send back the skins of winter animals. Few then realized that, in this rugged and untamed land, there lay hidden a powerful promise for the future."

Crucially, this "promise for the future" is in no uncertain terms associated with the settlement and cultivation of the non-European wilderness, through the establishment of farms, logging, fur trapping, and, later, mineral extraction. This process of settlement through domestication of the landscape is mirrored, the film asserts, in the transformation of white

³ Cole Harris, "The Myth of the Land in Canadian Nationalism," in *Beyond Wilderness: The Group of Seven, Canadian Identity, and Contemporary Art*, ed. John O'Brien and Peter White (Montreal & Kingston: McGill-Queen's University Press, 2007), 239.

Canadian society, expressed in rhetorical flourishes such as: "the hunter became the cowboy." In no uncertain terms, *This is Our Canada* offers a settler myth of white European Canada taming the "stubborn land," and pairs it with a discourse of natural wealth yielded from the landscape. The land, the narrator asserts against the rising triumphant classical score, "did not disappoint" the early settlers; "We had the raw stuff needed by older lands." Settlement is made possible through this natural wealth, and the Canadian identity is therefore cast as one defined by cultivation, management and extraction of natural resources from the very beginning. In sharp contrast to Europe, the old world from where future Canadians had departed, Canada offered a place for settlers willing to find their calling as farmers, fishermen, and industrial workers.

I elected to begin this chapter by invoking this NFB picture because it visualizes the complex and, at times, contradictory entanglements of natural resource extraction, settler colonialism, and national imageries based in the material world that form the focal point of this thesis. Invoking Canada's resource economy to celebrate the country's history of white settlement, *This is Our Canada* draws a direct line between Canada's political and social evolution, white immigrants' conquest of nature as unrefined wilderness, and the profitable development of the continent's abundant natural resources.⁴ As such, the film gives voice to, and helps shape, a persistent settler myth of white settler migration and making productive the North American landscape, while obscuring the presence of Indigenous peoples and pre-settlement forms of land use. As a publically funded production, this film is also an example of the NFB's goal of fostering certain modes of citizenship through film spectatorship, especially documentary film spectatorship.⁵ By foregrounding this particular account of Canada's development, and the

⁴ *This is Our Canada* reworks some of the footage from *Peoples of Canada* (dir. Gordon Sparling, 1940), which was produced by Associated Screen News. This earlier picture depicts the many (predominately white) ethnic groups that contributed to building the Canadian nation. Christopher Gittings offers a cogent reading of the 1947 revised version of *Peoples of Canada*, stating that it "structures the imagined community along the lines of a national economy, interpolating national subjects as those participating in the economic project of commodifying and selling the nation." In the process, Gittings concludes, *Peoples of Canada* "constructs a horizontal comradeship of whiteness that excludes racialized others from entering into the symbolic gathering of the nation constructed by state-funded national cinema." Although he invokes Canada's resource economy, his reading focuses most strongly on articulations of race in imaginaries of Canadian national identity. Christopher E. Gittings, *Canadian National Cinema: Ideology, Difference and Representation* (London and New York: Routledge, 2002), 83–84.

⁵ Zoë Druick, *Projecting Canada: Government Policy and Documentary Film at the National Film Board* (Montreal & Kingston: McGill-Queen's University Press, 2007).

entanglement of economic systems and environments that implies, I wish to use the themes raised in *This Is Our Canada* to unpack the theoretical and historical stakes of this thesis, which I will then explore in the subsequent chapters.

My project takes up the central importance of natural resource extraction and economic development within industrial, nonfiction, and other nontheatrical films from the early twentieth century to 1985. Jackson's focus on resource extraction in connection to economic and cultural development makes This is Our Canada an example of what I am calling Canada's "resource cinema." Resource cinema, as I will demonstrate in this chapter, offers a framework for analyzing how intersecting private and public interests turned to cinema in service of resource extraction industries, regional and nation interests, and ideologies of capitalist and national expansion. These sponsored, industrial and nontheatrical films were used to promote, explain, and naturalize forms of resource development through imaginaries of place and futures. In Canada, these resource films are also implicated and participate within the country's histories of settler colonialism and resource capitalism. Canadian resource films can be seen to work through discourses around the landscape's "natural wealth" as a basis for the profitable future for Canada as a white, imagined community. 6 The linkage between this projection of Canada and the country's economic and political futures enabled through resource development lays bare a fundamental temporality of resource development in capitalist society. The way in which the film connects the postwar project to previous waves of European settlement and colonial endeavours also lays bare both the historical and discursive significance of extractive resource industries to the colonial project, and later federal and regional economies.

In this chapter, I will take up the primary concepts and theoretical issues framing this thesis, while situating these topics in dialogue with *This Is Our Canada* as an example of this mode of filmmaking. After elaborating upon resource cinema as a categorization, I return to the notion of entanglement itself, and the ways in which an interweaving of economic systems, environments, and cultural production shapes the formation of so-called "natural resources." In doing so, I inquire into the ways in which this mode of interaction with physical environments is wrapped up in capitalist modes of value creation, nation, and cultural constructions of the so-called "natural" world. I situate these ideas within Canadian history and geography through key

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⁶ Benedict Anderson, *Imagined Communities: Reflections of the Origin and Spread of Nationalism*, 2nd ed. (London and New York: Verso, 1991).

Canadian theorists like Innis, as well as film studies and environmental humanities scholarship. Concentrating on entanglements of resource extraction and colonial settlement raised in *This is Our Canada*, I put theories of settler colonialism in conversation with those about resource use, environments, and empire, arguing that the corpus of Canadian films I take up in the thesis are examples of what Peter Limbrick terms "settler cinema." Following that, in order to foreshadow the successive chapters, I tease out issues of place and temporalities within this mode of filmmaking through recourse to extractivism and settlement histories. I weave my reading of *This is Our Canada* throughout these thematic entanglements.

Resource Cinema as a Useful Practice

This thesis focuses on a collection of publicly- and privately-funded productions that I term "resource cinema." This mode of filmmaking addresses natural resource extraction, and the political, social, and economic activities affiliated with such manifestations of extractivist ideology. As examples of documentary and state and corporate propaganda, these films also offer fertile grounds for evaluating the impact of these industrial practices on human and nonhuman life. This categorization serves to emphasize the relationships that these films to have to one another and the history of resource development, which often goes hand-in-hand with imperialism and settler colonialism. By positing the nontheatrical, industrial, and documentary films analyzed in the thesis as examples of resource cinema, I aim to excavate a previously overlooked strain of Canadian filmmaking established throughout the twentieth century.

Given the elevated place of documentary within Canadian cinema historically, and particularly films sponsored by the National Film Board (NFB), I focus specifically on nontheatrical forms of filmmaking in this project. While fiction filmmaking and other forms of media have also responded to resource use and environmental concerns, I limit the scope of this current project to nontheatrical and nonfiction films sponsored by public and private institutions. This enables my research to put questions of representation and cinematic imaginaries in dialogue with cinema's financial entanglements with land-use practices.

The films produced by the HBC, Imperial Oil, the NFB, and Memorial Extension examined in this thesis can be characterized as examples of this "useful cinema," defined by Charles Acland and Haidee Wasson in their titular collection as an elastic mode of filmmaking emerging in parallel to commercial entertainment cinema. Habitually screening outside of

conventional movie theatres (thereby transforming spaces like classrooms, factories, church basements, storefronts, and city transportation into exhibition venues), nontheatrical cinema worked to produce viewing subjects "in the service of public and private aims." Such forms of small-gauge amateur and professional filmmaking—including sponsored and industrial filmmaking, home movies, educational cinema, and civic films—emphasize cinema's utility as a mode of communication over its entertainment or aesthetic possibilities (although some nontheatrical filmmakers certainly also aspired to both). Nontheatrical filmmaking often intersected with commercial cinema as well; for example, some well-known directors like Alain Resnais, Joris Ivens, and Robert Flaherty made forays into sponsored filmmaking. 8 As a communication technology, nontheatrical films have the potential to reach a wide range of audiences through community, religious, institutional, and commercial networks, in order to convey various ideological, political, or commercial messages. Such films, Acland and Wasson assert, were made by individuals and institutions to serve specific desires and achieve certain tasks, "to do something in particular." As forms of useful cinema, sponsored and public sector films contributed to "the longevity of institutions seemingly unrelated to cinema" as well¹⁰ namely, in this case, resource extractivism and industrial-scientific-state entanglements. Vinzenz Hediger and Patrick Vonderau, in Films That Work: Industrial Film and the Productivity of Media (2009), assert that nontheatrical films remain historically and industrially significant precisely because their textual content is mutually constitutive of the conditions of creation and the contexts of their intended use.¹¹

Given the recent environmental turn within media and communication studies, and the growing body of scholarship dedicated to energy cultures, a number of film and media scholars have thoughtfully theorized the global production and circulation of films about energy and, specifically, oil. Mona Damluji, in researching sponsored filmmaking by British petroleum

⁷ Charles R. Acland and Haidee Wasson, eds., *Useful Cinema* (Durham: Duke University Press, 2011), 2.

⁸ Dan Streible, Martina Roepke, and Anke Mebold, "Introduction: Nontheatrical Film," *Film History*, Nontheatrical Film, 19, no. 4 (2007): 342; Edward Dimendberg, ""These Are Not Exercises in Style": Le Chant Du Styrène," *October*, 63-88, no. 112 (Spring 2005): 63.

⁹ Acland and Wasson, *Useful Cinema*, 3.

¹⁰ Acland and Wasson, 4.

¹¹ Vinzenz Hediger and Patrick Vonderau, "Introduction," in *Films That Work: Industrial Film and the Productivity of Media*, ed. Vinzenz Hediger and Patrick Vonderau (Amsterdam: Amsterdam University Press, 2009), 10.

industries in the Middle East and the globalization of the British documentary film movement, observes that corporations and "compliant states used film as a powerful public relations tool to shape global imaginaries of oil and its role in modern nation-building." Sponsored films about oil therefore offer future grounds for analysis of the entanglement of petroleum extraction with national and imperial interests, as Damluji and other scholars have shown. ¹³

Yet despite the prolific output of films about resource developments by the NFB and independent production companies like Crawley Films Limited 14 (which I briefly discuss in Chapter 3), the ways in which Canadian pictures have been used to promote, critique, and visualize the development of fossil fuels and other energy resources have garnered little scholarly attention to date in Canadian film and communication studies. Given the niche subjects of nontheatrical and sponsored films, and the frequent barriers to accessing archival prints, relatively scant work has been published on the rich history of nontheatrical filmmaking practices around industrial and scientific subjects, including films about natural resource extraction. Furthermore, histories of Canadian cinema, Zoë Druick notes, have generally privileged the development of documentary via the Film Board as the primary institution shaping Canadian film culture in the postwar period. 15 Established under the National Film Act in May 1939, the NFB was tasked with the mandate to "tell stories about Canadian society in its ongoing formation" through cinema. 16 While the NFB has certainly played a dominant role in shaping Canadian film cultures—and Canadians' twentieth century fascination with oil—this emphasis on the institution has served to marginalize important contributions from the private sector, such as those by industry.

Resource films can also be situated within the broader history of Canadian sponsored film production. According to Peter Morris, corporate and private interests have floated film productions to support the expansion of specific energy companies, advertise products, and

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¹² Damluji, "The Image World of Middle Eastern Oil," 148.

¹³ See Canjels, 2009; Banita, 2014; Damluji 2015.

¹⁴ Crawley Films Limited, an Ottawa-based private production company, was one of the few independent Canadian companies to operate in parallel with the National Film Board. The company was co-founded by filmmaker Judith Crawley and producer Frank "Budge" R. Crawley in 1939. Until its closure in 1989, Crawley Films produced around 5,000 films in both French and English, ranging from documentaries to features to corporate and government industrial films. James A. Forrester, "The Crawley Era," *Cinema Canada*, 1982, 22.

¹⁵ Druick, *Projecting Canada*, 9.

¹⁶ As cited in Druick, 12.

encourage European settlement in parts of Western Canada. Prominent early examples of the use of cinema to promote specific ideologies supporting white settlement and land-use practices to audiences, including the Edison Company's production of sponsored films in 1898 for the Massey-Harris Company (which manufactured agricultural equipment) in Toronto, Ontario, and the Canadian Pacific Railway's sponsored immigration films *New Homes Within the Empire* (director uncredited, 1922).¹⁷

The foundational industries that I take up in the following chapters—the fur trade, oil and mining, and industrial fishing—sought to use cinema as a useful technology to document specific extractive practices and convince the public that these forms of industry were inextricably woven into the fabric of Canadian economy, culture, and national identity. At the same time, these productions also communicate shifting ideas about the consumption of nature, land ownership, and the relationships between environments, culture, and institutions. The complex funding structure of many resource films—often a mixture of public and private money—reflect a host of competing interests around these highly lucrative natural resource industries. As I show in the rest of the thesis, public and privately-sponsored resource films were produced and exhibited for a number of reasons. These include:

- To promote the industrial and profitable development of raw materials to the public, typically in service to corporate profit or governmental aims (such as profit for shareholders, or the economic and social development of rural or Northern communities).
 This typically occurs when a new resource is developed, that is to say, a new resource frontier is explored.
- 2. To promote a corporate brand, visualize its corporate activities, or situate a corporation as part of Canada's heritage. Such is the case of the Hudson's Bay Company fur films, which I engage with in Chapter 2.
- 3. To educate viewers about the economic benefits or social or military importance of a given resource for national or community development. Examples of this include sponsored films that articulate the importance of petroleum to Canada's wartime and postwar prosperity, as I detail in Chapter 3.

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¹⁷ Peter Morris, *Embattled Shadows: A History of Canadian Cinema 1895-1939* (Montreal & Kingston, London, and Buffalo: McGill-Queen's University Press, 1978), 218.

- 4. To participate in the development of rural, marginalized, or precarious communities through the introduction, scaling up, or modernization of a resource economy. Here, cinema can be one of many educational and social initiatives used to expand a resource frontier: for example, in relation to offshore oil in Chapter 4.
- 5. To participate in community building around a given extractive industry or shared resource commons, or to interrogate links between communities formed through specific economic and cultural practices once a resource has been depleted. In these cases, films may be produced by and for the community, or by educational institutions that seek to engage these communities. I unpack this usage in Chapter 4 as well.
- 6. Lastly, to engage with conservation or sustainable resource management as popular environmentalism began to emerge in Canada by the late 1960s. However, these films often promoted ideas of reducing consumption patterns, turning to renewable resources, or energy conservation, which did not substantially challenge prevailing capitalist or extractive systems.

Given the shifting socio-political contexts of these films' production and the gap between their intended use and contemporary audiences, resource films often include narrative inconsistencies and provocative fissures in their ideological deployment of extractivist logics. For instance, a production like *Search into White Space* (dir. James Carney, 1970)—examined in Chapter 3—might have been sponsored by the Department of Indian Affairs and Northern Development with the intention of questioning resource exploration in the Arctic but its ambivalent depictions of Inuit peoples offers grounds for counter-readings. Furthermore, the difficulty of excavating original production contexts for many nontheatrical films can reinforce some of their textual ambiguity. Where possible, I have turned to production documents (memos, letters, and other archival records), viewing guides designed to compliment screenings, and contemporaneous publications (*The Beaver, Imperial Oil Review*) to flesh out my readings of these films. By drawing together this diverse and historically broad corpus of films, the categorization of resource film enables us to read these productions at the textual level through recourse to elements like their narratives and aesthetics, as well as in relation to the real-world industrial and cultural practices which they were made to document.

While other scholars have offered insightful studies of cinema's material links with nature, these works often concentrate on commercial film industries or media production more generally. In *The Cinematic Footprint: Lights, Camera, Natural Resources* (2012), Nadia Bozak offers a foundational study of what she calls the "resource image": the aesthetic and material impacts of film industries' engagements with environments through resource consumption. Concentrating on cinema's dependence upon fossil fuels, light, and other raw materials, Bozak argues that cinema—as well as the photographic image—is both a resource consumer and a "manufactured" or "unnatural resource" of industrialized culture.¹⁸ Taking this contention one step further, Bozak wades into sustainability politics by calling for more deliberate forms of film conservation and less resource-intensive models of image production. ¹⁹

While Bozak's work informs my own, her investment in sustainable industry exceeds the more culturally-specific concerns that frame my approach to Canadian resource cinema. Whereas she uses the term "resource image" to theorize *all* digital and analogue pictures as resources, I concentrate on productions that explicitly intersect with resource extraction industries in narrative and financing. In short, Bozak offers a more universal account of cinema's determining relationships to environments and the entertainment industry's dependence upon energy systems. ²⁰ From this perspective, the "resource image renders visible the subordination of nature as the root of industrial culture," so that we might understand oil politics and environmental histories as cultural categories. ²¹ This is a productive line of thought for those who aim to advance environmentalist politics within the industry, particularly in this age of accelerating climate change. Bozak's concerns also predominately lie with contemporary and future conditions of the medium's longevity as an input-heavy practice.

I agree with Bozak that foregrounding cinema's material links to energy politics and resource consumption offers a means of critiquing "the means and ends of cinematic representation and of industrial culture." Rather than approach all media as producers of "resource images," however, this thesis takes a different path; I turn to materials from the past to focus on resource entanglements within specific historical periods, in order to engage with cinema's participation in twentieth-century Canadian energy cultures and economic

¹⁸ Nadia Bozak, *The Cinematic Footprint: Lights, Camera, Natural Resources* (New Brunswick: Rutgers University Press, 2012), 59.

¹⁹ Bozak, 7.

²⁰ Bozak, 8–9.

²¹ Bozak, 54.

²² Bozak, 54.

development. In the following chapters, I will focus on specific geopolitical regions within the country and trace relationships between cinema and the specificities of place, industry, and resource. I also analyze films' production contexts to ask what they say about corporations, governments, and educational institutions' interest in using cinema to promote specific agendas related to resource extraction, transportation, and conservation. In Chapter 4, I return to the "afterlife" of archival films as a cultural resource, and the implications of material conservation and archival management on public access and use.

Nature as Resource: Environmental and Economic Entanglements

As I have argued, resource cinema has been taken up by states and corporations as a useful film practice through which to engage with natural resource extraction. At the same time, these texts also interrogate the material and imaginary entanglements of capitalism and the so-called natural world brought about through these industrial practices.

The examination of environmental and economic entanglements in this thesis draws from Anna Lowenhaupt Tsing's anthropological research into the interrelationships of commerce and ecology within late capitalism through the global matsutake mushroom trade. In *The Mushroom at the End of the World* (2015), Tsing theorizes the interplay between mushroom pickers' "precarious livelihoods" and the "precarious environments" in which these mushrooms grow. (Matsutake, it should be noted, cannot be commercially cultivated and only live in "human-disturbed forests" in several parts of the world.) Through her research on these fungi ecologies, she brings together questions of how wealth is amassed locally and transnationally. Most significantly for my study, Tsing argues that these networks of capital, commodities, and labour based in localized extractive practices ultimately render both human and nonhuman life precarious within a globalized economic system predicated upon the commodification of environments and bodies (including human labour and nonhuman bodies).

Like Tsing, environmental historian Jason W. Moore conceptualizes capitalism as a project that organizes social relations and power, an economic system, and a way of arranging nature. In particular, Moore emphasizes this last articulation of capitalism, asserting that a "fundamental condition of capital accumulation" is the management of the physical world.²⁴ This

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²³ Tsing, The Mushroom at the End of the World, 4.

²⁴ Moore, Capitalism in the Web of Life, 2.

organization of nature involves both the production of cultural ideas about human and physical nature and the material practices of environmental use. Cultural geographer Neil Smith shares Moore's assessment, arguing that this economic system produces nature as much as it produces social relationships and commodities.²⁵ While conceptualizations of nature have transformed over time, Smith argues that there is an essential dualism that runs throughout these evolving, occasionally contradictory, articulations. On the one hand, "nature is external, a thing, the realm of extra human objects and processes existing outside society"—the raw materials of human industry. This "external nature," which Smith also calls "the frontier which industrial capitalism continually pushes back," is internalized through practices of economic and social production.²⁶ On the other hand, nature also becomes shorthand for the supposedly "universal" qualities of human social behaviour. 27 Nature's accrued meanings, refracted through this dualism. philosophically prop up capitalist extraction by objectifying environments and making them available for certain humans to use as they will. In other words, capitalism assumes that nature can be harnessed, developed, probed, conquered and manipulated for human projects. 28 Projecting the natural world as a preindustrial wilderness, or that which exists beyond the human, therefore facilitates these practices.

Numerous scholars have sought to interrogate entrenched divisions between nature and culture, and between the human and the nonhuman, in recent decades. According to Donna Haraway, the traditional separation of "the self from the raw material of the other, the appropriation of nature in the promotion of culture, the ripening of the human form from the soil of the animal, the clarity of white from the obscurity of color, the issue of man from the body of woman [...]" supports imperial logics of Western racial and cultural superiority, while legitimizing the domination of the natural world, women, and racialized peoples.²⁹ In the case of Canadian settler colonialism and resource imperialism, we can see how both similarly sever entanglements of life through processes of extraction. As my resource films show (from *This is Our Canada* to those in the following chapters), Canada's resource economies are based in the

²⁵ Smith, *Uneven Development*, 10.

²⁶ Smith, 11.

²⁷ Smith, 12.

²⁸ Smith, 14.

²⁹ Donna J. Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989), 11.

removal (or alienation) of resources and human labour from local environments and "life worlds" to become, in Tsing's terms, "mobile assets [...] to be exchanged with other assets from other life worlds, elsewhere." ³⁰ Capitalism's trajectory is thus a "history of the human concentration of wealth through making both humans and nonhumans into resources for investment." Correspondingly, both human societies and ecosystems are reorganized in line with these practices of extraction and commodification.

To begin tracing the real-world entanglements of ecology and economy, Tsing further argues that we need to study both capitalist transformations of environments and the forms of life (and ways of organizing human and nonhuman existence) that manage to survive within capitalism. These transformations include the manufacture of alienated landscapes in which "only one stand-alone asset matters"; when that asset has been extracted or the landscape exhausted, then the "search for assets resumes elsewhere." 32 These alienated or extractive landscapes can include commercial monoculture fields in which most other forms of life are removed in favour of a single commodity crop, and the oil sands of Northern Alberta, where the boreal forests and top soil are scraped away in the search for bitumen. These resulting landscapes are characterized by both the promise of capitalist expansion and progress, and the resulting ruin after this search for resources has moved on to other landscapes and life worlds. This ruin is not final, however. Rather, this condition is one of "multispecies world making," in which relations are being recreated within ruined or precarious conditions. 33 Capitalism, she writes, "has directed long-distance destruction of landscapes and ecologies" so that "[i]magining the human since the rise of capitalism entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources."34 As a result, the world has become precarious, but not only in the negative sense that economies are unstable or environments are at risk. Precarity, she insists, is also "the condition of being vulnerable to others."35 It is therefore by recognizing our precariousness, and our entanglement in the life worlds of others, that we can begin to cultivate other, less alienated ways of living in capitalism.

³⁰ Tsing, The Mushroom at the End of the World, 5.

³¹ Tsing, 5.

³² Tsing, 5–6.

³³ Tsing, 22.

³⁴ Tsing, 19.

³⁵ Tsing, 20.

In the rest of the thesis, I adopt Tsing's concept of economic and ecological entanglements under capitalism, and the inherent condition of precarity which follows, as a means of speaking to the extractive relationships between resource economies and the so-called natural world, as well as alternative ways of configuring these relationships. While there are potentially innumerable imbrications and entanglements of economy and environments across history, for this thesis I will be focusing on the large-scale removal of raw materials from environments as one way of approaching these entanglements. Natural resource extraction enables a particular optics on the ways that capitalism functions by producing and withdrawing value from the natural world, while also manufacturing physical and cultural landscapes of ruin in the process. Yet life, as Tsing observes, is both precarious and resilient. Life continues to search for means of survival under capitalism and within landscapes of ruin. Likewise, scholars also need to find ways of theorizing and engaging with these forms of cultural and ecological resiliency. As I will demonstrate in Chapter 4, aspects of resiliency begin to emerge in a host of resource films by the 1970s and 1980s in relation to alternative consumption or extractive practices that attempt to postpone ruin, even if these forms of sustainability are burdened by their own "temporal fiction" of forestalling it.

Entanglement as a concept is not only prevalent within ecological scholarship; in quantum physics, entanglement refers to pairs of particles that are connected, so that a physical action carried out on one entangled participle will affect the other, even when separated across vast distances. In *Meeting the Universe Halfway* (2007), Karen Barad extrapolates from this phenomenon that "[e]xistence is not an individual affair." Survival requires a recognition of the system, in the absence of autonomous existence. Human existence is complicated by the social, biological and media ecologies which we inhabit; likewise, media histories are also wrapped up in the socio-cultural conditions that produce them, which include the resource economies of which they are part. To deny these entanglements is to be alienated from the life worlds that we inhabit. Tsing's critique of progress as a means of legitimizing capitalism's unquenchable thirst for new markets through spatial expansion and the invention of new forms of commodities also helps us to understand how human bodies and labour, as well as nonhuman life and substances like rocks or bitumen, are transformed into valuable resources.

³⁶ Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), ix.

By turning to this model of economic and ecological entanglements, I also aim to probe how the idea of "natural resources" is already tied up in specific beliefs about the creation of value and ways of interacting with the physical world. Natural resources, as I foregrounded in my introduction, are not *a priori* in the world but must be produced as such. The material substances of which "resources" are comprised are not extracted as inert, complete objects or commodities out of the earth. Rather, they have to be produced through the social, economic, and cultural labour of evaluation, exploration, and extraction, as well as the labour of creating the systems that demand and process them.

Cinema, as a communication technology, functions as one tool for producing the world as resource, and for stimulating consumer demand. As each of my chapters will demonstrate, film helped to create markets for raw materials (and consumer products) as varied as fur coats, gasoline, metal ores, and frozen fish filets, while also shaping cultural imaginaries of these goods. Through this study, it is my contention that we need to account for the roles that technology and capitalism play in this production of materials into valuable resource commodities. The social and economic value of a resource, and the development of technologies to produce them, feed into and motivate one another. Natural resources—to which workers in these industries could no doubt attest—require a huge amount of labour, energy, and infrastructure to extract, move, and manufacture into resource commodities. As my later chapters will demonstrate, this rendering is depicted as including the removal and treatment of animal skins to produce valuable fur pelts, the refinement of raw crude into gasoline, and trawler caught fish into processed food commodities. These processes of production are therefore not only material or physical; they are cultural and social as well. Both forms of production—the social construction of value and material production of natural resources from objects or life—work together as capitalism constantly searches out new resources to develop.

From this intertwined production of world-as-resource and of resource cinema, we can also consider how human labour is integral to these forms of production and extraction. Labour comes into play both during and following a resource's extraction from the physical environment, and in its subsequent transportation and refinement from a raw material into a consumable commodity for market. In this vein, we might also ask how certain objects and forms of life become resources and resource commodities over others. Tsing points out that while raw materials, human labour, and nonhuman life are created prior to or outside of

capitalism, through the process of "salvage accumulation," they become internalized as sources of capital.³⁷ This form of pillaging—of human labour, and matter that humanity did not create—by capitalism has parallels to, but is also distinct from, the cultural formation of resources that Bozak observes. Natural resources, she writes, are not "immanent" but come into existence through "historical processes of social construction. ³⁸ These intersecting processes frame depictions of resource industries throughout the thesis. I pay particular attention to settler and Indigenous human labour within these processes of production in Chapters 2 and 4.

Capitalism, writes Margaret Wiener, acts as a commoning force. By rendering organic and inorganic entities into commodities, it makes all aspects of life open to enclosure and consumption.³⁹ Harvey puts forward a similar argument, maintaining that labour is transformed into a "capitalist common" through its evaluation in monetary terms (that is, labour-as-time), transforming it into "the universal equivalency by which common wealth is measured." 40 Because labour is being continuously created as a commons, and just as quickly enclosed and commodified, the commons does not exist as a sort of pre-capitalist resource but is instead produced through social and economic systems. 41 Yet even as capitalism acts upon life in a manner that has historically brought communities together, whether around a resource commons or through organized labour movements, this "commoning force" can also work against communities. As several films co-produced by MUN Extension and the NFB show, some communities and environments close to extraction zones are disproportionally affected by the slow violence of environmental pollution, and the destruction of species on which communities have relied for survival. In this way, discussions of commoning can also be used to paper over economic disparities between communities and the asymmetrical impacts of extractive industry. I will go into this in more detail in Chapters 2 and 4, in relation to films about First Nations and white fishermen in Atlantic Canada, and the ways in which both are shaped by access to animal stocks and participation within resources industries.

³⁷ Tsing, *The Mushroom at the End of the World*, 63.

³⁸ Bozak, *The Cinematic Footprint*, 66.

³⁹ Margaret J. Wiener, "Things in (Un)Common: Two Reflections," *Anthropologica* 59, no. 2 (2017): 248.

⁴⁰ David Harvey, "The Future of the Commons," *Radical History Review*, no. 109 (Winter 2011): 105.

⁴¹ Harvey, 105.

We might also attend to the ways in which forms of resource extraction are configured along local, regional, or national lines. Resources, and by extension their extraction, not only fuel Canada's cultural, political, and economic ways of life; this extraction has materially shaped the development of Canada's communication and transportation systems, cultural institutions, legal system, and modes of governance. To write a history of Canadian cinema therefore necessitates a thorough investigation of the centrality of resource extraction to cultural institutions, and a more sustained meditation upon the corresponding environmental, cultural, and economic entanglements that this entails. Across these three industries and historical periods, we can see how natural resource extraction is transformed into national phenomenon, particularly within the federalist narratives of geology and subsurface resource extraction in mid-century public sector films. The ways that filmmakers working for industries, regional governments and the NFB promote or critique nationalist framings of resource access, exploration, ownership and extraction brings us back to how these resource industries are presented as part of a national endeavour or a means of undergirding cultural and national identities.

Settler Colonialism and Resource Capitalism

Canadian resource industries have historically been entangled with the settler colonial project, both within the twentieth century and prior to confederation. As I detail in my introduction to the thesis, intersections between settler colonialism and resource capitalism have framed Indigenous-settler relations, which in turn seep into Canadian films about resources and land-use practices. The films I examine in this thesis, while explicitly engaged in resource development, are also implicitly stitched up in settler colonialism. Like films about the North and colonial knowledge and sciences, these productions can be read through a settler colonial framework even if they appear only distantly related to white immigration and Indigenous disenfranchisement. In making these claims, I would like to foreground the fact that I am not conflating economic imperialism (through resource developments) and colonial settlement, as both are distinct formations of empire. Linda Tuhiwai Smith identifies four modes of European imperialism emerging from the fifteenth century onwards: "imperialism as economic expansion," as "the

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⁴² Timothy B. Leduc, *A Canadian Climate of Mind: Passages from Fur to Energy and Beyond* (Montreal & Kingston, London and Chicago: McGill-Queen's University Press, 2016), 13.

subjugation of others," as an idea, and "as a discursive field of knowledge." Economic imperialism, a "system of control which secured [...] markets and capital investments," formed a key component of the European conquest and settlement of Canada as it frequently assumed the form of staples industries and large-scale resource developments. Hese, in turn, depended on (and facilitated) the racialization and subjugation of First Nations residing in the territories in which these economic practices took place. As I show in Chapter 2 in relation to the HBC fur films, Inuit and First Nations were integrated into these resource economies as precarious workers, as consumers at HBC company stores, and as populations displaced by corporate and governmental forces over land. In this sense, colonial settlement in Canada interlocked with these other forms of imperialism, particularly in the capture of raw materials and the systemic displacement and violence against Indigenous peoples to suit the interests of settler society. As images of "the imperial imagination" both in its economic and colonial forms, *The is Our Canada* and these other examples of Canadian resource cinema are therefore cultural products of the collusion of white settlement and capital.

White settler colonialism, as Andrea Smith, Patrick Wolfe, and others have argued, is a structure rather than a single historical event, and furthermore one founded upon racist ideologies of difference and white superiority as justification for the elimination of Indigenous peoples. Wolfe, for instance, defines settler colonialism as a "land-centered project" aimed at removing and eliminating Indigenous societies through the dispossession and settlement of their lands, which operates through a number of forces including imperial or state institutions, private corporations, frontier communities, religious establishments, and neoliberal private-public partnerships. He are Preston locates resource extraction as an essential component of this matrix of settlement and control. Under mercantilism, she notes, raw materials were exported from Canada to foreign colonial markets, with First Nations often participating as trappers, scouts, and liaisons for French and British trading companies. Corporate and imperial alliances through economies like the fur trade also typically involved land surveying; in the case of the HBC, corporate land

⁴³ Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London, New York, and Dunedin: Zed Books and University of Otago Press, 2002), 21.

⁴⁴ Smith, 21.

⁴⁵ Smith, 23.

⁴⁶ Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of Genocide Research* 8, no. 4 (2006): 393.

⁴⁷ Preston, "Neoliberal Settler Colonialism, Canada and the Tar Sands," 48.

grabs facilitated the colonial displacement of Indigenous Nations. Such processes continued to frame twentieth- and twenty-first-century depictions of the Canadian nation and its industrial developments, as I will illustrate in the rest of the thesis. According to Affrica Taylor, Veronica Pacini-Ketchabaw, and Sandrina de Finney, colonialism is an inherently "incomplete project," in which settlers continuously make and remake territories, societies and cultures. Until Canada is decolonized or ceases to be legislated through settler laws, settler cultural formations and funding models will continue to influence Canadian film production.

In *Making Settler Cinemas* (2010), Peter Limbrick theorizes this titular mode of filmmaking as one that arises within colonial societies and empires. Produced by diverse groups, often with diverging interests, these films participate in the constitution of the colonial settler societies that give rise to them. ⁴⁹ Drawing a distinction between colonialism and settler colonialism, and focusing in particular on films produced within the British Empire (and later, the British Commonwealth), Limbrick contends that these Anglophone settler colonial states placed "British subjects and their descendants in contact with indigenous populations," and these colonial encounters and settler world building were constantly reworked on screen for white spectators within these settler societies. ⁵⁰ The sedimentation of settler relationships into landscape as part of the process of transforming colonized "sites into "home" is a crucial element of Limbrick's argument that I wish to emphasize here. He contends:

the systematic and violent alienation of land from indigenous ownership, the imposition of colonial governments, and the eventual establishment of independent states built on settler legal and political frameworks [...] required reckoning with those who were there first—indigenous populations—and the physical and representational transformation of landscape.⁵¹

In Australia, the United States, and New Zealand, white settlers were never "displaced by decolonization movements"; consequently, the racial and cultural formation of these societies'

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⁴⁸ Affrica Taylor et al., "Inheriting the Ecological Legacies of Settler Colonialism," *Environmental Humanities*, no. 7 (2015): 129.

⁴⁹ Peter Limbrick, *Making Settler Cinemas: Film and Colonial Encounters in the United States, Australia, and New Zealand* (New York: Palgrave Macmillan, 2010), 2. ⁵⁰ Limbrick, 6.

⁵¹ Limbrick, 6.

identities were forged in relation to both the "New World" and the imperial metropole, Great Britain.⁵²

Despite the many linguistic, cultural, and racial similarities between Anglophone Canada and these other British settler nations, Limbrick draws a sharp distinction between them based upon what he perceives as the motivations for British conquest and migration to these territories. "British subjects and their descendants," he argues, came "in contact with indigenous populations, not for the purpose of extracting particular resources, but with the aim of permanent settlement and colonization, the creation of "new worlds"." In defining Anglophone "settler colonies" as those "in which large-scale invasion and settlement, rather than imperial management and extraction of resources, was the primary goal," Limbrick frames settler colonialism in opposition to resource imperialism. Doing so implies that other forms of colonial societies (such as the British colonies in the Middle East and India) were predicated upon natural resource extraction whereas American and Australasia settler societies were not.

I disagree with the separation of white settlement from the colonial formations advancing resource extraction economies, given that the historical reality witnessed a much more complex mapping of these different processes. Settler societies, including the United States and Canada, emerge from multiple waves of migration, often motivated by a variety of economic incentives and favourable laws from colonial governments. The settlement of California, for instance, could be viewed as a product of the gold rush as much as Manifest Destiny. Lorenzo Veracini argues explicitly for the connections between Canadian settler nation-building and its history as a resource colony; the establishment of the Dominion of Canada was predicated upon white settlers' violent seizure of land and other natural resources from Indigenous inhabitants, and corresponding attempts to physically and culturally erase First Nations from territories that Europeans sought to inhabit and remake. 55 Moreover, arable land—territory—is one of the most vital and sought-after natural resources, as scholars and critics of Israeli settler colonialism in Palestine know well. In short, this distinction does not hold in the case of Canada since these two

⁵² Limbrick, 6.

⁵³ Limbrick, 6.

⁵⁴ Limbrick 8

⁵⁵ Lorenzo Veracini, *Settler Colonialism: A Theoretical Overview* (London and New York: Palgrave Macmillan, 2010), 105.

models of settlement and extraction were frequently entangled in, and dependent upon, one another.

Despite Limbrick's hesitation to apply his framework to Canadian cultural production, his articulation of settler cinema certainly describes the settler colonial presence within Canadian culture. This is particularly applicable, I believe, to cinematic representations of the nation, the landscape, and the conflicting invocations and erasures of First Peoples from popular accounts. His diagnosis that cinema played a key role in visualizing and narrativizing settler values and encounters that shaped these societies, as well as the cultural industries emerging from them.⁵⁶ can be seen in relation to prominent Canadian film institutions. John Grierson, for instance, founded the National Film Board with the purpose of cultivating a national cinema in the model of the British Film Institute and its colonial filmmaking practices. 57 Reframing studies of Canadian cinema in light of its "colonizing discourse," as Gittings does in relation to narrative filmmaking, also picks up on Smith's fourth articulation of imperialism as a system that is brought into "our heads," colonizing ways of thinking about groups of people, environments, progress, and our humanity.⁵⁸ Imperialism is a structure that shapes how both colonized and colonizer, descendants of settler society and Indigenous nations, understand the world, and their place within it. I believe, consequently, that Limbrick's delineation of settler cinema does accurately explain elements of the resource cinema I propose here, in that these films were produced within a settler society and imbued with settler imaginaries about the significance of landscapes to white Canadian identity. This runs parallel to the economic value signified by landscapes in these films. At the meeting point of both these capital and settler imaginaries is the erasure and appropriation of First Nations as the original inhabitants of these territories, a tension which comes to the fore in *This is Our Canada*.

As Limbrick also notes, new meanings are reproduced for these texts over time, rendering settler texts dynamic and living, rather than static objects. In *This is Our Canada*, discourses of white settlement and territorial conquest are bound up in making the Canadian landscape productive. Mining, like Western grains agriculture, is given particular screen time in the film's trajectory of Canadians' triumph over the wilderness. In one scene, male miners

⁵⁶ Limbrick, *Making Settler Cinemas*, 6.

⁵⁷ Joyce Nelson, *The Colonized Eye: Rethinking the Grierson Legend* (Toronto: Between the Lines, 1988).

⁵⁸ Gittings, Canadian National Cinema, 7; Smith, Decolonizing Methodologies, 23.

descend into the earth by elevator, dramatically illuminated with shadows ricocheting across the walls behind them in full Expressionist style. As the miners walk down a hollowed out mine shaft, the male narrator states: "No longer the surface scratching of gold rush days, but modern scientific, mining which has disproved the legend that the North is barren." Lines such as this one perpetuate a settler myth that only white men, wielding the advanced tools of Western science and technology, can render the landscape productive. The assumption that lies behind such discourses is that land, if left to its previous Indigenous inhabitants who remain unnamed in much of the film, would otherwise be unproductive, fallow, or barren.

As the film continues its rendering of Canadian history into the 1940s, natural resource wealth is reiterated as the locus of Canada's political and economic power. "Nearly a third of all we produce left the country for markets abroad," the narrator states in another scene, "We Canadians had found our place in the community of nations as producers of the raw stuffs." During the film's conclusion, which meditates upon Canada's military future with the Cold War looming on the horizon, the narrative's settler perspective turns an eye to the Arctic. Describing it as "raw new lands whose future we can only guess," the film proposes that the North might be the next frontier to conquer through industrial development and settlement. This fascination in the Arctic, and imaginaries of its potentially vast, untapped mineral resources (obscured only by the hostile climate in this remote region), returns time and time again throughout many of the resource films I take up in this thesis. From The Romance of the Far Fur Country (cinematography by Harold M. Wyckoff and Bill Derr, 1920) to The North Has Changed (director uncredited, 1967), explored in Chapters 2 and 3, as well as many other films that exceed the current scope of this project, the North returns as a site of economic promise and exoticism, but which nevertheless informs the identity of Southern Canadians—regardless of whether they have ventured towards the Arctic Circle. Throughout these depictions, as is noticeably the case with *This is Our Canada*, the North is also configured as an *empty* frontier for Southern exploration, subjugation, and management. In other words, the film's depiction of the conquest of the wilderness, of the waterways, and of geological formations is carefully delineated from histories of structural oppression and violence against specific Indigenous peoples and their cultures, belying their actual interconnectedness.

Picking up on the subject of race—and specifically whiteness as a racial construct and hue—from the preceding discussion of settler imaginaries, we can also see how use of the

landscape and whiteness are intertwined within the film. The imaginary of the North, Sherrill E. Grace details, is intimately connected to configurations of race, pristine nature, and economic development.⁵⁹ Such discursive formations of the North not only work to redefine southern Canadians as "Northerners," but they also link capitalist and territorial frontiers to this national imaginary of place. The film's celebration of how Canadians' "ancestors" left Europe behind to become "pioneers"—domesticating and transforming environments into sources of wealth as they pushed their way across the continent—locates white Canadians and European immigrants' ability to transform raw materials into resource staples as key to the nation's success. In tracing these historical imbrications of resource extraction, settler violence, and imperialism, we can see how This is Our Canada betrays a remarkable absence in its account of Canada's resource economy and national development: that of Inuit, Métis, and First Nations. The racial aspect of the film's portrayal of settlement emerges at several points in relation to both the presumed whiteness of settlement and this absence of Indigenous peoples. As a structure of conquest, settler colonialism is predicated upon ideologies of racial difference as justification for the elimination of Indigenous peoples. Andrea Smith contends that white supremacy and settler colonialism mutually inform each other, given that the logic of genocide, which bolsters white supremacy, also anchors colonialism. ⁶⁰ White supremacy is interpolated within the capitalist system, as it not only commodifies workers' labour but also commodifies racialized bodies through racial hierarchies like black slavery. 61 Despite its attention to the regions and various ethnic groups constituting Canada, This is Our Canada depicts immigration as an almost uniformly white phenomenon. It disavows Canada's history of slavery and non-white immigration—both of which were absolutely crucial to the accumulation of wealth by the elite, property-owning class and the construction of national infrastructures like the railroad. Nearly all labourers depicted are also Caucasian, making the brief glimpse of a black Canadian miner the exception who proves the rule. The racial hierarchy of capitalism is made invisible by rendering Canadian labour as white, and multiculturalism into a prism of European ethnicities.

⁵⁹ Sherrill E. Grace, *Canada and the Idea of North* (Montreal and Kingston: McGill-Queen's University Press, 2001).

⁶⁰ Andrea Smith, "Indigeneity, Settler Colonialism, White Supremacy," *Global Dialogue* 12, no. 2 (Summer/Fall 2010): n.p.

⁶¹ Smith, n.p.

Canada's industrial and social progress is likewise enabled by the disavowal of Indigenous peoples, which is itself a component of what Veracini identifies as the founding myths of settlement. He theorizes the conventional settler narrative as a means of creating stories which emphasize settlers' movement to a new empty place, and their struggles to tame and triumph over their newfound environments. Such narratives help to culturally and ideologically sustain the settler state as an institution, particularly stories which disavow the "founding violence" of colonial settlement and original (and ongoing) presence of Indigenous peoples. ⁶² This manifests in *This is Our Canada* in one such scene, in which the ability to survive on the land becomes disassociated from race. The early sequence of a man crossing the frozen landscape by dog sled, for instance, could be construed as either an Inuit traveler or a white European trapper. The ambiguity of the individual's ethnicity serves to reaffirm the film's broader disavowal of First Nations' preceding land claims, while transforming this aspect of indigeneity into a transferable quality that can be appropriated by whites.

This is Our Canada also represents the migration of European settlers in the eighteenth and nineteenth centuries to Canada, with its ever-expanding frontier of settlement, in connection to the emergence of a "pioneer culture." The link between natural resource extraction and this history of settlement has its echoes in the creation of new economic frontiers within resource capitalism. Frontiers of settlement, which participate in shaping political and cultural structures of settler societies, also functioned as economic frontiers for imperial power, the nation, and mercantile assemblages. Such frontiers of white migration, environmental historian John F. Richards writes, were plugged into global economic networks, and highly dependent upon accessing metropolitan markets for the resource commodities they produced. The search for resources to develop, and the corresponding exploration of new territories in which to locate these resources, can drive the expansion of settler frontiers. At the same time, this quest for resources is also linked to the capitalist expansion of markets. As an economic system, capitalism reproduces through expansion. This expansion, we might say, constitutes another sort of frontier. In her reading of Michael Hardt and Antonio Negri's *Empire* (2000), Bozak characterizes the capitalist economy as always, insatiably, in search of new consumer markets.

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⁶² Veracini, Settler Colonialism, 95.

⁶³ John F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World* (Berkeley, Los Angeles, and London: University of California Press, 2003), 4–6.

Capitalism is therefore dependent upon a continuous "reconfiguration of the boundaries of the inside and the outside," flowing beyond these limitations to seek new spaces. ⁶⁴ As Limbrick argues, "settler societies have been made by forces larger than nation," and these forces include not only empire and Indigenous resistance, but also transnational industry as a cultural producer. ⁶⁵ In the next chapter, I return to the notion of frontiers and its implications for Canadian visual culture in relation to mercantile assemblages like those of the HBC.

Canada as Environment, Geology, and Place

Place and time are deeply intertwined in the formation of resource cinema, as well as in the geological sciences and Canadian settler imaginaries about identity and environment. A recurring gesture within Canadian scholarship on political economy, literature and cultural studies, and science studies is to emphasize the profound impacts of climate, geology, and environment on Canada's formation. Innis's often-cited claim that Canada "emerged not in spite of geography, but because of it" continues to resonate within contemporary accounts of Canadian material culture and historiography through the cultural scholarship and environmental histories of Jody Berland, Nicole Shukin, and Tina Loo.⁶⁶ In her account of Canadian conservation movements, by way of an example, Loo tracks how wildlife achieved a symbolic currency in Canada dating back to the fur trade, acting as a metonymy for nature's influences upon Canadian national identity.⁶⁷ Considering aspects of place and, as I discuss in the next section of the chapter temporal concerns, foregrounds the connection between resource cinema's production of environmental imaginaries and the place of nature within Canadian culture (particularly Anglophone culture).⁶⁸

⁶⁴ Bozak, *The Cinematic Footprint*, 114.

⁶⁵ Limbrick, Making Settler Cinemas, 15.

⁶⁶ Harold A. Innis, *The Fur Trade in Canada: An Introduction to Canadian Economic History* (Toronto: University of Toronto Press, 1999), 393.

⁶⁷ Tina Loo, States of Nature: Conserving Canada's Wildlife in the Twentieth Century (Vancouver: UBC Press, 2006), 1.

Although my thesis focuses predominately on Anglophone Canada, these concerns about environments, the North, and climate permeate Québécois visual and literary cultures in distinct ways as well. For studies addressing Quebec, see: Louis-Edmond Hamelin, *Nordicité Canadienne* (Montreal: Hurtubise HMH, 1975); Caroline Desbiens, *Power from the North: Territory, Identity, and the Culture of Hydroelectricity in Quebec* (Vancouver and Toronto: UBC Press, 2013).

Canadian literary critic Northrop Frye, in his conclusion to *A Literary History of Canada*, describes Canadian culture as one defined by the "riddle" of place: "Canadian sensibility [...] is less perplexed by the question of "Who am I?" than by some such riddle as "Where is here?" Frye's analysis of Canadian literature frames these texts through their connections to the "hostile" and "desolate" physical environment. While later critics have taken umbrage at his characterization of Canadian culture's "garrison mentality," his emphasis on the distinctive presence and influences of the Canadian geography on cultural production and identity has been enormously influential within English Canadian literary studies and cinema. This idea that geography shapes culture also has its parallels in the idea that the North underpins the political boundaries of the Canadian state. Québécois geographer Louis-Edmond Hamelin, who pioneered the field of *nordologie* (the study of Arctic regions and Northern latitudes) in Canada, argues moreover that the North is a "natural" feature of Canada as a state.

In addition to his influential staples theory of Canadian political economy, Harold Innis wrote extensively about the Canadian North. As Patricia H. Audette-Longo and William J. Buxton recount, Innis sought to document and archive knowledge about the North, its geography and natural resource potential, and narratives of conquest though his book reviews for the *Canadian Historical Review*. While Innis posits that Canada developed in dialogue with the construction of communication and transportation technologies uniting metropolitan cities and resource-producing peripheries, in his book reviews he nevertheless positions the North as a "new or last" frontier. For Innis, this Northern frontier functions as a site of Canada's shared cultural past and a location for building its future, through the development of its resources, narratives of individual conquest, and imaginaries of a shared Canadian Northern identity. In Chapter 2, I further unpack his staples thesis in relation to economic frontiers. As I touched on earlier, Innis proposes that the Canadian economy, political system, and culture were shaped by

⁶⁹ Northrop Fry, *The Bush Garden: Essays on the Canadian Imagination* (Toronto: Anansi, 1971), 220.

⁷⁰ David L. Pike, *Canadian Cinema Since the 1980s: At the Heart of the World* (Toronto, Buffalo, and London: University of Toronto Press, 2012), 3.

⁷¹ Hamelin, Nordicité Canadienne.

⁷² Patricia H. Audette-Longo and William J. Buxton, "Compiling Knowledge, Enacting Space, Binding Time: Innis's Canadian North (1928-1944)," *TOPIA: Canadian Journal of Cultural Studies*, no. 32, "Theory in a Cold Climate" (Fall 2014): 229.

⁷³ Audette-Longo and Buxton, 240.

key "staple" resource industries including, timber, fur, fish, wheat, and minerals. Outlined first in *The Fur Trade in Canada: An Introduction to Canadian Economy History* (1930) and expanded in *The Cod Fisheries: The History of an International Economy* (1940), he argues that the extraction and transportation of these staples had a fundamental effect on the creation of transportation and communication networks through the country, and relations between metropolitan centers and remote peripheries. Liam Cole Young, reflecting on Innis's work, claims that Canada emerged through its staples economy as "a zone of extraction and exchange" first, only later becoming a nation-state. This passage from a collection of regional resource economies operating within colonialism to a modern nation continuing to prioritize its resource development sector emerges as a narrative within many of the films examined here.

Most significant for my purposes, however, is how Innis and later environmental historians like Tim Steinberg have argued for the importance of geological and ecological factors in shaping culture. Like his predecessor, Steinberg asserts that geological features (soil composition, mineral deposits, rivers) and climatic zones have left decisive impacts on American social, political, and cultural history. The prominence of streams and rivers in the Northeast, for instance, enabled the emergence of water-powered industry in the region during the nineteenth century. The resulting wealth, gendered and racialized labour, and social ideas of productivity were fundamentally dependent upon the availability of water. As such, Steinberg argues that American history needs to take into account longer geological and environmental histories than perhaps first apparent when tracing the history of a given technology. This thesis has a similar investment in the industrial histories, geological timescales, and environmental contexts which inform the production of resource cinema. Like the deep histories of archaeology, this approach seeks to bring various temporalities together—geological time, capitalist time, anthropocentric histories, and temporaries of the nation state—usually considered distinct within film studies.

As detailed in the previous section on settler and economic frontiers, many other scholars have likewise sought to theorize the cultural and geographic histories of the North within (predominately white) southern Canadian society, literature, and visual cultures. One trope of the North, which was shared by Innis and other Canadian scholars during the first half of the

⁷⁴ Liam Cole Young, "Innis's Infrastructure: Dirt, Beavers, and Documents in Material Media Theory," *Cultural Politics* 13, no. 2 (2017): 237.

⁷⁵ Tim Steinberg, *Down to Earth: Nature's Role in American History* (New York and Oxford: Oxford University Press, 2002), 4.

twentieth century, presented the region as an "object of knowledge." The Northern landscapes, as well as the peoples and nonhuman life inhabiting them, were to be studied, measured and known. This perspective meshed with early twentieth century ethnographic films and photography to document Indigenous peoples and wildlife in both the Canadian Arctic and other regions of North America. Examples of this include *Nanook of the North* (dir. Robert Flaherty, 1922) and less intentionally ethnographic films like *The Romance of the Far Fur Country*, which nevertheless thrilled Southern Canadian audiences with select ethnographic sequences. I will return to the latter text, as one of the HBC's "fur films," in the next chapter.

Beyond ethnographic inquiries into the flora, fauna, and peoples inhabiting the North, the Arctic has also been alternatively configured as a laboratory for scientific exploration and experimentation. This discourse of the "landscape as laboratory" places the North as a site for research as well as an object of that study. The North and other peripheral regions have been articulated in cinema, political speeches, and other cultural texts as the future of Canada's economy and national culture that can only come to pass through the scientific and industrial exploration of these geographies. As Edward Jones-Imhotep argues, both the Canadian military and scientific establishments turned to the Arctic (like their Russian and American counterparts) during the Cold War to both document the strategic economic and political potentials of these spaces, and to "rigorously document the northern environment and to help indoctrinate and acclimatize [Southern Canadians] for military operations in northern conditions."⁷⁷ In doing so. these groups were not only seeking to control these Arctic spaces and bolster the military's presence in potentially valuable and volatile geopolitical frontiers. They also developed media communications networks, such as the Arctic radar system, to connect these geographical "peripheries" to urbanized centers through informational networks. The Arctic experiments with high-latitude atmospheric research on radar communications promoted by a group of Canadian researchers lead by Frank Davis in the late 1940s fits into these conceptions of the Canadian North as a "natural geophysical laboratory," to use Davies' turn of phrase, to explore relationships between nature and technology. 78 This idea of the North as a laboratory has

⁷⁶ William J. Buxton, *Harold Innis and The North: Appraisals and Contestations* (Montreal and Kingston: McGill-Queen's University Press, 2013), 30.

⁷⁷ Edward Jones-Imhotep, "Communicating the North: Scientific Practice and Canadian Postwar Identity," *Osiris* 24, no. 1 (2009): 154.

⁷⁸ Quoted in Jones-Imhotep, 154.

colonial undertones, in that it renders a vast and diverse territory an object for Southern scrutiny and potential economic development. In Chapter 3, discourses of the North as a site of extraction—resource extraction as well as scientific knowledge—return in relation to the ways in which films about geology and subterranean extraction position science as a tool of industry as well as empire.

These accounts, bridging environmental determinism (in the case of Innis) and the contemporary field of environmental history, also imply certain temporal investments. Attending to environmental factors within economy and society—particularly within studies of geology and other sciences—necessarily involves notions of deep time and temporalities which extend beyond the human. Furthermore, resource extraction itself, especially the most iconic forms, drilling and mining, rests upon the production of capital from geological and nonhuman processes, as I argue earlier in this chapter. The resource films taken up in this thesis, including *This is Our Canada*, also frequently propose imaginaries of Canada's future prosperity or modernization based upon resource extraction, offering another temporal entanglement embedded in this industrial practice.

Geology, as a scholarly discipline and applied practice, offers a particular example of science's entanglement with industrial resource extraction, and the questions of place and deep time within resource films that these enmeshments raise. As an earth science, geology includes the study of lands, sub-surfaces, and the material resources within and below the earth's crust. It also offers a means of measuring deep time, since rocks offer one of the few avenues for insight into the earth's geological formation and that of other celestial bodies. Within my corpus of resource films, geology also serves as a prominent tool for the scientific and industrial exploration of Canadian landscapes (like the Arctic) and the potential oil, gas, and mineral deposits concealed within them.

As a method of compiling knowledge about the physical world, geology also has an imperial history, much like those of anthropology, biology, and other Western scientific disciplines. According to Suzanne Zeller and other Canadian science studies scholars, geology emerged in Canada with a close affiliation to the specificities of place: in this case, the unique geological formations of the North American continent, which is largely defined by the Canadian Shield from the Precambrian era. This section of the continental shelf spans over half of contemporary Canada and parts of the Northern United States, and includes some of the oldest

rocks known to scientists. Zeller argues that the field developed as an imperialistic science in nineteenth-century British North America, influenced by London and Edinburgh as the field's prominent European centers of geological inquiry. 79 The Geological Survey of Canada (GSC), founded in 1841, produced and compiled scientific data about the landscape and subsurface resources after Upper and Lower Canada. Many explorers and early geologists relied upon geological sketches and topographical observations from fur traders stationed across the western and northern regions of the dominion.⁸⁰ Early accounts, such as naturalist Dr. John Richardson's Arctic Searching Expedition (1851), often relied upon data gleaned from firsthand accounts of the northern reaches of British North America and offered maps which, for Zeller, "reduced British North America to its starkest geometrical frame" to emphasize waterways and mountain ranges, with removing traces of human (including Indigenous) inhabitation. 81 Following confederation, both the state and private corporations utilized topographical surveys and geological reports to assist in the identification of ore bodies to develop and plot agricultural settlements based upon soil maps, and otherwise contribute to the economic and social expansion of Canada during the nineteenth and twentieth centuries. To point to such one example: the Canadian government used GSC reports to identify petroleum deposits in Alberta's Athabasca region as a basis to begin treaty negotiations with the Indigenous peoples there in 1870.82 Such intersections between science, resource development, and the state's dealings with First Nations offer further evidence of my earlier claim that histories of settler colonialism and resource extraction cannot be so easily detangled within the Canadian context. Both inform land use practices, as well as public and corporate film depictions of environments.

Although the development of geology in British North America and late nineteenth-century Canada predates the resource films I address in my thesis, this history is nevertheless pertinent to my study because it continued to shape scientific tradition in English Canada during the twentieth century. Questions about Canada's industrial future which arose following the discovery of coal beds in New Brunswick between 1838 and 1842 and British free trade

⁷⁹ Suzanne Zeller, "The Colonial World as Geological Metaphor: Strata(Gems) of Empire in Victorian Canada," *Osiris*, Nature and Empire: Science and the Colonial Enterprise, no. 15 (2001): 85.

⁸⁰ Zeller, 89.

⁸¹ Zeller, 89–90.

⁸² Preston, "Neoliberal Settler Colonialism, Canada and the Tar Sands," 42.

agreements in 1846, for instance, offer historical parallels to twentieth-century concerns over Canadian sovereignty and the race to identify and develop oil and natural gas deposits in Western Canada and the Atlantic offshore. Geology and other Victorian sciences, Zeller proposes, also powered Canadian expansionism by using transcontinental geology as a means of naturalizing and legitimizing colonial expansion across the continent.⁸³ The GSC, under Survey Director William Logan, took up the flag of scientific discovery to rationalize survey expeditions across the continent prior to confederation, in effect normalizing the concept of a transcontinental nation as a natural evolution of the Canadian colonies.⁸⁴ The GSC was not the only institution to take advantage of the seemingly benevolent appeal of scientific inquiry to justify exploration to governments or shareholders. As Ted Binnema shows in his history of the Hudson's Bay Company, the crown corporation helped underwrite costly expeditions in the seventeenth and eighteenth centuries by emphasizing their "selfless contributions" to scientific research and Western humanity. 85 Yet commerce also placed severe pressures on the field and the types of knowledge it facilitates, both in the nineteenth century and now. Charles Lyell's Principles of Geology (1830-1833), which became a foundational text for the field, has been seized upon by contemporary environmental scholars and media theorists for its theorization of deep time and links between science and commercial industry. Doug Macdougall similarly characterizes geology in his popular account Why Geology Matters: Decoding the Past, Anticipating the Future (2011) as "a field with its roots in the search for and extraction of mineral resources from the Earth."86 Effectively, geology has been used to facilitate extraction on two fronts: information about the past as well as resources from the planet's crust.

In the industrial films and popular earth science film I take up in this project, scientific regimes of knowledge are leveraged to facilitate corporate expansion into new resource frontiers. As *Know Your Resources* (dir. David A. Smith, 1950) recounts, for instance, the same aerial photography used to calculate forest coverage and identify valuable stands of timber could also be deployed to identify subterranean mineral deposits based upon subtle changes in topography.

⁸³ Zeller, "The Colonial World as Geological Metaphor," 101.

⁸⁴ Zeller, 101.

⁸⁵ Ted Binnema, *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870* (Toronto, Buffalo, and London: University of Toronto Press, 2014), 33.

⁸⁶ Doug Macdougall, *Why Geology Matters: Decoding the Past, Anticipating the Future* (Berkeley, Los Angeles, and London: University of California Press, 2011), 3.

At the same time, geology also demonstrates how place and time are inseparable through the discipline's focus on the physical manifestation of the passage of time through volcanic eruptions, the accumulation of sedimentary layers of rock and fossils, ice ages, and other geological turbulence. In a sense, nonhuman history is given solid form. Macdougall frames his overview of contemporary earth sciences through a similar association between past and future times. For Macdougall, "geological prediction," which he calls "decoding the past," is at the heart of geology as a practical or applied discipline. 87 Part of this process of decoding the past rests in learning to decipher the planet's "natural archives," which have organically accumulated over time to include tree rings, ice cores, geological strata, and fossils.⁸⁸ Through this metaphor of the earth as nonhuman archive, he presents its sedimentary history through ossified layers of the past, which can be analyzed through radiometric dating, the study of the fossil record, and ice sampling. Macdougall links these ways of reading the earth's stratigraphy and other natural archives to future temporalities as well, by arguing that since the laws of physics and chemical reactions remain consistent and therefore predictable between moments in time, we can use this scientific data about historical geological, atmospheric and biological processes to create models of future planetary processes. 89 Although my resource films do not engage with data projections of future geologies and atmospheres per se, several films I take up in Chapter 4 are nevertheless invested in imagining future economic and social conditions through new resource frontiers and potential developments. Others, in contrast, look backwards in time, leveraging these sedimentary archives and deep time to legitimate the Canadian nation as a natural extension of the continent's millennia-long emergence. Such cinematic depictions echo Innis's writing about Precambrian geology, which he deploys to naturalize the political boundaries of the Canadian state.

Pasts and Futures of Resource Extraction

Thinking through geology, along with other methods of engaging with ecological and economic entanglements, reiterates the importance of place and natural resources—as well as the representational tropes, technologies, and sciences we use to explore them—within Canadian

⁸⁷ Macdougall, 2.

⁸⁸ Macdougall, 2.

⁸⁹ Macdougall, 250.

film history. Yet as I hinted above, geology involves not only an attention to geographies but also to non-anthropocentric temporalities. Taking up this latter point, I turn now to the ways in which these nonhuman temporalities and imaginaries of future times likewise frame Canadian resource cinema.

Discussions of nonhuman temporalities have become quite timely (if one might excuse the pun) within cultural studies and the humanities in light of debates surrounding the Anthropocene as both the elevation and denial of humanity to the level of a geological agent. In a 2000 article, Paul Crutzen, an atmospheric chemist and Nobel laureate, and ecologist Eugene Stoermer popularized the concept of the Anthropocene to speak to what they viewed as the snowballing impacts of human activities on the planet and its atmosphere. In proposing that the Anthropocene—the age of the human as geological force—supplanted the most recent geological epoch, the Holocene, during the Industrial Revolution, Crutzen and Stoermer offer a concept that has captured the imagination of many within the environmental humanities. However, critics have foregrounded the political problems of the concept, given that it flattens the ontological category of "the human" and thus papers over the Global North's outsized role in producing global CO₂ emissions and the corresponding slow violence wreaked upon many inhabiting the Global South. Crucially, deliberations around this human-motivated geological epoch has contributed to reconsiderations of normative spatial and temporal scales in the humanities scholarship.

Theorizing futures, and specifically the environmental and political futures imagined through this collection of films, enables us to think about the temporalities associated with these industries. For instance, the commodification of geological materials and biological resources draws forms of deep time and nonhuman life spans (animal, plant) external to capitalism into this system, effectively creating value from these temporalities. Given the popular and scholarly concerns over the ecological longevity of the earth and our capitalist global system built on petroleum, the question of what is the "future" is becoming one of the leading political issues of

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⁹⁰ Paul J. Crutzen and Eugene F. Stoermer, "The 'Anthropocene'," *IGBP Newsletter*, no. 41 (May 2000): 17–18.

⁹¹ Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35, no. 2 (Winter 2009): 197–222.

our time. 92 Nonhuman time scales are particularly significant as these are where the geological comes into dialogue with the economic and political futures predicated upon resource extraction in this corpus of films. There are several ways that the following chapters bring these seemingly distinct "timescales" together. First, they do so in the mapping, surveying and exploration of spaces for natural resources therefore rendering knowable (and controllable) these territories, natural resources, and forms of human and nonhuman life. These technologies and documentary practices unravel entanglements of time, as well as environment and economy. The national, corporate and colonial search for resources such as minerals, oil and natural gas and animal life like fur-bearing animals all seek to develop, monetize and profit from these nonhuman timescales and life processes. While fish and fur seemingly fall outside of deep time, they nevertheless participate in the monetization of the past by profiting from the evolution of these species over millennia.

We humans, like other living organisms, have always based our biological survival on our environments, and the other forms of life within them. However, I concentrate on the important shift from non-market forms of resource use to capitalist forms of "hyper" extraction here, as it manifested within each industry. A growing awareness of global climate change in late capitalism has interpolated resource consumption in questions of sustainability. Sustainability is often invoked in relation to more recent neoliberal green washing strategies and how media and film industries might reduce their ecological footprint. However, the term sustainability has a longer history of entanglements with Western narratives of progress and linear futures. The "future" is not, Tsing contends, a singular entity or path ahead. Instead, like "virtual particles in a quantum field, multiple futures pop in and out of possibility [...]." Yet the notion of sustainability pushes the impending future of a particular commodity's depletion to a future time, even while reiterating the potentially finite end of that resource and the lifestyles it enables.

⁹² Petrocultures and energy humanities scholars who have informed my thinking on energy futures include: Imre Szeman, "System Failure: Oil, Futurity, and the Anticipation of Disaster," *South Atlantic Quarterly* 106, no. 4 (Fall 2007): 805–23; Stephanie LeMenager, *Living Oil: Petroleum Culture in the American Century* (Oxford: Oxford University Press, 2014); Ross Barrett and Daniel Worden, eds., *Oil Culture* (Minneapolis: University of Minnesota Press, 2014); Sheena Wilson, Adam Carlson, and Imre Szeman, eds., *Petrocultures: Oil, Politics, Culture* (Montreal & Kingston, London and Chicago: McGill-Queen's University Press, 2017).
⁹³ Tsing, *The Mushroom at the End of the World*, viii.

Other film and media scholars have sought to reflect upon the concept of sustainability, particularly in relation to the question of how and whether media industries can be made less wasteful or ecologically burdensome. Most recently, Janet Walker and Nicole Starosielski theorize the ways in which media could become a sustainable practice. In their introduction to Sustainable Media, they argue that since "media and environment are mutually constitutive," media technologies and infrastructures are bound up with environmental concerns and real-world ecosystems. 94 While recognizing that definitions of "sustainability" now abound within environmentalist, economic, and scholarly circles—and the contentious nature of this concept in regards to models of development which often privilege the preservation of certain economic orders—Walker and Starosielski explain sustainability as "a future-oriented concept," which refers to "the prolongation and continuation of human and animal life on Earth" through "the ecological impact of present practices on future generations."95 While I admire their political investment in calling for less damaging (resource intensive) media practices and alternative ways of facilitating their longevity, I mobilize these connections between media and temporalities to interrogate sustainability in relation to the following paradox between resource consumption and conservation. We need resources (especially food and energy resources) to survive yet in using them we hasten their depletion. Further, within hyper-extractive forms of capitalism, nearly all natural resources become non-renewable given the scales at which these resources are captured and consumed. 96 This consumption-conservation paradox requires us as scholars to seriously reconsider temporal fictions like the concept of sustainability, which is predicated upon projected consumer behaviours. Sustainability, literary and environmental scholar Cheryl Lousley argues, requires an imagination of the future "suspended into a perpetual present." Therefore, we cannot imagine an "after" to the responsible management of resources for future use, because to achieve ""sustainability" would be to ensure there is no end [...]." My last chapter on the Atlantic

⁹⁴ Nicole Starosielski and Janet Walker, eds., *Sustainable Media: Critical Approaches to Media and Environment* (New York: Routledge, 2016), 1.

⁹⁵ Starosielski and Walker, 5.

⁹⁶ Even the example of solar energy as a renewable resource is beholden to temporal scale. Solar energy is renewable if measured by in human lifetimes, but when we turn on geological timescales, the sun will also eventually die. All renewable resources become nonrenewable when we consider geological or astronomical timescales.

⁹⁷ Cheryl Lousley, "Narrating a Global Future: Our Common Future and the Public Hearings of the World Commission on Environment and Development," in *Global Ecologies and the*

fisheries and offshore oil in films about Newfoundland returns to theorizations of futures and sustainability to inquire into intersections of capitalist speculations about economic futures and the precariousness they might imply to communities and marine life. To discuss present use is also to be haunted by the future exhaustion of that substance, and the potential destabilization of the resource economies around which communities have formed. In Chapter 4, I also therefore attend to the ways these texts manifest communities' anxieties about sustainable practices, progress, and collapsed futures.

Resource depletion, Patricia Yaeger points out, "is not new"; it repeats across history and cultures. Consequently, she insists that an energy-driven literary theory (and I would add, film theory) requires scholars to take seriously the ways that environmental resources and technologies of production shape cultural production. 98 By extracting finite resources, we are forever engaged in cycles of depletion and energy (or resource) anxiety about what the "end" entails for the ways of life, technologies, and industry these resources enable. Studies such as this one produced in the Global North ought to reckon with the political realities of the energyintensive systems that facilitate this production of scholarly research, as well as media. While it is comparatively simple to critique the economic "necessity" of certain resource industries (such as the Athabasca oil sands developments, to name one of the most controversial and expansive industries in Canada today⁹⁹), we must also recognize that our present way of life in Canada and the Global North would not be possible without many of these industries. Ken Hiltner puts it succinctly when he observes that the central question defining our current way of life is "how do we reduce our dependency on something that endangers plants, animals, and ourselves but that we believe is essential of life?" My aim in writing this thesis is not, therefore, to condemn all forms of resource consumption but rather, to critically engage with the ideological articulations of resource extractivism and its historical manifestations within Canadian cinema, while recognizing my own position within these entanglements.

Environmental Humanities: Postcolonial Approaches, ed. Elizabeth DeLoughrey, Jill Didur, and Anthony Carrigan (New York: Routledge, 2015), 260.

⁹⁸ Patricia Yaeger et al., "Editor's Column: Literature in the Ages of Wood, Tallow, Coal, Whale Oil, Gasoline, Atomic Power, and Other Energy Sources," *PMLA* 126, no. 2 (2011): 307–8.

⁹⁹ As critics of the oil sands like to note, these developments encompass a territory approximately the size of England.

¹⁰⁰Yaeger et al., "Literature in the Ages of Wood, Tallow, Coal, Whale Oil, Gasoline, Atomic Power, and Other Energy Sources," 317–18.

Conclusion

In recounting the history of European settlement and Canada's emergence as an economic power through the exportation of raw materials, This is Our Canada presents the country through a narrative of progress. This form of progress, however, is enmeshed in notions of racial capitalism, in which resource wealth is accessible only to white Canadians. Reading this film as both a product of settler imaginaries and as an example of a mode of filmmaking I categorize as "resource cinema," This is Our Canada brings together several strands of the entanglement I aim to develop over the course of this thesis. Reiterating the almost spiritual connection between Canadian pioneers and the natural world, the film portrays the process of shaping North American landscapes as co-constitutive of becoming Canada. The nation, therefore, is a product of the continent's geology, watersheds, and ecosystems—both in terms of settlers' affective connection to "their" land and in their work to transform nature into raw materials for industry and export. Notably, the film's conclusion reaffirms the nation's trajectory of progress by asserting Canada's geopolitical importance due to its resource exports. Canadians "found our place in the community of nations as producers of the raw stuffs," give that almost a third of the country's economic activity serves to produce exports "for markets abroad." From commercial logging and fur trapping, to animal husbandry and the cultivation of wheat, and finally the extraction of subsurface resources like uranium and petroleum, resource geographies established the "patterns for Canadian life."

At the same time, this binding of nation-building and economic development through resource staples in *This is Our Canada* presents a vision of industrial productivity that obscures Indigenous peoples and their land use practices. By depicting North America as both uninhabited and endowed with plentiful raw materials, the documentary foregrounds the ways in which white Canadians make environments profitable and useful. Indigenous labour and presence on the land are replaced with an economic model requires the expansion of white possession over resource deposits and landscapes for development. This expansion of private land ownership, settlement, and capitalist logics of extraction all serve to support the dispossession of First Nations. In other words, as this analysis of *This is Our Canada* has sought to argue, there is a sustained yoking of resource industries to the ongoing project of settler colonialism across large segments of Canadian film culture.

Using this 1945 NFB production as an entry point, this chapter sought to introduce some of the ways in which environments, natural resource extraction (with its related geographies, histories, and imagined futures), and settler colonialism have informed Canadian cinema. In many ways, *This is Our Canada* typifies the entanglements of empire, energy industries, and white settlement to be found in other nontheatrical films from this period. Adapting Tsing's model of economic and ecological entanglements to studies of cultural production as I do here enables us to trace similarly extractive relationships between capitalism and colonialism, and how these extractive logics have historically informed some aspects of Canadian cinema. In the subsequent chapters, I focus on intersecting types of governmental and corporate sponsorship of film production, and how cinema was used in service of resource extraction industries and ideologies of capitalist and settler expansion. I will also attend to the ways in which institutions in each of the three periods of filmmaking I address offered different models of engaging with the nonhuman world through depictions of these economic regimes.

Considering the broader project of the thesis, reading entanglements of resource extraction, settler culture, and nation across this collection of resource films also casts the unboundedness of the settler colonial project into stark relief. Tsing, drawing connections between the precarious circumstances of the workers who gather matsutake mushrooms and the mushroom's forest habitats, proposes that all forms of life are rendered precarious within the economic and political conditions of late capitalism. Like capitalism and imperialism, settler colonialism also renders human life and environments precarious: from the political, economic, and epistemological forms of violence enacted against First Nations, to the transformation of landscapes into sites of capitalist accumulation and ecological devastation. It is my hope that this study of a selection of Canadian corporate and public sector cinema can prompt further examination of the ways in which cinema has been used to uphold, but also challenge, entanglements of resource capitalism and settler colonial processes.

¹⁰¹ Tsing, *The Mushroom at the End of the World*, 4.

Introduction

For commuters passing through Gare Centrale de Montréal, the cavernous hall of the city's train station offers a glimpse into the industrial development of the province and country, and the ways in which these histories continue to shape material culture. Adorning the upper walls of the station's concourse are stylized renderings of industrious individuals engaging in a variety of economic, scientific, and cultural activities: prospecting for gold, gazing at the night sky by telescope, harvesting wheat, swimming, composing music, manufacturing locomotives and airplanes, and preparing for war. The Art Deco bas-reliefs, designed by Canadian artist Charles Comfort and constructed by Sebastiano Aiello, collectively depict the entanglement of arts and industry in Canada since the beginning of European colonial settlement. The station's interior walls, labelled according to the cardinal directions, represent the country through depictions of these regionally specific activities and histories. The concourse's eastern wall, tucked today above a fast-food restaurant and restrooms, is dedicated to what Sherrill Grace calls "the idea of North." Images of fur trappers and dog sleds intertwine with those of fashionable ladies donning furs, an igloo, and scampering minks (Fig. 1). Such scenes of Northern life grounded in the production of fur and winter survival might remind the casual passer-by of the fur trade's once prominent position within Canada's cultural and national development. A more critical viewer might even be prompted to consider the potential ramifications of this centuries-long industry on the development of Montreal, and wider histories of Indigenous-settler relations across the continent

Like The Fur Trade at Lachine National Historical Site memorializing the nineteenth century fur trade and experiences of the Québécois *voyageurs*, Indigenous trappers, and European merchants in the island's southwest, Montreal Central Station is a concrete marker of the industry's profound impressions on Canada's infrastructures and visual cultures. Images of the beaver and the international trade in animal pelts continue to abound in contemporary

¹ Sherrill E. Grace, *Canada and the Idea of North* (Montreal and Kingston: McGill-Queen's University Press, 2001).

Canadian advertising media, popular culture, architecture and public artworks, and fashion.² This entrenchment of the iconography of fur is not limited to eastern Anglo-Canadian and Québécois cultures either. Evidence of the fur trade and its associated transportation and economic systems continue to mark the geographies of many cities and rural spaces located along the trading routes and hunting grounds of prominent corporations, including that of the Hudson's Bay Company (HBC). This chapter seeks to trace some of the influences of the HBC, and the fur trade it sought to control, on early Canadian film culture by considering cinematic entanglements with the political economy of fur, urban and Northern landscapes, and practices of colonial settlement in the early twentieth century.

As part of the 250th anniversary celebrations of the company's charter, the Hudson's Bay Company hired American cinematographer Harold M. Wyckoff from The Educational Films Corporation of America to travel to several of the HBC's Northern and Western trading posts to document its corporate activities and commodities (from luxurious fur coats to the HBC's signature point blankets). Wyckoff, along with a second cinematographer, Bill Derr, left from Montreal aboard the supply ship, the *Nascopie*, in July 1919. Their trip, which Company directors referred to as the Moving Picture Expedition, lasted from mid-July to January 1920, first traversing the eastern Arctic by ship and then traveling inland across the prairies to Winnipeg, Calgary, and coastal British Columbia, before finally ending in the Athabasca region of northern Alberta. (Derr, it should be noted, departed partway through the shooting, returning to New York City from Winnipeg in mid-September. Wyckoff was then joined by Captain Thomas P. O'Kelly, a long-time HBC employee, who travelled with the cameraman from Vancouver to the conclusion of the journey.³) From this footage, the HBC sponsored the creation of *The Romance of the Far Fur Country* (cinematography by Harold M. Wyckoff and Bill Derr, 1920), a silent picture that loosely followed the expedition, as well as a revised and re-titled

² For examples of other studies that take up the visual culture of the fur trade and the beaver in Canada, see: Chantal Nadeau, *Fur Nation: From the Beaver to Brigitte Bardot* (London and New York: Routledge, 2001); Nicole Shukin, *Animal Capital: Rendering Life in Biopolitical Times* (Minneapolis and London: University of Minnesota Press, 2009); Glynnis A. Hood, *The Beaver Manifesto* (Victoria, Vancouver, and Calgary: Rocky Mountain Books, 2011); Jody Berland, "The Work of the Beaver," in *Material Cultures in Canada*, ed. Thomas Allen and Jennifer Blair (Waterloo: Wilfrid Laurier University Press, 2015), 25–49.

³ Peter Geller, *Northern Exposures: Photographing and Filming the Canadian North, 1920-45* (Vancouver and Toronto: UBC Press, 2004), 93.

version for release in Great Britain, *The Heritage of Adventure* (cinematography by Harold M. Wyckoff and Bill Derr, 1920). These two feature-length films, along with a collection of nontheatrical shorts edited by Educational Films from Wyckoff's footage—*Hudson's Bay Company Pageant* (1920), *The Trials and Tribulations of a Cameraman* (1920), and the Hudson's Bay Travel Series one-reel shorts—together comprise a collection of corporate films that capture the final decades of a once continent-wide industry monopolized by the HBC.⁴

As some of the earliest examples of feature-length filmmaking in Canada, *The Heritage of Adventure* and *The Romance of the Far Fur Country* offer fertile grounds for tracing entanglements of corporate film practices, environments, and capitalism. As productions of the Hudson's Bay Company in association with Educational Films between 1919 and 1920, these "fur films" participated in the extraction of economic value from human and nonhuman life on the textual level and as corporate products. In the process, they also attest to the entangled emergence of resource frontiers (the expanding edge of a particular market and supply line) and frontiers of colonial settlement through the company's documentation of physical landscapes, Indigenous communities, and fur as a commodity. Following Anna Tsing, I show how the production of these extractive landscapes under capitalism also renders life precarious: economically for its workers and ecologically for inhabitants of damaged landscapes.⁵

From trapping to the production and transportation of pelts for sale in urban retail establishments, the fur trade was as much a practice imbedded in urban centers as in the wilderness landscapes of Northern and Western Canada. As a centre of commerce and culture, as well as a meeting point for empire and industry, Montreal functioned as a major participant in the fur trade connecting North America to Europe from the mid-seventeenth century to the departure of the *Nascopie* from the city's port in the early twentieth. Given that *The Romance of the Far Fur Country* likewise begins with images of Montreal before following the *Nascopie*'s journey to the East Arctic, the city is one example of the frictions that also arise in these films between economic "centers" and "peripheries," as well as capitalism and nature, through the constitution of frontiers. As a British Crown corporation chartered by King Charles II in 1670, the history of the Hudson's Bay Company in Canada is one of empire as much as capitalist

⁵ Tsing, *The Mushroom at the End of the World*.

⁴ Of the four short films in the Hudson's Bay Travel Series, only *It's a Great Life—If* (1921) remains extant with a print held at the Hudson's Bay Company Archives. *A Tale of the Fur North, An Eskimotion Picture*, and *Hides and Go Seek* are thought to be lost. Geller, 208.

expansion. While consumers today know the HBC for its line of Canadian department stores The Bay/La Baie, it operated as a Northern trading company headquartered in London for over two hundred years before restructuring into a primarily Southern Canadian retail company in the mid-twentieth century. The HBC's network of trading posts across Western and Northern Canada played a foundational role in settlement practices and the commercial extraction of natural resources such as fur. In my reading of these films, I foreground these colonial and racial histories of the fur trade. The westward expansion of white settlement and changing land use practices in the early twentieth century are equally entangled with the Hudson's Bay Company through its land sales and other operations. The fur films, as well as the web of HBC activities in which they were embedded, offer a window into settler-Indigenous relations during this period.

Other films have sought to document the fur trade, sketching celebratory stories of intrepid traders laden with colonial imagery, excavating the experiences of Indigenous trappers working within these structures, or tracing the path of the toothy rodent on which so many human livelihoods depended. Newfoundland-based Nigel Markham, for instance, took up the complicated colonial politics behind the industry in *Pelts: The Politics of the Fur Trade* (1989). More recently, Inuit documentarian and activist Alethea Arnaquq-Baril's Angry Inuk (2016) sought to counter popular opinions around seal hunting in Northern Canada by amplifying Inuit perspectives and voices into these contentious conversations. In the middle of the twentieth century, the National Film Board produced several documentaries on the history of the Hudson's Bay Company and Europeans' westward exploration of the continent. Some, like Age of the Beaver (dir. Colin Low, 1952), offer romanticized perspectives on the trade and its spidery network of trading posts that grew across the country. Others, such as The Other Side of the Ledger: An Indian View of the Hudson's Bay Company (dir. Martin Defalco and Willie Dunn, 1972), present a much more critical view of the trade's impacts on Indigenous peoples. The HBC fur films, in comparison, stand out as rare examples of sponsored image making by a company actively participating in the twilight of an industry, centuries old.

In what follows, I first situate the HBC's fur films within a brief history of the company's involvement in film production and the trade itself, to examine how the HBC capitalized on cinema as an "adventurous" or exploratory practice as a means of shaping its corporate image. Next, drawing on Harold Innis's influential staples thesis, I analyze the ways in which the films depicted and assisted in the production of colonial and resource geographies of the fur trade and

Euro-Canadian settlement in Western Canada. Turning from the environments and spaces of the trade, I then examine how the films document the transformation of animals into capital in the passage of this resource frontier, and its implications for precarious human and animal labour. Throughout the chapter, I theorize the interweaving of economic frontiers with frontiers of white settler exploration. The expansion of these frontiers through the territorial extension of the fur trade, and the depiction of new markets for fur in the emerging metropolitan centres of the Western provinces, all point to the entanglement of resource extraction with cultural production and energy networks. Uniting these distinct threads is the industrial-scale removal and commodification of raw materials from environments for financial profit. As a collection of industrial practices, extraction entails not only the creation of value from terrestrial and aquatic environments; it is also highly dependent upon collaborations between companies and sympathetic governments. Moreover, these resource films reiterate how, under capitalism, industrial-scale resource extraction necessitates particular ways of conceptualizing life (animal, plant, and even human) as open to commodification.

Educational Films and the "Company of Adventurers": Producing the Fur Films

On May 2, 1670, the charter of the newly incorporated Hudson's Bay Company bestowed "the Governor and Company of Adventurers of England" exclusive trading rights and political sway over the entirely of the Hudson Bay watershed. This region, according to the charter, stretched from Labrador west to the Rocky Mountains and north towards the subarctic, a vast territory which it named Rupert's Land for the company's first governor, Prince Rupert. Following the trail of the beaver further and further into "the heart of unexplored America" in pursuit of valuable furs, the Company of Adventurers helped to lay "the foundations of the great Dominion of Canada." Or so begin *The Romance of the Far Fur Country* and *The Heritage of Adventure*. The opening intertitles of both films foreground the HBC's historical significance to the establishment of Canada as a nation and satellite of the British Empire, to commemorate what was then (as now) one of the longest-running companies in the world while burnishing its corporate image through an appeal to conquest and adventure. In the process, these early sponsored films about the fur trade, along with the other titles produced through the HBC's short-lived partnership with Educational Films, chronicled the North, settler-Indigenous relations, and people's interactions with environments from the East Arctic to the Pacific

Northwest. In doing so, these productions attest to the ongoing interweaving of Canada's resource industries, cultural production, and colonial settlement. Significantly, both the fur trade (a resource economy that powerfully influenced settler-Indigenous and materially altered wilderness ecologies) and cinema offer us a means of entering into, or tracing, entanglements of nature and economy. In this section, I focus on how the production of the HBC's fur films served to promote the company's interests through its adoption of cinema as an exploratory practice. Later in the chapter, I turn to readings of the films themselves.

Entanglement is enacted not only through natural resource extraction but also through the production and circulation of capital. The industrial-scale physical removal of raw materials from environments, and their commodification into resources and subsequent consumer products, requires the participation of transportation networks, human and mechanized labour, financial institutions, and societies and political systems that are sympathetic to—if not participatory in— this creation of value from nature. In the case of the Hudson's Bay Company, this production of capital from environments operated on multiple layers through the company's long history: through its control over trade (specifically, of furs), the sale of its land holdings post-1870, and through its retail operations in the twentieth century.

For two hundred years, until 1870, the HBC maintained a chartered monopoly over a quarter of North America—a jurisdiction of three million square miles at its height, and nearly a quarter of the British Empire. Although a commercial enterprise beholden to its shareholders, it functionally governed these territories under the authority of the British Crown and Parliament, thereby participating in the expansion of the British Empire (despite the lack of official representative of the British government on the HBC's London Committee). At the same time, the HBC's charter included the right to exploit any subsurface mineral resources located within the watershed and an obligation to scout for the Northwest Passage to facilitate trade between the Atlantic and Pacific Oceans. Significantly, by using the Hudson Bay watershed to demarcate its trade boundaries, the charter turned to the specific hydrology and geology of the continent to map out what would become one of the largest (and longest running) extractive resource

⁶ Binnema, Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870,

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['] Binnema, 7.

⁸ "HBC Heritage — The Royal Charter" (Hudson's Bay Company, 2016), http://www.hbcheritage.ca/things/artifacts/the-royal-charter.

industries in Canada: the fur trade. Moreover, this watershed was home to the beaver, the primary prey of the trade. In other words, the HBC's territorial and corporate presence in Canada was a consequence not only of British imperial trade and European tastes for fur. It was also a product of the entanglement of colonial exploration, mercantilism, and the particular environmental conditions of the continent (an entanglement I pick up again in Chapter 3) and the amphibious creatures that made these waterways their home.

The flows of capital between the Hudson's Bay Company, its subsidiaries, and other institutions offer another route for tracing entanglements of nature and economy. Throughout its history, the HBC maintained financial interests in a number of diverse industries and subsidiaries: including the Puget Sound Agricultural Company in the 1830s (an experiment in corporate ranching and agriculture to feed British settlements in the American Pacific Northwest), Hudson's Bay Oil and Gas (operating in Alberta's Turner Valley from the early 1940s to the late 1960s), and Educational Films in the 1920s. The company also faced fierce competition from rival fur traders, merging with its primary rival, the North West Company (headquartered in Montreal) in 1821. Fur trade personnel including HBC officials, Harold Innis notes, also maintained prominent positions in the Canadian Pacific Railway Company, the federal government, and the Bank of Montreal. The influence of the HBC and Canada's trade in furs therefore extends far beyond the company's physical trading posts, workers on payroll, and even its collaborations with the RCMP and Christian missionaries in the North. The company was situated amidst a web of entanglements interwoven with the fabric of the Canadian state, and implicated in the expanding boundaries of European settlement across the North American continent, the emergence of Canada's scientific and cultural institutions, and even its department store culture. 10 By tracing just one of these filaments—the HBC's involvement in corporate film production—we can begin to visualize parts of this multifaceted cultural, economic, social, and political entanglement: historically, as well as onscreen through these sponsored pictures.

Given the outsized role the Hudson's Bay Company has played within Canada's development from the seventeenth century to the present, there is a large amount of popular and

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⁹ Innis, The Fur Trade in Canada, 397.

¹⁰ Binnema, *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870*; James Opp, "Branding 'the Bay/La Baie': Corporate Identity, the Hudson's Bay Company, and the Burden of History in the 1960s," *The Canadian Historical Review* 96, no. 2 (June 2015): 223–56.

scholarly writings on the company and the fur trade. 11 However, the HBC also has a long history of corporate sponsorship of various Northern expeditions comprised of artists, photographers, and filmmakers throughout the twentieth century. Beginning around 1919, the company became involved in the production of still and moving images, first through its work with Educational Films underwriting the Moving Picture Expedition. Peter Geller, in his history of the HBC's corporate image making, documents how the 1937 voyage of the *Nascopie* (the same supply ship that carried Wyckoff and Derr over a decade earlier) included tourists as well as artists and filmmakers.¹² Cinematographer Richard Finnie, for instance, collaborated with his wife Alyce Finnie during the journey to record footage for Patrol to the Northwest Passage (1937), an unreleased silent picture sponsored by the federal Department of Mines and Resources. 13 Similarly, Ontario businessman Edwin W. Mills recorded a tourist film entitled *To the North*, 'Nascopie' Voyage (1937) on the trip, which is also currently held in the HBC Archives by family donation. These types of "photographic encounter," Geller argues, became an established and central component of the *Nascopie*'s seasonal supply runs. ¹⁴ The HBC's public relations department, along with the American Wildlife Institute, also sponsored American nature photographer Lorene Squire, funding her travels through northwest Canada in 1937 in collaboration with the HBC's corporate magazine *The Beaver*. ¹⁵ This trip resulted in Squire's

¹¹ Some histories include: *Hudson's Bay Company, Incorporated 2nd May 1670: A Brief History* (London: Hudson's Bay House, 1934); Innis, *The Fur Trade in Canada*; Stephen A. Royle, *Company, Crown and Colony: The Hudson's Bay Company and Territorial Endeavour in Western Canada* (London and New York: I.B. Tauris, 2011); Binnema, *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870*.

¹² Geller, *Northern Exposures*, 2–3.

¹³ Richard Finnie, a Canadian filmmaker, writer, and self-described adventurer, was considered an authority on Northern Canada during his lifetime. In addition to making five expeditions to the Eastern Arctic, Finnie worked for Bechtel Corporation for twenty-five years, producing around fifty industrial and documentary films for the engineering firm. Much of Finnie's career was dedicated to the documentation of prominent oil and natural gas projects, including industrial films for Bechtel and the U.S. Army Engineers about the construction of the CANOL pipeline (running from the Northwest Territories to Alaska) and films about oil production in Saudi Arabia. Although an engagement with Finnie's transnational filmmaking exceeds the scope of this thesis, in Chapter 3 I return to the subject of corporate oil films and the participation of government agencies like the Department of Mines and Resources. "Richard Finnie Biographical Note," April 1967, Richard Sterling Finnie fonds Vol. 21, file 19, Library and Archives Canada.

¹⁴ Geller, *Northern Exposures*, 5.

¹⁵ Karla McManus, "'These Diminished Waters': Conservation, Camera Hunting, and

only book Wildfowling with a Camera (1938). These studies demonstrate how the Hudson's Bay Company, like the federal government and organizations like the Anglican Church, used film, photography, magic lantern shows, and illustrated publications to produce the North "as an object of knowledge and understanding" for Southern viewers, particularly in Canada and the United States. 16 In fact, the HBC continued to sponsor short and feature-length films for promotional purposes and internal use until the 1980s. The films discussed in this chapter are therefore a component of this history of visualizing the North, but they are also significant for the way in which the linkages between the HBC's corporate brand, adventure, and wilderness landscapes open the door for a pronounced analysis of cinema's roles in the production of value from nature.

In 1919, the London-based directors of the HBC purchased a majority share in The Educational Films Corporation, known for producing educational and sponsored films in the United States. Through this acquisition, the HBC aimed to release films for public exhibition that could promote its corporate activities, such as its department stores and real estate in the Western provinces. Although the HBC's association with The Educational Films Corporation lasted only a few years, it was through this partnership that the HBC commissioned *The Romance of the Far* Fur Country. Competition between the French fur company Revillon Frères Trading Company, which opened competing trading posts in the Canadian North during the 1910s, and the HBC also indirectly contributed to the creation of two of the earliest films shot in Canada depicting spectacles of Inuit life (to varyingly fabricated extents). Revillon Frères financed Robert Flaherty's Nanook of the North (released in 1922), whose early footage of Inuit communities in northeastern Quebec "around Hudson Bay" had been viewed by an HBC official in an exhibition to the New York Geographical Society. 17 Electing to hire their own cameramen, the HBC went on to fund the Moving Picture Expedition.

The HBC's self-styled image as the "Company of Adventurers" is advertised through depictions of the extreme conditions under which animal pelts were trapped, and of the Company's collaborations with Indigenous trappers. The Trials and Tribulations of a Cameraman (1920), for example, emphasizes the challenging climatic conditions facing

Setter/Indigenous Conflict in Lorene Squire's Wildfowl Photography of Northern Canada," Journal of Canadian Art History/Annales D'histoire de L'art Canadien 36, no. 2 (2015): 60.

¹⁶ Geller. Northern Exposures. 5.

¹⁷ Geller, 104–5.

Wyckoff when shooting in the extreme cold. As a corporate production, it must also be contextualized alongside the Company's other commemorative public events and activities for the HBC's 250th anniversary. These included public pageants across many Western cities including Winnipeg, Calgary, Edmonton, and Vancouver, as well as the launch of *The Beaver*. subtitled "A Journal of Progress," the HBC's corporate magazine. ¹⁸ Narratively, *The Romance of* the Far Fur Country also offers an imperialist tale of adventure and conquest over the wilds of the far North, for its predominately white audiences and customers. We can therefore read the film as a corporate testament of the resource trade, but also as a document of settler culture that engages with popular discourse of white conquest, resource wealth in the North ripe for the taking, and the individual's struggle to triumph over nature. The film functions as another example of the HBC's sustained efforts to produce images of and about the Canadian North, including photography, hand-painted calendars featuring landscape scenes, scientific and tourist photography, and post-war educational and promotional films. The Romance of the Far Fur Country also contains several ethnographic sequences, which record Indigenous communities' interactions with modernity and the settler state. This includes footage of residential schools as well as scenes intended to exhibit First Nations' traditional cultural costumes and ceremonies, including the potlatch which was illegal under Canadian law at the time.¹⁹

The HBC's corporate publicity also frames its investment in cinema as a potentially adventurous practice. The HBC-Educational Film productions were conceptualized by its sponsors as being part of the period's broader interest in travelogues, exploration films, and other early pictures about exotic locations. According to a "Report on Progress of Educational Films Company Limited 12th May 1920," the "popular lecture film" (which the report categorizes as a type of nontheatrical production) "is capable of earning a lot of money if presented by a good lecturer." The report goes on to suggest that one or two "most interesting lecture films" could be made from "the Hudson's Bay film," bringing a solid profit for Educational Films. The report's unidentified author speculates that there would be a market for the Hudson's Bay film given that

¹⁸ Coverage of corporate events organized to celebrate the company's milestone were published the first issue of *The Beaver*. "Celebrations at Fur Trade Posts in Many Districts," *The Beaver*, October 1920.

¹⁹ The Canadian federal government banned the potlatch ceremony in an amendment to the Indian Act from 1885 until 1951. Douglas Cole and Ira Chaikin, *An Iron Hand Upon the People: The Law Against the Potlatch on the Northwest Coast* (Vancouver: Douglas & McIntyre, 1990).

"very large revenues are being drawn from Shackleton's film and Lowell Thomas' film "With Allenby in Palestine"—two other contemporary pictures offering themes of adventure and exploration within the British Empire. ²⁰ An earlier memo to the company's board, dated November 11, 1919, states that the initial intention for the production of the HBC's pictures "was to make arrangements with say Mr. Herbert Pointing, who took the films for Scott's Antarctic Expedition," until it became apparent that Pointing's fee would have been too high for the type of production the company had in mind. ²¹ Comparisons to these other travelogue and exploration pictures further illustrate the company's interest in associating the perceived exoticism of Northern landscapes and the filmmakers' voyages through them (geographies inaccessible to the average white, Southern Canadian) with the Hudson's Bay Company brand, echoing the company's image as an "adventurous" enterprise. Similarly, by displaying the Northern supply chains behind the company's garments and other fur products—the subject of the rest of this chapter—the films lend these commodities an air of authenticity, derived from the environments in which they were trapped.

In addition to monitoring the production of these titles, the HBC maintained tight control over the exhibition of its first feature length motion picture. It orchestrated a limited theatrical release for *The Romance of the Far Fur Country* in the Western provinces through the Toronto-based Allen Theatre Enterprises during the spring of 1920. The film premiered in Winnipeg's Allen Theatre on 23 May 1920 to an audience of HBC clerks, members of the public who received tickets from HBC department stores, and First Nations who were brought in by the company to help advertise the film and corporate brand through their presence.²² The HBC made an agreement with the Allan Theatre chain to offer free screenings to customers who picked up tickets made available by the company at its retail stores.²³ Like the content of the film, the strictly controlled circulation of the picture reflects the HBC's investment in guarding its corporate image. These screenings map onto the HBC's other efforts to promote the company's

²⁰ "Report on Progress of Educational Films Company Limited 12th May 1920," Film matters ideal and educational, Correspondence Dossiers of the Governor and Committee's Secretary, May 1920, H2-97-4-2 (A.102/889), Hudson's Bay Company Archives.

²¹ "Memorandum for the Board Re The Alliance Film Securities Corporation," Film matters ideal and educational, Correspondence Dossiers of the Governor and Committee's Secretary, November 11, 1919, H2-97-4-2 (A.102/889), Hudson's Bay Company Archives.

²² Geller, *Northern Exposures*, 98–99.

²³ Phone interview with James Gorton, HBC film archivist, August 7, 2015.

emerging retail division, independent of its real estate and fur trading branches. The HBC's first department store was opened in Calgary in 1913, followed by its flagship stores in Vancouver (1914), Victoria (1921), Saskatoon (1922), and later, Winnipeg (1926). Exhibitions of *The Romance of the Far Fur Country* in Calgary, Edmonton, and Vancouver during the spring of 1920 showcased the HBC's Western stores during the early years of Canada's department store era. As I discuss later in this chapter, the Vancouver and Calgary flagship stores are also proximately depicted in the film as sites of urban culture, leisure, and commerce—providing a built-in advertisement for the screening locations themselves to Western Canadian viewers. In contrast, *The Heritage of Adventure*, produced for a British viewership, does not seem to have been released in theatres.²⁴

At the same time, Educational Film Exchanges supervised the circulation of the one-reel prints *A Tale of the Fur North, Hides and Go Seek, It's a Great Life—If,* and *An Eskimotion Picture*, categorized by the company in its monthly rental records as "Hudson Bay Specials." Prints were leased out between 1921 and 1925, according to corporate records, in the United States and Canada. American circulation was organized through Educational Film's branches in major and middle-sized cities across the country, from Boston to Washington, Oregon. Within Canada, the titles were available for circulation in Calgary, Montreal, St. John (New Brunswick), Toronto, Vancouver, and Winnipeg, although the number of prints in circulation within each of these cities varied by year.²⁵

The repurposing of Wyckoff's footage across these different productions poses a challenge, as well as an opportunity, for analyzing the HBC's experiment with promotional cinema. Because no original prints of *The Romance of the Far Fur Country* have been located, scholars and archivists are today left with twenty-eight reels of original footage and outtakes shot for the film under the title *The Hudson Bay Company's Centenary Celebrations* (1919), as well as prints of *The Heritage of Adventure*, *The Trials and Tribulations of a Cameraman* (1920) and a few other edited shorts. ²⁶ However, Five Door Films, an independent production company

²⁴ Geller, *Northern Exposures*, 208.

²⁵ "HBC Film - Summaries of Film Rentals," Hudson's Bay Company Film Business Files, 1925 1921, Accession No. HB2007/108, H2-231-4-8, Hudson's Bay Company Archives.

²⁶ In 1956, the Hudson's Bay Company donated *The Heritage of Adventure* along with thirteen other films to the British Film Institute. These archival prints were repatriated to Canada in 2011, upon donation by the BFI to the Hudson's Bay Company Archives, held at the Archives of

based in Winnipeg, undertook an extensive digital reconstruction of *The Romance of the Far Fur* Country beginning in 2011, drawing upon production records and footage housed in the Hudson's Bay Company Archives. The reconstituted film, released in 2015, includes a contemporary score and digitally animated map inserts to more clearly convey the geography covered by the Moving Picture Expedition.²⁷ The 2015 reconstruction of *The Romance of the* Far Fur Country therefore offers an important glimpse into what the original film might have resembled, and the viewing experience its screenings might have engendered. Nevertheless, *The* Heritage of Adventure remains the closest in content and form to the original, now lost, Romance.²⁸ When read together, these fur films offer an invaluable record of how the HBC sought to present itself as a corporate brand, dominant player in the fur trade, and authority within the North. As I will show in the rest of the chapter, these HBC-Educational Film productions document how the entangled ideologies of extraction and colonial conquest render human and animal precarious, by legitimating the accumulation of wealth based upon the exploitation and dispossession of life worlds. At the same time, they also provide subtly different vantage points on the fur trade and its implications for entanglements of human and animal life, depending upon the curation of Wyckoff and Derr's footage and use of intertitles across the productions. Framing these investigations is the frontier: an imagined space for identity making and national fabulation, a receding ecological wilderness at the margins of white settlement, and the drifting edge of an shifting economic market. It is through these cinematic spaces, and discourses about real geographies, that nature and nonhuman life is produced into margins and centers of economic activity.

Manitoba. "Archives of Manitoba - The Heritage of Adventure" (Province of Manitoba, 2017), http://pam.minisisinc.com/scripts/mwimain.dll/144/PAM_DESCRIPTION/DESCRIPTION_DE T REP/SISN%2011822?sessionsearch; "Hudson's Bay Company Archives - About HBCA"

⁽Province of Manitoba, 2017), http://www.gov.mb.ca/chc/archives/hbca/about/index.html. ²⁷ The 2015 reconstruction is commercially available through the Winnipeg Film Group. As part of the project to restore *The Romance of the Far Fur Country*, Kevin Nikkel and Chris Nikkel also wrote and produced a documentary entitled *On the Trail of the Far Fur Country* (dir. Kevin Nikkel, 2014). It includes some of the restored footage shot by Wyckoff and Derr, as well as footage recorded during screenings organized by the Nikkels in several Northern communities visited by the Moving Picture Expedition between 1919-1920. *On the Trail of the Far Fur Country* recounts how descendants of some of the Indigenous and non-Indigenous people featured in *The Romance of the Far Fur Country* experienced those images of their family members.

²⁸ Phone interview with James Gorton, HBC film archivist, August 7, 2015.

Economic Frontiers and the Frontiers of Settlement

In *The Romance of the Far Fur Country*, spaces that seemingly lie at the geographical margins of the North American continent are depicted as integral to what Harold Innis describes as Canada's "wilderness economy." Early in the film, Charlton Island, located at the mouth of the Rupert River in James Bay, is one such example. Workers unload supplies from the *Nascopie*, transporting them from ship by trolley cart to a warehouse emblazed with a large crest of the Hudson's Bay Company. This tiny island, a title card informs the viewer, is a distribution point for the James Bay district. The only visible structures are a few wooden saltbox houses and the corporate warehouse. Similarly remote trading posts and distribution sites accessible only by ship are depicted in other scenes as well. Places like Charlton Island, Port Burwell on Baffin Island (close to what is today Kimmirut, Nunavut), or Moose Factory at the mouth of the Moose River (Ontario) attest to the HBC's geographical reach and vast network of footholds across the Northern waterways of the continent. These frontiers of Southern industry are entangled within the wider fur trade, alongside other sites of extraction, transportation, and consumption.

The concept of the frontier as the edge of Western settlement against the untamed wilderness of the North American continent has held purchase within both American and Canadian settler imaginaries. One of the most famous articulations of its importance within Anglophone-North American settlement is American historian Frederick Jackson Turner's frontier thesis. In his influential essay "The Significance of the Frontier in American History" (1893), Turner maintains that the westward expansion of white colonization and settlement of "free land"—that is to say, "a frontier of settlement"—created a frontier line, the "continuous recession" of which played an instrumental role in American cultural and economic development. The receding frontier and corresponding conquest of the so-called "wilderness" shaped white identity formation and institutions. Turner argues that American representative democracy and civil society "have been compelled to adapt themselves to the changes of an expanding people – to the changes involved in crossing a continent, in winning a wilderness, and in developing in each area of this progress out of the primitive economic and political conditions

²⁹ Innis, *The Fur Trade in Canada*.

³⁰ Frederick Jackson Turner, *The Frontier in American History* (New York: Henry Holt and Company, 1958), 1.

of the frontier into the complexity of city life."³¹ He defines the frontier as "the outer edge" or "meeting point between savagery and civilization," in which the European habits and practices of the white settler become indigenized, eventually forming a new collection of practices that are distinctly American.³² In doing so, Turner not only characterizes the North American physical environment as a crucial agent in this process of acculturation of white American life. He also identifies settlers' interactions with Indigenous nations as formative. At the same time, however, Turner's essay is very much a product of its time, sprinkled with references to "Indian" traditions while naming the territories lying west of the Atlantic Coast as "free land."³³ (Although this land existed outside of Western legal title and was thus claimed as *terra nullius*, these territories were clearly far from uninhabited.)

Turner's analysis of the socio-political and economic impacts of environments and Indigenous nations on white American development influenced early twentieth-century Canadian historical and economic thought as well. J. W. S. Careless, observing the influence of what he labels "frontierism," argues that a strain of nationalist Canadian historiography took up Turner's invocation of the frontier to link Canadian nation building to the North American environment. Through contact with the wilderness, especially waterways like that of the St. Lawrence, according to this body of thought, white Canadian institutions forged a distinctly "American," rather than simply British, identity. A Careless argues that this frontier mindset was also wrapped up in the influence of metropolitan forces in Canada's economic and socio-political development, particularly in the work of the Laurentian School, shaped by Innis and Donald Creighton. This "metropolitanism," according to Careless, went hand in hand with "frontier expansion," as the extension of the frontier was also propelled by the growth of metropolitan power. In other words, the frontier cannot exist without the metropolitan centre, as the former supplies the raw materials for growth of the latter, which in turn supplies the capital, markets, transportation, and communication systems for the margin.

³¹ Turner, 2.

³² Turner, 3–4.

³³ Turner, 3.

³⁴ J. M. S. Careless, "Frontierism, Metropolitanism, and Canadian History," *The Canadian Historical Review* 35, no. 1 (March 1954): 5.

³⁵ Careless, 18.

³⁶ Careless, 18.

Harold Innis's theorization of Canadian political economy emerges from this vein of environmental determinist historiography, and likewise engages with the frontier as a site of white Canadian identity and economic formation. In his staples thesis, Innis argues that Canada's economic development occurred in relation to European economies, as the country's resources were extracted and then shipped abroad as "staples" to be manufactured in metropolitan centres. In exchange, processed goods were transported back to colonial settlements from the metropole since, as Innis notes, European settlers could not initially produce enough goods to meet their needs (let alone maintain their previous European standards of living), "even with the assistance of Indians," making them dependent upon "the mother country." To maximize the profitability of trading networks, these staples also had to be in high demand, through such things as luxury goods, which would be sold in metropolitan centres.³⁸ The resulting staple economies that emerged from these exchanges required not only geographical margins from which the raw materials were harvested, trapped, and otherwise extracted. They also relied upon industrialized centres which demanded these exported resources. In other words, the centre-margin relationships that arose were shaped as much by the markets in these metropolitan centres as the various environments in the peripheries from which trackers and traders extracted these raw materials. The centre therefore continuously draws upon what Innis calls "outside areas" from which to secure raw materials.³⁹ As a margin, first for Europe and later for the United States, Canada became that staples provider. Yet the colony, then country, also produced its own metropolitan centres such as Montreal or Toronto, in a dialectical relation to the more peripheral white settlements in the East, far West, and North. Crucially, these articulations of economic centers and margins always already imply the existence of a frontier, constituted as the furthest edge of the margin.

By focusing on the east-west valance of Canada's political economy, and related transportation networks and communications systems, Innis makes a different argument than Turner who concentrated on agrarian frontiers. Nevertheless, both invoke the importance of the particularities of North American environments (especially the unique geology of the Cambrian Shield in Innis's case) to emerging economic and industrial practices in settler societies.

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³⁷ Innis, *The Fur Trade in Canada*, 383.

³⁸ Innis, 348.

³⁹ Innis, 385.

Moreover, both Turner and Innis emphasize the importance of trade between Indigenous and European settlers in the process of white settlement and the colonization of the North American continent. Economic exchange between French traders and First Nations, Turner argues, "steadily undermined Indian power by making the tribes ultimately dependent on the whites" for firearms and other manufactured goods imported from Europe, even as it fuelled Indigenous resistance to the British "farming frontier." ⁴⁰ In other words, he claims, "the Indian trade pioneered the way for [Western] civilization."

I draw on these different theorizations of the frontier as they relate to settler economies to argue that frontiers of white settlement in Canada were historically intertwined with expanding economic frontiers. The emergence and movement of these frontiers accordingly shaped one another during the centuries of the fur trade. Through their depictions of the HBC's trading posts and commodity chains, *The Romance of the Far Fur Country* and *The Heritage of Adventure* dwell not only on the workings of the trade itself, but also, as I will show, the moving geographies and economic edges of the trade as well. These are closely bound up in the expansion of white settlement and the Canadian state westward during the nineteenth century through the HBC's land titles, a subject that also returns within these films in relation to the Numbered Treaties.

Dependence upon an "outside" for securing cheap labour, raw materials, and other inputs to foster economic growth, as theorized by Innis, is not unique to his staples thesis. It is also fundamental to the workings of capitalism as an economic and ideological system. Jason Moore, in his analysis of how nature and capitalism are co-constitutive, asserts that the production of value requires "the appropriation of unpaid work outside the circuit of capital but within reach of capitalist power." This fundamental premise, which he calls "the law of Cheap Nature," emphasizes that the relentless accumulation of capital requires a nonhuman world (a biosphere), whose "work/energy" (from the growth of plants, or the production of coal and oil over deep time) can be commodified without demanding compensation in return. 43 If socio-political or environmental conditions change however, making it more difficult (or less profitable) to extract

⁴⁰ Turner, *The Frontier in American History*, 13.

Turner, The Promier in Amer 41 Turner, 14.

⁴² Moore, Capitalism in the Web of Life, 193.

⁴³ Moore, 14.

this cheap energy, then these processes of accumulation collapse. 44 Like any economic frontier, the boundaries of "Cheap Nature" do not just exist, they are actively constituted through imaginaries as well as material practices. 45 During the colonial settlement of North America, the introduction and expansion of capitalism as a way of organizing social and economic relations offers one strand or thread of the entanglement of economies and environments. These looping entanglements of frontiers and centres, edges and cores, can be traced through the history of the fur trade, and the HBC's films in particular. In Canada and the United States, the expansion of European settlement was accompanied by the creation of new resource frontiers, raw materials which could be commodified into natural resources and exported to the colonial metropole, or exchanged on international markets. In an early ethnographic study of the environmental destruction and conservation of Indonesian rainforests during the 1980s and 1990s, Anna Tsing describes the expanding reaches of capitalism as a form of frontier. This frontier, she writes, is "an imaginative project" which binds places and processes of extraction, social life, and economy. 46 Frontiers form out of "historical models of European conquest," delineating (and therefore producing) the natural world as a form of "wildness," made open to unequal yet expansive forms of extraction. As deregulated or unregulated spaces, they "arise in the interstitial spaces made by collaborations among legitimate and illegitimate partners [...]."47 Resource frontiers are created through capitalist expansion of markets, when animal, plant, and mineral substances are "discovered" as new resources for global consumption. In the process, these new wide-ranging extractive processes replace local systems of survival and smaller-scale resource use, which previously depended on these environments.⁴⁸

In *The Heritage of Adventure* and *The Romance of the Far Fur Country*, these frontiers of capitalism and, more specifically, the fur trade, emerge in unruly ways across a range of spaces. Depictions of remote trading outposts, which I invoked above, at first glance appear to be the most obvious articulation of the solidification of a resource frontier. As the HBC expanded its infrastructural network and supply lines further North along James Bay, and deeper inland,

⁴⁴ Moore, 193.

⁴⁵ Moore, 193.

⁴⁶ Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection* (Princeton and Oxford: Princeton University Press, 2005), 32.

⁴⁷ Tsing, 27.

⁴⁸ Tsing, 28.

structures like these were built to address the commercial and everyday needs of HBC factors and other employees traveling along these networks. At the same time, these outposts facilitated the consolidation of resource capitalism across these geographies, materializing these economic exchanges in the form of wood shacks, shipping depots, rail lines, portage routes, and even the ruins of old forts. A later scene in *The Romance of the Far Fur Country*, for example, depicts Fort Garry in Manitoba. First constructed by the HBC's rival the North-West Company, and reconstructed following the amalgamation of the two companies under the HBC's aegis, Fort Garry—according to a shot of the site's commemorative plate—was decommissioned and donated to the city of Winnipeg in 1897. The fort itself is depicted in one long shot, its stone entrance maintained as a memorial to the early days of the fur trade, the interior courtyard now a grassy field.

Although the fur trade was an international phenomenon, the near extinction of European beavers (Castor fiber) in the sixteenth century across much of Europe, including Great Britain, pushed fur traders and merchants to exploit populations of Castor canadensis Jacques Cartier and other explorers found thriving in North America.⁴⁹ However, even as the trade ballooned across Canada during the eighteenth and nineteenth centuries, the locations in which furs (especially the beaver) were sourced were constantly shifting. Once populous environments were quickly exhausted by Indigenous trappers, voyageurs, company men, and itinerant workers. Colonial records kept by the Jesuits in Trois-Rivières (Quebec) and merchants in New Amsterdam (New York) already documented the scarcity of North American beaver populations by 1635 and 1687 respectively. 50 By the time the HBC Moving Picture Expedition left Montreal's harbour, the apex of what Hood calls North America's "mammalian gold rush" had already passed, as the numbers of furs sourced in Canada dropped from nineteenth century highs.⁵¹ The HBC-Educational films do not depict an emerging resource frontier therefore, but rather offer a snap-shot of a particular moment in which the North American industry continued to extract pelts from the West and East Arctic, spaces located along the geographical peripheries of the trade's expanse in the preceding century. Yet we must also recognize that the frontiers or

⁴⁹ Hood, *The Beaver Manifesto*, 19–20. ⁵⁰ Hood, 22–23.

⁵¹ Hood, 22.

points of control for the trade also wind through urban spaces and along supply lines, subjects which I return to later in this chapter.

Even as the Moving Picture Expedition committed to celluloid the mobile edges of North American trapping grounds, the Hudson's Bay Company was also in the process of diversifying its commercial portfolio to include new retail establishments. These flagship department stores in several Western cities (as mentioned in the previous section) represent another protruding edge of the economy. Footage in *Romance* of the HBC department stores in Calgary and Vancouver, located in the cities' retail districts with luxurious interiors and imposing facades, advertise these new operations. As an increasingly dominant site of contact between Canadian customers and products of the trade, these stores demarcate the shifting boundaries of the early twentieth-century fur industry as much as the corporate outposts at Moose Factory or Charlton Island. Such emerging markets for HBC merchandise, and the construction of new corporate infrastructures to facilitate them, attest to the moving frontiers inherent to any industry.

At the same time that capitalist expansion produces economic frontiers, frontiers also produce imaginaries and material expressions of wilderness. Like Turner's characterization of the American frontiers of settlement as expanding into open and exploitable nature, Tsing's conceptualization of the frontier points to the ways in which the idea of wilderness is imagined by reviving previous fantasies of savage life and violence within contemporary landscapes.⁵² In this sense, frontiers bind time to specific spaces and environments. As projects, they create imagined and physical geographies grounded in temporal experiences of the past (or imagined pre-civilized pasts).⁵³ Frontiers are never discovered or pre-existing, they are only ever made and transitory. Fabricated, briefly inhabited, and then disappearing: such a process of formation constantly repeats itself as new frontiers give way to the coming ones.

Fort Garry's significance as a material and architectural artefact of the fur trade, and of an economic frontier long past, is emphasized in *The Romance of the Far Fur Country* in an accompanying title card. It reads: "The old entrance to Fort Garry has been presented to the City of Winnipeg, and now white children play where Indians once bartered furs." This brief statement summarizes the historical entanglement of economic frontiers with the expanding frontier of white settlement. Winnipeg, like Fort Garry, emerged as a site of human settlement in

⁵² Tsing, Friction, 28–29.

⁵³ Tsing, 28–29.

relation to trade. Prior to European colonization, the region had been a place of assembly and economic exchange for First Nations. Manitoba's capital and the fort were founded by white communities following the expansion of the fur trade and other European-Indigenous trading routes into the area. The replacement of Indigenous trappers who once worked and resided in these territories with the offspring of white communities so clearly articulated in this sequence reinforces the double imaginary of "the frontier" in settler colonial nations.

For inhabitants of those territories reconstituted into frontiers, these edges of capital are sharp. Alternatively offering fantasies of wealth through resource capture and conquest, frontiers are socially and culturally disruptive, and often ecologically destructive. The arrival of a frontier is also asymmetrical, in that it creates unequal impacts on local (human and nonhuman) communities and does not occur evenly across local geographies. In the case of the fur trade, as I examine in the rest of the chapter, First Nations and Inuit communities experienced different consequences and became involved as workers in a variety of ways: as temporary and non-skilled labour or skilled labour, and as subjects of cultural assimilation and removal promoted by encroaching settlers, expanding industry, and the state.

The fur trade, and especially the trade in beaver skins, became one of the most widely recognized and lucrative staple economies in Canada. As a resource frontier, the trade relied upon the over-exploitation of fur-bearing species, which pushed the fur trade increasingly further northward and westward, as Indigenous and white hunters sought to locate new populations. Innis's staple theory also points to capitalism's dependence upon externalized economic frontiers and expanding markets for raw materials. Economic imperialism is another form of this externalization of economic frontiers, distinct from yet often intertwined with human migration. In the case of the Canadian film industry, which was in its very early stages when Wyckoff and Derr set out on the *Nascopie*, Canada also served as a margin for American capital. The Canadian film industry has helped to entertain American audiences, from the so-called "tax shelter years" through to contemporary runway productions, shot in Montreal, Toronto, and other Canadian-centers-turned-American-peripheries. Such margin-centre relations are not only determined by mercantilism or colonialism, therefore, but also by economic imperialism.

These constantly changing sites of resource extraction and development also have limited durations. As mentioned previously, by 1920 the Canadian fur trade had flat lined in comparison to its peak in the nineteenth century. Part of this was due to over-hunting, although changing

consumer tastes also played a role. Because an economic frontier is only ever an edge, frontiers wax and wane, sometimes becoming subsumed into other economies. As these frontiers moved outward, or emerged across new spaces, economic practices and forms of settlement were also transformed. Frontiers, therefore, are always in flux with elastic boundaries, constantly in the process of disappearing and becoming. Although governments, corporations, missionaries and schools attempt to chart the frontier on maps, such lines are only ever approximations. The real boundary of the frontier is so fluid that it moves even between individuals, trading posts, settlements and homes. This is because we imagine and inhabit the frontier as much as we physically manifest it by remaking the landscape. This edge is never a border, but only a permeable, elastic series (entanglement) of lines. Even though the extraction sites are concrete, precise, and certainly material in their impacts upon the earth, nearby communities and the profits they create, these sites are only one aspect of the resource frontier. This edge is also imagined, projected and cultivated through conversations, politics, and economic policy; through maps, media, and other cultural forms. In this sense, the frontier exists within cinema as much as it does within maps or nature. The Romance of the Far Fur Country and The Heritage of Adventure therefore document some of the realities for those living along these shifting frontiers of settlement and capital, even as they also help to conjure up these frontiers as part of the HBC's corporate promotional strategies.

Territory, Space, and the Production of Resource Geographies

The entanglement of the fur trade with various Canadian environments emerges in the fur films in relation to specific spaces of extraction, defined as such by different land use practices undertaken by the HBC and state interests. These practices, including the manufacturing of furs and the bundling of Western parcels of land for purchase by white Canadians, show the complex and ambivalent relations between resource industries and the project of colonial settlement of Indigenous lands prior to and following confederation.

The political and cultural impacts of Canada's staple economy is particularly visible in regards to the French and British fur trade in North America, which served to establish networks of trading posts across parts of the Northern and Western United States and Canada, thereby facilitating European exploration and research about North American environments, animals, and Indigenous peoples. As a political state and imagined community, the Dominion of Canada

emerged from intersecting histories of mercantilism and European settlement under empire, which continue to structure twentieth-century government policy, societal relations, and economy. The search by competing British trading companies (including the HBC) to secure access to raw materials like fur coincided with the surveying of land for settlement on behalf of the British Crown. Collaboration between state and corporations, which underwrote Canada's staples economy, also assisted, along with other civil and religious institutions, in the territorial dispossession of First Nations.

The Hudson's Bay Company played a similarly instrumental role in shaping the country's colonial and resource geographies. Following confederation, according to Innis, the Hudson's Bay Company and the Canadian National Rail System, as well as the growing trade in lumber, facilitated capital investments in Canada's transportation infrastructure and the growth of a centralized government but regional economies.⁵⁵ In other words, the development of Canada's political economy—and its margin-centre relations—was facilitated by collaborations between government and industry, such as sympathetic government policies favouring growth in resource sectors. Innis summarizes the close spatial, economic, and political relations between Canada as a nation state and "the fur-trading areas of northern North America" in his observation that territory controlled by the Hudson's Bay Company became the "forerunner of the present confederation."56 The geography of the fur trade was shaped through a number of converging forces. These included flows of international capital and the continent's hydrology—the latter of which in turn shaped the natural ecosystems of the prized beaver and other animal species. This "resource geography" of fur therefore encompasses "extractive zones" (those spaces where animals were hunted) in which entanglements of empire and economy were most acutely felt; intermedial spaces including processing centers and intersecting lines of movement and exchange; and spaces of commodity consumption. Conceptualizing the environments and physical geography of the fur trade in this way emphasizes how the expansion of European markets for animal pelts capitalizing on the range of fur-bearing species overlaps with the HBC's mercantile geography of its trading posts, trap lines, and transportation routes.

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⁵⁴ Preston, "Neoliberal Settler Colonialism, Canada and the Tar Sands," 48.

⁵⁵ Innis, *The Fur Trade in Canada*, 396.

⁵⁶ Innis, 392–93.

We can take from this two further implications. Canada cannot be understood apart from the history of the fur trade, just as the production of resource geographies (and its implications for the health of the country's ecosystems and human societies) cannot be disassembled from the workings of capitalism. Neil Smith contends that capitalism produces specific geographies and spatial patterns, namely through the geographical expression of what he terms "the logic of uneven development." Uneven development, in Smith's view, encapsulates the dual, and seemingly opposing, movements of capital: whereas capital is invested in infrastructures to create surplus value (and facilitate the expansion of capitalism as a system), it is also extracted from environments and systems in order to export that capital elsewhere for profit. ⁵⁷ Furthermore, this production of space (through capitalism's asymmetrical, and unevenly distributed, practices of resource extraction and surplus value creation) is grounded in capitalism's production of nature. ⁵⁸ To put it another way, following Moore, "the accumulation of capital *is* the production of space." ⁵⁹ By remaking physical environments in the image of capitalism, this restructuring of space creates a resource geography around a given industry, which shapes social relations and frequently intersects with other resource geographies.

The geographical entanglement of the HBC and the Canadian state, and the production of the country's colonial and resource geography, emerges in the fur films on the textual level and through their production. The path of the HBC's Moving Picture Expedition, along which both *Romance* and *Heritage* are loosely structured, effectively visualize the HBC's supply lines for this international trade in animal remains. Offering parallels to Innis's center-periphery model for staples production, the films depict how pelts are extracted from the far North and other geographic "margins" of the continent and transported through port cities like Montreal, to produce manufactured goods in industrialized centers such as London and New York, finally sold in emerging markets such as in Winnipeg. Numerous scenes of the expedition—arranged so that the cinematographer could shoot his own crew as they packed up or were in transit—depict them traveling by ship and canoe, walking and portaging over the continent's interior, and crossing the frozen landscape by dogsled. These methods, and the routes the filmmakers travel, echo those used by the HBC to transport their furs from resource frontiers of the North to centers

⁵⁷ Smith, *Uneven Development*, 6.

⁵⁸ Smith, 7.

⁵⁹ Moore draws heavily here upon the work of Henri Lefebvre. Moore, *Capitalism in the Web of Life*, 10.

of capital. According to Tsing, the process of transforming raw materials into resources entails the extraction of value from the environmental and social entanglements they inhabited. ⁶⁰ Animal pelts become "mobile assets," resources removed from localized environments and brought by ship, pack, canoe, or railroad to warehouses and markets. Considering Innis's analysis of the roles of transportation and communication technologies in the production of space, we might consider the routes traveled by fur (and the HBC Moving Picture Expedition) as a form of space-making as well. The centrality of transportation to the film's production and narrative produces a mercantile geography, represented on screen through the fragmented depictions of extraction sites, markets, and trails on which these mobile commodities passed.

The story of the fur films' production is also entangled in Canada's colonial history and treaty-making with First Nations (**Fig. 2**). In the winter of 1919-1920 when the HBC's footage was recorded, the Canadian federal government was in the process of drafting the last of the eleven Numbered Treaties, which was signed in 1921. Numbered Treaties One through Seven (completed between 1871 and 1877) pertained to First Nations residing in the Western and Northern territories formerly known as Rupert's Land, which the HBC sold to Canada in 1870. According to the official website of Indigenous and Northern Affairs, treaty-making between the Crown and Indigenous peoples since the eighteenth century "permitted the evolution of Canada as we know it." Most Southern Canada is covered by treaties, which negotiate land rights and title, with approximately seventy recognized treaties forming the current "relationship between 364 First Nations, representing over 600,000 First Nations people, and the Crown." The processes of negotiating and upholding treaties are a great deal more politically fraught than the carefully-worded descriptions publically circulated by the Canadian government, such as the following summary of pre-1975 treaties from Indigenous and Northern Affairs Canada:

⁶⁰ Tsing, The Mushroom at the End of the World, 5.

⁶¹ The Trudeau Government dissolved Indigenous and Northern Affairs Canada in August 2017, replacing it with two new departments: Indigenous Services Canada and Crown-Indigenous Relations and Northern Affairs Canada. These structural changes, which occurred during the writing of this thesis, attests to the persistent and unresolved settler colonial politics in Canada, questions of reconciliation, and on-going negotiations of what the state should and can do to address Indigenous calls for sovereignty, access to resources and traditional lands, and justice. "Treaty-Making in Canada" (Indigenous and Northern Affairs Canada, Government of Canada, November 7, 2013), http://www.aadnc-aandc.gc.ca/eng/1100100028574/1100100028578.

These treaties, negotiated and concluded between the Crown and many of Canada's First Nations, are foundational documents in the history of Canada. They established peaceful relations during times of colonial war, helped stimulate prosperous economic and commercial trade relations, and allowed for the organised expansion of Canada. 63

Furthermore, not all Indigenous peoples are covered by treaty, or consented to having their lands ceded to the government in the first place. The process of treaty-making fundamentally served to consolidate the Canadian government's territorial claims in the West and North. The Numbered Treaties, in particular, facilitated the opening of Western lands to agrarian and white settlement.

Resource development and management is another key component of treaty-making, often serving as a motivation behind the Crown's negotiation of specific land titles. Jen Preston foregrounds political and economic connections between the search to secure raw materials for development and the dispossession of Indigenous communities in her study of the tar sands and treaties encompassing the Athabasca region. In the nineteenth century, the Canadian state, she argues, was motivated to sign treaties with First Nations tribes in Western Canada to secure land and mineral deposits like gold. 64 Earlier in the decade, a Privy Council Report from the Superintendent General of Indian Affairs (dated on January 7, 1891) affirmed this connection between the treaty processes in Western Canada and resource demands. In it, the Superintendent General argued that the "immense quantities of petroleum" in the Athabasca region, and belief that "other minerals and substances of economic value" might be found, "render it advisable that a treaty or treaties should be made with the Indians who claim those regions as their hunting grounds, with a view to the extinguishment of the Indians title [...] as it may be considered in the interest of the public to open up for settlement."65 The subsequent treaty, Treaty Eight, was negotiated in 1899 with Chipewyan, Cree, and Beaver First Nations and included an unceded area in northern Alberta.66

⁶³ "Summaries of Pre-1975 Treaties" (Indigenous and Northern Affairs Canada, Government of Canada, August 29, 2013), http://www.aadnc-aandc.gc.ca/eng/1370362690208/1370362747827.

⁶⁴ Jen Preston, "Racial Extractivism and White Settler Colonialism: An Examination of the Canadian Tar Sands Mega-Projects," *Cultural Studies* 31, no. 2–3 (2017): 358.

⁶⁵ Quoted in Preston, 358.

⁶⁶ For further historical background on Treaty Eight, see: Dennis F.K. Madill, "Treaty Research Report - Treaty Eight (1899)" (Treaties and Historical Research Centre, Indian and Northern Affairs Canada, 1986), https://www.aadnc-aandc.gc.ca/eng/1100100028809/1100100028811; Preston, "Racial Extractivism and White Settler Colonialism," 357–59.

Land claims and colonial practices of territorial dispossession (through treaty-making in part) remain entangled in the fur films, and even if white audiences at the time may not have been attentive to this context, the film producers were. The HBC sought to use its financial interests in Educational Films to promote its real estate operations in Manitoba, Saskatchewan, and Alberta. In 1870, the HBC sold its territorial rights to Rupert's Land to the Dominion of Canada. 67 As part of this deal, the company maintained title to its trading posts and five per cent of the arable lands in the West. By the 1910s, the Hudson's Bay Company controlled approximately three million acres of "undeveloped farming lands" in the Prairies, which it sought to sell to white farmers as a means of mitigating the titles' enormous tax burden. According to an article from November 1920 in *The Beaver*, the HBC considered itself to be in a position of "authority on land values and a source to which perhaps a majority of land seekers turned when endeavoring to obtain acreage." 68 As such, the company considered itself responsible for keeping potentially farmable land out of the "hands of private speculators." On this note, the HBC's Governor expressed that the corporation's intention was to sell this land to "bona-fide settlers only" so that its corporate land policy might support the "steady, helpful development of Western Canada's agricultural interests."70

It is within this context that the company's board of directors began to discuss turning to cinema as a means of promoting its Western land holdings. In a November 1919 memorandum to the HBC Board in London regarding the "Alliance Film Securities Corporation," cinema was proposed as a useful vehicle to "stimulate the public interest in the Hudson's Bay properties." The memo begins by describing the visit of E. Hammons of The Educational Films Corporation of America to London to meet with representatives of the HBC regarding their idea of commemorative picture. It continues:

The Company are large owners of Lands suitable for farming, and in view of the tendency of taxation it is advisable to dispose of those Lands as rapidly as possible, and any measures which stimulate the public interest in the Hudson's Bay properties seem likely to prove a profit-able advertisement.

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⁶⁷ Geller, Northern Exposures, 108.

⁶⁸ "H.B.C. Policy to Push Settlement," *The Beaver*, November 1920, 10.

⁶⁹ "H.B.C. Policy to Push Settlement," 10.

⁷⁰ "H.B.C. Policy to Push Settlement," 10.

^{71 &}quot;Memorandum for the Board."

The suggestion is that starting with the special films of Hudson's Bay proper, other interesting short films might be prepared in connection with the various activities in which the Company is engaged. These films would form part of the circulating film library for circulation among Schools, Churches, Y.M.C.A Institutions, etc., so that, running through the whole of the years exhibitions, there would be a "Hudson's Bay" thread, advertising the Company and incidentally its lands, without appearing to do so.⁷²

Although the scope of the circulation of the HBC-Educational Film productions fell short of that imagined in this memo, as corporate products, these films were nevertheless entangled in the HBC's broader land-use practices through its real estate business, in addition to fur. The pictures were, at least for a time, considered useful vehicles for advertising a variety of HBC products. Undergirding these negotiations—as evidenced in the description of the HBC's real estate as being "suitable for farming"—is of course the westward-moving frontier of white colonial settlement, from which the company hoped to profit in more ways than one.

Depictions of Northern wilderness landscapes in The Romance of the Far Fur Country and The Heritage of Adventure are also accompanied by some ethnographic views of First Nations peoples. Footage of an elderly Inuit woman doing fine needlework and Indigenous women in Northern Alberta tanning a moose skin by hand simultaneously document and fetishize Indigenous cultures and women's traditional work. A later sequence, shot in the Northwest—perhaps on Vancouver Island or Haida Gwaii—documents elements of the Nation's material culture, including intricately carved totem poles and traditional costumes for the potlatch ceremony. In it, four Indigenous children walk into a clearing and then pose for the camera, giggling and then becoming stoic as they rotate slowly to show off their wooden masks and beaded textiles for the camera. Despite this ethnographic attention to detail, neither productions serve strictly speaking as tourist films. Although audiences then, as now, might find their interest in these locations piqued by the cinematic portrayal, the films themselves do not explicitly appeal to a tourist gaze prompting audiences to want to "consume" these places through planned summer holidays or recreational outings in nature.⁷³ Instead, as archival records of internal communications at the HBC's show, the London Board's interest in using cinema to subtly promote the company's land holdings in Western Canada participates in another type of

⁷² "Memorandum for the Board."

⁷³ John Urry, *Consuming Places* (London and New York: Routledge, 1995); Dominique Brégent-Heald, "Vacationland: Film, Tourism, and Selling Canada, 1934-1948," *Canadian Journal of Film Studies* 21, no. 2 (Fall 2012): 27–48.

consumption of resources, through the white settlement and farming of lands dispossessed from Indigenous nations.

While such contested land-use practices can be read into the fur films as glimpses into the settler-Indigenous relations of the period, controversy over the provisions of Western Numbered Treaties emerge in much starker terms in one scene depicting an exchange recorded outside Fort Chipewyan in northern Alberta. To reiterate, the Athabasca Chipewyan First Nations had signed Treaty Eight in 1899, and the document included the northern half of Alberta, northern sections of Saskatchewan and British Columbia, and part of southern Northwest Territories. In The Romance of the Far Fur Country, the short sequence begins with a title card reading "The Chief of the Chipewyans sends a message to the King by way of the camera" (Fig. 3). In it, an unnamed Chipewyan First Nation Chief makes an impassioned nation-to-nation appeal to the British Crown through Wyckoff's camera regarding white settlers' violation of his nation's hunting rights. While the chief's words are inaudible (given that it is a silent picture), his message is recorded on another title card, reading: "He says that the White Man is breaking his treaty and that for the Indian there should never be any "close season" on game." In a moment of remarkable sensitivity, The Romance of the Far Fur Country makes space for the Chipewyan First Nation Chief to affirm his people's sovereignty and the violation of Treaty Eight. However, the title cards of *The Heritage of Adventure* intended for Great Britain were significantly revised, literally erasing the chief's words and the name of the Chipewyan First Nation. The first card reads: "The Chief of the local Indians, through an interpreter—and the camera—sends a message to King George." The second follows with: "The chief waxes vehemently eloquent about a pet grievance." This radical reduction of the territorial concerns (and inter-national politics) raised by the chief to an unintelligible complaint reflects racial and settler colonial ideologies, thereby denying the sovereign status of the Chipewyan First Nation and the chief's right to speak. Such scenes attest to the HBC's ambivalent relationships with Indigenous peoples; dependent upon Indigenous workers as a local labour source and their knowledge as skilled trappers of animal habitats, the company also participated in the territorial displacement of First Nations in Western and Northern Canada through its land sales and production of colonial space.

In sum, the fur films map not only the resource geography of the fur trade, but also offer a complex image of Western Canada as a region in flux. Amidst the growing development of Western urban centres, the fur films depict and are entangled in white migration to these cities

and agricultural lands put up for sale by corporations. At the same time, these images offer an important glimpse into the overlaps and transitions between resource geographies: from the fur trade and co-dependent trading and transportation networks, to the growing agricultural might of the Prairies and oil exploration and mineral prospecting in Alberta—which would replace the fur trade as the primary staples of these regions over the course of the century. While the entirety of *The Romance of the Far Fur Country* documents the entanglement of resource extraction infrastructures, white settlement, colonialism, and cultural production, this latter portion of the film offers a particularly exemplary view of these interwoven strands as they came to bear on the region's transition between staple economies and the accumulation of land through the dispossession of Indigenous communities. In short, colonial settlement and resource development intertwine and reproduce one another, just as the production of these examples of Western spatial relations were entangled with racial capitalism, to which I turn now.

Racial Capitalism and Gendered Labour in the Fur Trade

Capitalism not only extracts value from nature, it also relies upon racialized structures of value production and labour. Colonialism, similarly, involves processes of human valuation dependent upon race. These structures have a long, entangled history, manifesting in the commodification of non-white human bodies (slavery), the commodification of non-whiteness, and what Cedric Robinson terms "racial capitalism" or the co-constitutive organization of economic relations through race.⁷⁴ In my conceptualization of the entangled, and relational, economic and colonial frontiers thus far in this chapter, I have pointed to the subject of race without centring it within my analysis. In this section, I aim to put my theorization of frontiers into dialogue with racialization by focusing on how Indigenous and white women's working bodies participated in the fur trade on screen, and were inscribed within racial capitalism.

Whereas Smith and Moore examine the complex ways in which capitalism produces first and second nature (the nonhuman world, and human labour), scholars of settler colonialism and critical race studies argue that capitalist accumulation is in fact inseparable from these processes given the ways in which certain bodies have been valued over others (as skilled workers, or

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⁷⁴ Preston, "Racial Extractivism and White Settler Colonialism," 355.

dehumanized commodities). 75 Katie Pickles and Myra Rutherdale, in their introduction to Contact Zones: Aboriginal and Settler Women in Canada's Colonial Past (2005), examine sites of colonial encounter in English Canada by focusing on the ways in which colonial power relations were expressed through women's raced and classed bodies. Focusing on the frontier as the historical meeting point of white settler women and Indigenous women, Pickles and Rutherdale argue that these asymmetrical yet power dynamics manifested within "the materiality of women's day-to-day lives."⁷⁶ In other words, women's racialized bodies became intimately inhabited "contact zones," a concept coined by Mary Louise Pratt to describe geographic spaces colonial encounter. In these spaces, according to Pratt, peoples historically separated by distance "come into contact with each other and establish ongoing relations, usually involving conditions of coercion, radical inequality, and intractable conflict." 77 Such sites of encounter and confrontation—points in which the frontier becomes visceral, embodied, material—are not limited to the economic periphery. In this way, economic frontiers are always already bound up in socio-political processes and ideologies of racialized difference. In other words, the unequal and extractive effects of capitalism are fundamental characteristics of this economic and ideological system.

As argued earlier in the chapter, frontiers are not linear, nor rigid. In the HBC fur films, they emerge across and between bodies throughout the company's commodity supply lines. There are numerous lengthy sequences depicting the workings of the fur trade: including the production of valuable pelts from beavers and other fur-bearing animals; the HBC's dependence upon Indigenous labour to trap, process, and transport animal skins; and the spaces in which the trade is enacted (in forests, waterways, snowy encampments, and urban department stores). In *The Heritage of Adventure*, one such scene narrates the processing of fox skins into fur commodities, by stitching together footage of Inuit women from Baffin Island with staged images of white shoppers for these products (**Fig. 4**). The sequence opens with the title card:

⁷⁵ Smith, "Indigeneity, Settler Colonialism, White Supremacy"; Aileen Moreton-Robinson, *The White Possessive: Property, Power, and Indigenous Sovereignty* (Minneapolis and London: University of Minnesota Press, 2015); Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016).

⁷⁶ Katie Pickles and Myra Rutherdale, eds., "Introduction," in *Contact Zones: Aboriginal and Settler Women in Canada's Colonial Past* (Vancouver and Toronto: UBC Press, 2005), 1–2.

⁷⁷ Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London: Routledge, 1992), 6; in Pickles and Rutherdale, "Introduction," 4.

"Women turning white fox skins, worth their weight in gold..." A row of four Inuit women are seated outside, dark fox skins drying on a line behind them, as they meticulously turn cured pelts inside out, to process the leather. The pelts are long and delicate; their bright white colouring only punctuated by the darkened incisions where the animals' eyes once were. As the camera pans to the right, more women working the pelt line are revealed. They work quickly and industriously, although no sign of their skill is given. Their linear positioning implies that they are seated in this way for the camera, although their gaze remains primarily on their work. Another title card interrupts the scene to pick up the story of the pelts' production, explaining that the "men press the pelts into bales [...]." The next scene returns to the group of Inuit women, who are now hanging the furs on a drying line although with pelts from several larger animals. Husky dogs play underfoot, and the camera's pan left reveals the press mentioned in the text. Next, two women are depicted sewing up the bales of fur, first in long shot and then in a close up as they stitch. These bales will be shipped off to "London market." The next scene enacts a remarkable geographical and temporal leap, metaphorically following the pelts from Baffin Island to "the great fur warehouses." The tightly packed bales of fox fur are suddenly revealed to be only some of the millions of furs slaughtered and exported to urban markets for resale. Within the warehouse, several white men hang, tote, count, and unpack piles upon piles of furs—white fox, red fox, beaver, muskrat. Fur bleeds into all corners of the frame, draped over handrails in the foreground, suspended in massive bundles along the walls. The workers are dwarfed by the enormous quantities they handle. From this charnel house of skin and hair emerge fine women's attire, or as the case might be in the final scene, a white fox fur muff and shawl. A smiling white woman poses for the camera, turning round to display her matching furs. Her stylish dress, along with the decor of the furnished showroom, appeals to an upper class (or aspiring upper class) viewership, thus bringing the scene's cycle of labour to a close.

Significantly, this scene emphasizes the myriad roles of women within the production and consumption of fur as racialized and classed workers. As workers and inhabitants of the economic frontier in the East Arctic, the Inuit women are entangled in both colonialism and a racialized economy, which co-constitute them as precarious, low-wage workers. Their bodies are rendered open to exploitation, by their employers as well as by representatives of the state and church, depicted in other scenes. In contrast, the white woman in the department store at the end of the scene models one of the final products of the trade. As either an upper class consumers of

luxury products, or a retail worker imitating one for the benefit of the film, she serves as another type of worker, one whose labour is hidden behind her imagined purchasing power. Unlike the Inuit women, the department store girl is highly feminized, gazing directly at the camera as she nods and winks knowingly. Her impeccable make-up, whiteness, youth, and fashionable attire place her in a social class and lifestyle that implicitly benefits from racial capitalism and settler colonialism—even as she is also marginalized within the country's patriarchal social and legal system. (White women's suffrage began in Manitoba in 1916, and across the country, it remained limited in 1920 according to voters' race and province of residence.) This sequence affirms how extractive economic frontiers were bound up in racialized practices of settlement and empire, which contributed to the placement of Indigenous communities within these economies as labour sources. At the same time, the sequence expands the boundary of the extractive zone from spaces where animals are trapped, to include the broader, diffuse structures of imperial power and capital that help to render women's bodies racialized and, in the case of Inuit women, their labour, culture, and traditional lands open to exploitation and commodification.

Although the women at the end and beginning of this sequence (and commodity supply line) remain entirely anonymous to each other, the film nevertheless constitutes the white fox fur as a type of cinematic contact zone between these groups of workers. As a circulating point of contact, material yet also difficult to individually trace in the pelts' standardized sameness, the skins become sites of encounter, between bodies along commodity and colonial frontiers. In her history of the fur trade, and the HBC's specific role in Canada's French and British colonial development, ⁷⁸ Chantal Nadeau examines the "sexual economy of a nation" through the "social and historical encounter between skin and pelts." Adopting Nadeau's terminology, we can view the Inuit and settler women "fur ladies," participants within the multiple (tactile, cultural, economic, and political) interactions between fur commodities and gendered, racialized bodies. In gendered and sexualized nationalist narratives, she contends that the beaver appears "as something more than a traded commodity, a token of value for the fur business, or a symbol of

⁷⁹ Nadeau, 8–9.

⁷⁸ Although Nadeau mentions the HBC's involvement in sponsored film production during the 1930s in passing, her cinematic focus remains limited to a lengthy analysis of male homosocial relations and race in the Hollywood film *Hudson's Bay* (dir. Irving Pichel, 1941), produced by 20th Century Fox with the participation of the HBC. Nadeau, *Fur Nation*, 36–56.

the French and British colonial enterprises"; it also functions as a marker of the nation's "sexual economy." Although the HBC-Educational pictures shy away from engagements with the sexual economies which functioned in parallel with the fur trade (from sex work to white trappers who also took "Indian wives"), Nadeau's attention to the intersecting gendered labour and colonial practices which enabled interactions between fur and (human) skin productively frame scenes such as these.

However, there is also an ambivalence or complexity which runs through these depictions of the HBC's relations with Indigenous communities working within the trade and inhabiting the extractive landscapes of fur production. Rather than a simple narrative of exploitation, depictions of the Inuit women as productive workers make space within the text for readings of agency and community. While Preston correctly observes the ways in which "European liberal ideologies of property [...] motivated the 'resourcification' of Indigenous territories," she then claims that Western land use practices "informed the racialization of Indigenous peoples as wasteful, lazy and unable to be productive in the economy or in white settler society more generally." However, the on-the-ground relations between HBC employees and Indigenous peoples portrayed in the feature-length fur films cannot be so easily reduced to the period's circulating racial stereotypes. Furthermore, the fur trade's environmental and economic entanglements are marked in different ways in the cinematic depictions of non-white workers.

In a long sequence towards the end of *The Romance of the Far Fur Country*, an HBC Factor (played by Thomas P. O'Kelly, who collaborated with Wyckoff after Derr's departure) travels into the Athabasca bush with Battice Plakoti, a skilled Indigenous trapper, to learn how trap lines are set up. Unlike most Indigenous people depicted in the films, Plakoti is introduced to the viewer (and the fictionalized H. B. Company man) by name, and described as "the best trapper in the region" in the accompanying title card. As the two men prepare to leave from the HBC's trading post Fort Chipewyan, their exchange is depicted as friendly and professional. Plakoti, in a bear-skin coat smokes a pipe, as he invites O'Kelly, dressed in a felt coat sewed from a striped HBC point blanket, to "accompany him on his next trip." Despite the implied power inequalities between the two men (communicated through their clothing, and racial and class differences), they nevertheless become collaborators, who must rely upon Plakoti's

⁸⁰ Nadeau, 9.

⁸¹ Preston, "Racial Extractivism and White Settler Colonialism," 358.

knowledge of the land and animal behaviour to both survive the extreme winter conditions and trap their prey. From Plakoti's insistence that the Factor pack only "necessities" for their journey as they purchase supplies, to his careful explanation of how he catches beavers by installing trap lines through a hole in the lake ice, the footage and intertitles position Plakoti as a knowledgeable expert. In teaching O'Kelly about how to catch beaver, fox, and other animals on which the HBC relies, Plakoti also works to make Northern landscapes and the trade's supply lines more legible for the viewer. While these scenes are tinged with a level of ethnographic scrutiny—of Plakoti and the trapping practices he performs for the camera—the film's act of naming and emphasis on Plakoti's productive, skilled labour serves to stress his agency through work and underscore the HBC's absolute dependence upon Indigenous knowledge to procure furs. In sharp contrast to scenes depicting First Nations as ethnographic subjects, Battice Plakoti and the unnamed Inuit women of Baffin Island are both acknowledged for their traditional knowledge even as they are also inscribed within colonial systems of relations. Such representations therefore complicate concomitant depictions of state-sponsored assimilation and racist "civilizing" practices—such as those in scenes of the Christian missionaries on Baffin Island and the schoolgirls of an "Indian School" in British Columbia who walk in orderly rows in their straw hats and cotton dresses. These different scenes of fur production demonstrate how the trade offered economic opportunities to some Indigenous communities and individuals, while at the same time, entanglements of the settler state, extractive industry, and religion worked to render other communities more economically and environmentally precarious by drastically altering ecological systems, traditional ways of living on the land, and societal relations. We can therefore see two major processes of assimilation occurring in the films: integration of Indigenous peoples into capitalism, and colonial assimilation. These processes share commonalities and feed into one another, but are not synonymous.

The careful documentation of the fur trade's operations in the HBC's fur films can be read with an attention to women's labour, and the entanglements of racial capitalism in colonial economies. Yet it is not only women's bodies that are made available as forms of labour, and exploitable to varying extents. Fur-bearing animals have also been subjected to over-hunting and near-extinction over the course of the trade. As two forms of energy—productive human labour and reproductive animal labour—animal and human are made more intimate through the procurement of fur; practices which also render these lives more precarious at the same time.

Energy Networks and Precarious Life

The creation of extractive landscapes through the industrial production of furs for markets elsewhere is documented across *The Romance of the Far Fur Country* and *The Heritage of Adventure*. Yet such a depiction of the "long-distance destruction of landscapes and ecologies" resulting from the ever-expanding search for raw materials in this staple economy, to adapt Tsing's phrase, is also bound up in the films' representation of "the spread of techniques of alienation that turn both humans and other beings into resources." In documenting how wild animals are trapped and their skins processed into commodities, the HBC fur films also trace the processes by which these forms of animal life are rendered into energy. Such networks of staples production are simultaneously networks of energy consumption, energy that is also extracted (that is to say, alienated) from natural environments.

In this last section of the chapter, I focus on how the HBC films present the fur trade as a web of entangled energy circulation networks as much as a narrative of commodity production. As a complex collection of processes focused around the trapping, hunting, and transportation of animal life to other locations, the trade required the exertion of immense amounts of human and animal energy to power these economies. At the same time, the commodities of the trade—animal pelts—are themselves products of animal metabolisms, which converted plant energy from photosynthesis into thick winter coats. The beavers with the warmest furs, grown to survive the colder more northerly climates—that is, those who most efficiently turned plant energy into a protective coat against the harsh climate—in turn became the most sought after and lucrative pelts for their thicker, more luxurious hides. Although the HBC fur films do not overtly dwell upon energy infrastructures (in contrast to the oil films I analyze next in Chapter 3), their attention to animal life and human labour is ripe for an analysis of energy flows and the intersections of imperial power and fuel. By reading staples economies like this one through critical energy studies, we can also trace how both human and animal life is rendered precarious through extractive and racial capitalism.

In *The Fur Trade in Canada* (published a decade after the Moving Picture Expedition's tour across the country), Innis uses the term "energy" to describe the ways in which human

⁸² Tsing, The Mushroom at the End of the World, 19.

⁸³ Innis, The Fur Trade in Canada, 5.

labour is directed towards the exploitation of environments in Canada's resource economy, and the flows of resources and capital:

Energy has been directed toward the exploitation of staple products and the tendency has been cumulative. The raw material supplied to the mother country stimulated manufactures of the finished product and of the products which were in demand in the colony. Large-scale production of raw materials was encouraged by improvement of technique of production, of marketing, and of transport as well as by improvement in the manufacture of the finished product. As a consequence, energy in the colony was drawn into the production of the staple commodity both directly and indirectly. Population was involved directly in the production of the staple and indirectly in the production of facilities promoting production. [Emphasis my own.]⁸⁴

In Innis's view, Canadians' productive labour and capabilities were bound up in both explicit and implicit ways in staples economies. Workers exerted energy to physically extract raw materials, and invested in different transportation and communication infrastructures necessary for the transformation of resources into staples for European and American economies. Staple industries therefore guided the movement of materials (capital, labour, and natural resources) from far-flung geographies to manufacturing centres, necessitating a reciprocal trade in food and fuel to power these transportation networks and trading post settlements.

Innis levied this analysis of Canada's political economy to critique the ways in which the staples model made the country's economic and social development reliant upon its trading partners, preventing the Canadian economy from diversifying while reinforcing its position as a colonial "periphery" for these other industrialized economies. However, I propose that we can understand his usage of the term "energy," and his observation of energy flows between Canada and foreign markets, in another way: in relation to the extraction and circulation of nonhuman energies in staples economies involving fur and other animal parts. While Innis was specifically referring to human populations in this text, the fur trade was quite clearly predicated upon animals' reproductive energies and the harnessing of nonhuman energies (from sled dogs and horses, to railways powered by steam and coal) to move staple commodities. Through depictions of extractive labour and fur-bearing animals in *The Romance of the Far Fur Country* and *The Heritage of Adventure*, we can see how the fur trade rendered fur just as much into a form of non-combustible fuel as it did a wearable luxury.

⁸⁴ Innis, 385.

Conventionally, fuel has been defined as a resource, often organic in its composition like coal, wood, gas, or oil, which can be burned to produce power, light, and heat. Nuclear energy, released by splitting an atom, and renewables like wind, hydro, and solar power complicate this equation of a biological fuel which only becomes activated through the chemical process of combustion and access to oxygen. Conceptualizing fur or other highly valuable commodities that do not burn as fuels therefore requires a shift in emphasis from the chemical process (or physical properties) to the types of movement or capacities for work that these materials propel or enable. In her theorization of fuel and energy, Karen Pinkus contends that "any object—living or dead that moves another object [can] be considered a fuel in the broadest sense."85 Energy, in turn, is the ability or potentiality to perform work.⁸⁶ Thinking about work in relation to energy and power, according to Jason Moore, has implications for an understanding of "capitalism as a set of relations through which the 'capacity to do work'—by human and extra-human natures—is transformed into value" through labour time. 87 The commodification of energy through work, or even the potential to perform work, is not the sole domain of the human. As Moore shows, "work/energy" may also "be appropriated via non-economic means, as in the world of a river, waterfall, forest, or some forms of social reproduction."88 The commodification of organic bodies produced through the labour and life forces of animals and plants (or of mineral and geological forces, in the following chapter) as staples falls within what Moore describes as "the terrain of accumulation by appropriation."89 That is to say, the energy (or potential to move bodies in space, following Pinkus' definition) of nonhumans is appropriated to create value for human workers, accessible only to certain social classes.

Within the staples economy of the fur trade, the financial and symbolic value of dead animals motivated people to migrate across vast territories, to build transportation routes and trading posts requiring other resources like timber and iron, and to enact forms of legislation favourable to these economic practices. In effect, fur acted as a fuel in that it motivated or compelled other objects and human populations to move across vast distances. In this way, fur,

⁸⁵ Karen Pinkus, *Fuel: A Speculative Dictionary* (Minneapolis: University of Minnesota Press, 2016), 21.

⁸⁶ Pinkus, 1.

⁸⁷ Moore, Capitalism in the Web of Life, 14.

⁸⁸ Moore, 14.

⁸⁹ Moore, 193.

and the promise of wealth, acted as one of the mechanisms of colonization, "powering" the engines of Canadian and European economies and transforming ecosystems and human societies in the process. Like the restructuring of time and human behaviours to adhere to capitalist ideologies of efficiency and productive labour, human and nonhuman energies are geographically redirected within staples industries. During its height, the fur trade therefore facilitated the reorganization of a settler economy to circulate and exert energy along a certain axis, making and remaking environmental and human relationships in the process. In this sense, fur fuelled the expansion of economic frontiers west and north, in tandem with the expansion of empire.

Moreover, the fur trade—like all staples industries—is entangled in the production of other resources necessary for fuelling or powering these practices of extraction. George Colpitts argues that the linkages between food production and colonialism have been overlooked until recently within Canadian history. The ways in which "carbohydrates, fats, and proteins actually combusted at a molecular level" are significant to consider within histories of empire, migration, and white settlement because the mass movement of people are inseparable from the availability of portable food sources (or lack thereof). 90 In his account of fur traders' transition to pemmican—a preserved calorie-rich food staple derived from buffalo fat and meat in almost equal quantities—Colpitts claims that "food energy was probably the driver of newcomer and First Nations' relations" during the fur trade, prompting in part the "unsustainable fur production" and the HBC's expansion across the continent. 91 Glynnis A. Hood, in her thoughtful study of the Canadian beaver, puts it another way: "It was not just fur that fed the fur trade: every fort needed trees to build it and provide heat; every dog team needed fish or some sort of meat to fuel it; every voyageur needed pemmican or other staples to keep his arms paddling; and every Red River cart needed feed for its oxen to keep its wheels turning."92 Several scenes in both fur films visualize this point. In one such sequence, a man ice fishes on the frozen Lake Athabasca in northern Alberta to feed himself and his sled dogs, who each require three fish a day to survive. The production of fur commodities is so intimately interwoven with fuel on all levels

⁹⁰ George Colpitts, "Food Energy and the Expansion of the Canadian Fur Trade," in *Powering Up Canada: A History of Power, Fuel, and Energy from 1600*, ed. R. W. Sandwell (Montreal & Kingston, London, and Chicago: McGill-Queen's University Press, 2016), 39–58.

⁹¹ Colpitts, 39–40.

⁹² Hood, *The Beaver Manifesto*, 83–84.

that these resource economies (which both fed and powered the expansion of white Canada) are impossible to detangle.

Nicole Shukin describes the industrial processing and recycling of animal life and bodily remains into commodities as a form of "rendering." For Shukin, rendering speaks to the "complicity" or entanglement of industry and cultural creation through the "production of animal capital" within capitalist economies."93 Shifting from an analysis of the human labour required by this process of rendering animals into capital to the animals themselves, we may notice how very few *live* animals are in fact depicted within the aforementioned scenes of the HBC's supply lines. With the exception of companion and transportation animals like sled dogs and horses, the majority of the innumerable animals that traverse the screen are already dead, bodies in motion through the exertion of human force. Frozen carcases are pried from trappers' snares and nets; skins are scraped, pressed, transported, and (finally) worn by fashionable ladies; even the crew of the Nascopie participates, hoisting a harpooned sea lion on deck. In another scene from The Romance of the Far Fur Country, Battice Plakoti shows the HBC Factor (Thomas P. O'Kelly) how to skin and cure animal pelts. Seated in front of his hunting cabin, with the Factor looking on, Plakoti carefully takes a knife to a stiff fox corpse. However, the film makes use of welltimed title cards elucidating the process, as well as fades between shots, to almost completely remove the actual work of such rendering. Following the explanatory interjection "The skins are stretched on boards to dry," the next shot reveals Plakoti's work to have been tidily completed during the interstices between film frames. The Factor inspects the fox pelt, now mounted on a board, and then leans it against the cabin wall to dry. This formal trick is repeated with an ermine; just as the trapper's knife begins to pierce the creature's tiny body, the shot dissolves to reveal the ermine pelt similarly mounted. These temporal ellipses, while minimalizing the labour required to remove animal flesh and bone, serve to smooth out and sanitize the process of creating these commodities from the unruly materiality of life.

Such techniques reaffirm the notion that animals are a raw material, waiting to be extracted from nature and processed into a tote-able commodity (Fig. 5). While there are a few exceptional views of living animals, such as a sequence of roaming Prairie bison included in both fur films, these scenes only serve to emphasize the ways in which animals are otherwise integrated into economic systems as commodities. Instead, images of animals throughout the

⁹³ Shukin, Animal Capital, 12, 20.

film become signs, standing in for what Shukin calls the "material history of the fur trade as a primal scene in which Native trappers, French coureurs de bois, and English traders collaboratively trafficked in animal capital." Nowhere is this more prominent than in the HBC's coat of arms sports two bucks and several beavers, an image of which opens *The Romance of the Far Fur Country*. The bodily natures of animals are consistently reduced to forms of food and fuel, historic and corporate signs, and products of cheap nature.

Yet this process of rendering nonhuman nature into capital does not end with the bodies of animals alone. Extractive capitalism also renders the complex interdependences of ecosystems precarious, which in turn effect the human communities entangled within them. The ecological impacts of the fur trade on animal populations and environments are, as such, another important element of the aforementioned energy flows. Scenes of London warehouses brimming with furs and packed bales of dried pelts provide the only evidence in the films of the enormous scale of the trade's subtraction of animal life. As Hood points out, archival records and other company documents (of which I would include the HBC films) cannot provide an accurate account of the number of pelts harvested over the course of the centuries-long industry, particularly since pelts deemed unsuitable for use and discarded were rarely counted. This makes it, for Hood, exceedingly "difficult to comprehend the vast numbers of furs actually harvested," let alone "assess the ecological implications of the loss of millions of beavers across an entire continent." This problem of scale, and its environmental ramifications, is significant because it highlights the fundamental economic calculus of the trade's commodification of animal energies, while overlooking the environmental outcomes of these equations.

The ways in which ecosystems are made more biologically precarious through the large-scale rendering of animal energy into capital can only be inferred in the HBC films: in the receding of wilderness frontiers as agricultural settlements and urban centers expand, in the lingering shots of mounds of furs or fish for sled dogs, and in the mediated appeal of the Chipewyan First Nation Chief about his people's hunting rights. Images of pelts and other animal signs hint at the acts of violence necessary for the production of furs, but the scale remains, for the most part, inferred—encased within narratives of romantic struggles against nature and exploration of exotic locations. Although these films offer stories of fur, Northern

⁹⁴ Shukin, 4.

⁹⁵ Hood, *The Beaver Manifesto*, 37.

communities, and the HBC's integral role in Canada's cultural fabric, it is only by tracing these resource entanglements surrounding the HBC's films that the animal itself becomes more entirely (and lively) visible.

Conclusion

The Hudson's Bay Company fur films, produced with The Educational Films Corporation of America, sought to depict this Northern trading company on the eve of its 250th anniversary. Promoting the company as both historic and modern, urban and yet also of the North, *The Romance of the Far Fur Country* and *The Heritage of Adventure* offer a rare perspective into a period of Western urbanization and expanding white settlement, the growth of department store culture in Canada, and settler-Indigenous relations during the waning years of the fur trade. In addition to being early examples of feature-length, documentary filmmaking in Canada, these fur films serve as valuable historical evidence of shifting economic frontiers in the first decades of the twentieth century, their entanglements with frontiers of white settlement, and implications for land-use practices, First Nations and Inuit peoples, and animal life.

In this chapter, I traced these intertwined and relational frontiers through the HBC-Educational Film pictures to examine the ways in which romantic images of Canadian fur trails, First Peoples, and the frozen North mobilize cinema as an adventurous, exploratory practice albeit one inseparable from the capitalist and colonial systems of extraction it documents. In reading these corporate films as texts and sponsored commodities through environmental and staples theory, the accumulation of wealth through the commodification of animal life is shown to render non-white human lives precarious within Canadian settler colonialism. In other words, these films about the fur trade produced as much as they reflected capitalism's and colonialism's extractive and ambivalent relationships with the natural world and Indigenous peoples, relationships which were intrinsic to the industrial and economic workings of the industry. Frontiers of capital ebb and flow; altering landscapes as they move across geographies. Within settler colonial contexts like Canada, the frontier is also a site of racial and cultural contact. The frontier is therefore a site of openness and closure, of both potentialities and violence. Along the frontier, practices of white settlement and state-sponsored assimilation worked to close down Indigenous futures and cultural survival. At the same time, as a site of economic frontier-making, these spaces were also integrated into capitalist relations, forcing them "open" as it were to new

markets and extractive industries. However, we must also be attentive to cinema's potential as a site of semiotic excess and unruly meaning-making. Moments which unexpectedly capture collaboration across difference or resilience within colonial relations—the shared exchange of smiles between the Factor and Battice Plakoti, Inuit women wearing and making their traditional *amauti* parkas—encourage us to also recognize acts of individual agency and Indigenous cultural persistence⁹⁶ within products of settler and corporate culture.

"Economic development through resource exploitation," writes Hood, has underpinned Canada's economy since the early years of confederation. ⁹⁷ Just as Innis's staples thesis offers an historical analysis of the country's political economy, these corporate resource films suggest a perspective into one such staples industry, and the extractive relations to ecosystems it fostered. In the following chapter, I turn to another collection of sponsored films, underwritten by both the Canadian state and corporations, released a few decades later about another host of land-use practices. Shifting from surface ecologies to dig into the continent's subterranean forms, these films trace another strand entangled within Canada's resource histories: the use of geology science as a tool of scientific exploration and national development.

⁹⁶ Lorna Roth, *Something New in the Air: The Story of First Peoples Television Broadcasting in Canada* (Montreal & Kingston, London, and Ithaca: McGill-Queen's University Press, 2005), 17.

⁹⁷ Hood, *The Beaver Manifesto*, 104–5.

Introduction

A golden field stretches outward, marked by mounds of cut wheat, abutting the edge of a forest on the horizon. As the camera pans right following the crest of the field, a horse-drawn wagon slowly traverses the film frame, chopping and turning the wheat harvest. The afternoon sunlight casts long shadows across this prairie landscape. The subsequent shot depicts a second field, where a farmer—by tractor this time—continues the harvest under a steel blue sky. A medium shot offers the viewer a closer perspective of a farmer's work. His draft horses stand patiently as he forks heavy sheaths of grain onto the wagon. It is a demanding, physical task; nevertheless, the scene offers a bucolic, almost idyllic vision of agrarian life in which the farmer can be his own master of the land and everything he reaps from it. A light orchestral score floats through these scenes, accompanying the voice of an anonymous farmer. A folksy narrator, he testifies to his audience that the harvest serves as a livelihood, and existential compass. He and his neighbours helped to clear and till the prairie landscape "years ago." This "good earth" to which he tends will become a "heritage" for his children, and the generations of agriculturalists to follow.

Yet this proposed heritage does not only encompass the rich soil and acres of cereal crops swaying in the prairie winds. As the narrator of this opening sequence of *A Mile Below the Wheat* (director uncredited, 1949) attests, "other men" sought to cultivate another "harvest" from the land. A final camera pan across a stony field reveals the technological mechanism of this second crop: a spindly oil derrick, jutting high into the sky. Here, the film's analogy between Western wheat farming and the commercial extraction of subterranean reserves of fossilized prehistoric plants render petroleum as another one of nature's bounties. Two industries dedicated to different geological crops, but which harmoniously coexist.

¹ Portions of this chapter first appeared in: Rachel Webb Jekanowski, "Fuelling the Nation: Imaginaries of Western Oil in Canadian Nontheatrical Film," *Canadian Journal of Communication* 43, no. 1 (2018): 111–25.

A Mile Below the Wheat, sponsored by The Imperial Oil Company (Imperial Oil) and produced by Crawley Films Limited,² is one of many nontheatrical, industrial, and educational films released between the 1940s and the 1960s promoting oil exploration and subsurface resource extraction in Western and northern Canada. Imperial Oil ³—like its international competitors BP, Iraq Petroleum Company, and Royal Dutch Shell—turned to cinema as a communications technology to legitimize its corporate operations following its 1947 discovery of large crude oil reserves in Leduc, Alberta. Imperial, like the National Film Board of Canada (NFB), which I address in this chapter and the following, used cinema to advertise petroleum products and dependent lifestyles, and to explain the potential significance of oil as an emerging energy staple to ordinary Canadians. Such corporate and public sector oil films intended to entertain viewers, while educating them about petroleum's potential contributions to Canada's postwar economy and society. This chapter therefore continues to trace cinema's entanglements with industry through funding practices and discourse from Chapter 2.

Films about oil are also entwined with a wider collection of industrial and governmental uses of geological science, and related surveying and visualization technologies, for subsurface resource exploration and extraction. As a rational science and exploratory practice, geology served as an important tool in state and corporate attempts to identify new oil and mineral reserves across Canada during the Second World War and the decades following. Films, government reports, and corporate publications like the *Imperial Oil Review* from this period

² Crawley Films' involvement with Imperial Oil dates back to the Crawley's production of *The Loon's Necklace* (1948), a short animated picture derived from a First Nations legend about the loon, which Imperial Oil purchased for educational distribution. Imperial Oil distributed it through the Canadian Educational Association, with 125 prints circulating through community film libraries across Canada by 1950. Betsy Mosbaugh Mackay, "Industrial Film Making in Canada," *Industrial Canada*, March 1950, 49.

³ The Imperial Oil Company, which was founded in London, Ontario in 1880, has a long history of oil and gas operations in Canada. This includes the extraction and refining of crude oil to produce a range of petroleum-based lubricants and other products, and the transportation of these products to domestic and international markets. By the 1890s, Imperial had emerged as the leading player in Canada's oil industry, with its corporate headquarters relocating to Toronto, Ontario in 1916. By 1920, Imperial refineries processed 91 per cent of the country's crude oil. Today, Imperial is headquartered in Alberta, Calgary and continues to be one of the country's largest refiners of petroleum products. For a timeline of the corporation's activities, see: http://www.imperialoil.ca/en-ca/company/about/history/our-history. Ken Penfold, "Petroleum Liquids," in *Powering Up Canada: A History of Power, Fuel, and Energy from 1600*, ed. R. W. Sandwell (Montreal & Kingston: McGill-Queen's University Press, 2016), 284.

promoted these reserves as holding the key to Canada's continuing development and future prosperity. In turn, the rational, and sometimes seemingly magical, geological exploration of the earth's rocky crust and hidden subterranean "wealth" became a prominent theme in petroleum and mining films.

This chapter approaches public and private sector filmmaking about oil and subsurface mineral resources as a means of tracing the entanglements of geological science with industrial and governmental interests in promoting resource extraction. As a scientific discipline, geology emerged and become codified over the course of the nineteenth and twentieth centuries in Canada. Prominent scientific institutions such as the Geological Survey of Canada contributed to the growth of the geological sciences following the unification of Upper and Lower Canada, using topographical surveys to map the emerging Canadian nation and assess reserves of surface (timber, soil) and subsurface (metals, petroleum, natural gas) resources across the continent. Throughout this history, geological institutions and practitioners have had to negotiate the entangled and at times, collaborative, relationships between government and industry—both of which maintain a financial stake in the profitable extraction of resource deposits.

Science also assisted in the visualization of this emerging industry in the years following the oil booms in Turner Valley and Leduc, Alberta. As a resource buried deep below the surface of the earth (like gold, feldspar, asbestos, iron, and other sought-after minerals), compressed reserves of greasy crude required a visual vocabulary for representation on film. While other global petroleum companies and governments also sought to develop a means of representing oil and argue for its unique importance to progress and modern living (and these efforts were no doubt in dialogue with Canadian pictures representing these subjects), the Imperial Oil and the NFB films analyzed in this chapter sought to depict petroleum in relation to Canada's specific history as a resource economy. They accomplished this through comparisons to pre-existing and contemporaneous resource industries, particularly mineral extraction, wheat agriculture, and ranching. However, they also turned to geological diagrams and other representational techniques from within earth sciences. As resource films, these productions were entangled in, and contributed to, the emergence of discourses and representational strategies to communicate ideas about petroleum as the country's "conventional oil" industry expanded and solidified in the mid-twentieth century. This research builds off previous energy humanities and petrocultures scholarship, specifically studies of oil infrastructures like pipelines and what Stephanie LeMenager terms "petroleum media" (cultural texts funded by, and derived from, oil that mediate human relationships to the world). In this chapter, I take up entanglements of industry, government, and environments through the doubled-lens of geology as an historical practice and nontheatrical filmmaking as a textual negotiation of oil exploration and geological inquiry. I approach geology as three intertwined projects: as a rational science through which one can investigate and examine the planet's physical processes and rocky surface over time; as an industrial practice which seeks to use geological data to pursue new mineral and fossil fuel reserves for extraction; and as an ideological means of understanding and ordering the natural world in terms of national resources available for development.

To do this work, I trace these entanglements through a rich field of film texts. Know Your Resources (dir. David A. Smith, 1950) and The Modern Prospector (dir. Jean-Yves Bigras, 1959), produced by the NFB, explain the various exploratory processes used by geologists and petroleum companies to survey landscapes and identify geological resources for development, to communicate the importance of geology as a science and industrial process to the public. In this sense, these films narrativize the first two strands of geological practice. Cinematic entanglements with subsurface resources in this period can also be read ideologically, to trace geology's imbrications with Canadian national and imperial projects. The Great Canadian Shield (director uncredited, 1945), produced by the Film Board in cooperation with the Department of Mines and Resources, and Riches of the Earth (Revised) (dir. Colin Low, 1966), from the NFB assisted by the Geological Survey of Canada, function as two examples of public filmmaking that are enmeshed with scientific traditions and Canada's leading geological institutions. Both visualize a focus on mining and mineralogical histories, while offering key parallels to the extraction of oil. The Geological Survey of Canada and federal agencies such as the Department of Indian Affairs and Northern Development, founded in 1966 with a mandate to facilitate the economic development of Canada's natural resources, were also entangled in imperial projects. Turning later to The North Has Changed (director uncredited, 1967) and Search into White Space (dir. James Carney, 1970), both of which were sponsored by the Department of Indian Affairs and Northern Development through the NFB, I examine how these films integrate exploratory oil drilling and mining ventures in Canada's Northern territories into geology's longer history as an imperial and nation-building tool.

⁴ LeMenager, *Living Oil*, 6.

In the last section of the chapter, I show how geological exploration as an industrial operation cannot be disassociated from the infrastructures of extraction and fuel transportation that these practices enable. Examining A Mile Below the Wheat and Underground East (director uncredited, 1953), sponsored by Imperial Oil, and the NFB production *The Story of Oil* (director uncredited, 1946), I demonstrate how images of derricks, wildcat wells, pipelines, tanker ships, and refineries ideologically construct the Canadian nation by co-opting the language of Innis's staples theory. Deploying analogies between subterranean hydrocarbon resources and agricultural industries dependent upon surface geological resources (soil and water), these films situate post-Leduc Western oil developments and pipeline construction within pre-existing national imaginaries. Canada, crisscrossed by pipelines and other petroleum transportation infrastructures, becomes constitutive of the technologies that bind it and enable its economy.

Nontheatrical Filmmaking and Oil: Revisiting a Useful Cinema for Industrial Ends

In February 1947, one of the exploratory wells drilled by Imperial Oil, Leduc No. 1, struck crude oil near Leduc, Alberta. This discovery, which proved to be a highly prolific reserve, sparked an oil boom in the province, with a rapid surge in exploratory drilling and a nearly sevenfold growth in crude production by 1952.⁵ Prior to this, there were a number of earlier boom and bust cycles in western Ontario, southern Alberta, and Norman Wells in the Northwest Territories (where Imperial Oil located oil in 1920)—the earliest of which date back to the 1860s in Petrolia and Oil Springs, Ontario. Another cycle of drilling and land speculation was sparked in 1914, when oil and natural gas was found in Turner Valley, southwest of Calgary. Leduc, like Turner Valley before it, helped transform Alberta's economy over the course of the 1950s from an agricultural to a petroleum one, with the province supplying over half of Canadians' oil needs.⁸

In response to this emerging energy industry, in the 1940s, the Canadian government and petroleum companies like Imperial Oil began producing industrial, educational, and sponsored films about commercial petroleum extraction and oil infrastructures to communicate fossil fuel development to viewing publics. These nontheatrical oil films depicted a range of industrial and social subjects in relation to oil and subsurface mining: the construction of pipelines and tanker

⁵ Penfold, "Petroleum Liquids," 286.

⁶ Victor Ross, *Petroleum in Canada* (Toronto: Southam Press Limited, 1917), 16–17.

⁷ Ross, 52.

⁸ Penfold, "Petroleum Liquids," 286.

routes to transport crude oil, geological surveying and other exploratory practices to map Canadian landscapes and identify potential resource reserves, and wildcat drilling in Western Canada. The consistent theme of many of these sponsored films was that petroleum, and the industrial processes of its extraction, could contribute to Canada's wartime and post-war nation-building and economic prosperity.

Canadian magazines and industrial publications touted this perceived utility of cinema as a communication and public relations device for both targeted audiences and general film-going publics. In a 1947 article for Canadian Business, Harry Chapin Plummer promotes "the industrial film, the educational, the documentary and the travelogue" as crucial tools for private businesses, having been already "welcomed by the leading public utility, transportation, mining, agricultural, fisheries and manufacturing interests of the country for its efficiency in long-range public relations, advertising and promotion [...]." Plummer explains cinema's appeal to industry as such: "It impresses its message upon the audience through both eye and ear. It influences opinion and aids retention of fact far better than through the eye alone as in printed matter, or through the ear, as in sales talks or lectures." ¹⁰ An uncredited 1954 article from *Industrial* Canada echoes this marketing rhetoric around sponsored filmmaking in the 1950s and 1960s, declaring that such sponsored 16mm productions "are the backbone of the commercial industry in Canada." Seeking to connect this increasingly popular mode of filmmaking to Canada's postwar prosperity, the article attributes a structuring theme to this body of industrial pictures: "the growth of a nation." Canada's "dramatic" industrial expansion and "her great industrial projects [...] carried out against a background of Nature" make for the "stuff of solid cinematic fare" according to Industrial Canada. 13 Although accounts such as these sought first and foremost to promote nontheatrical cinema, they also point to the private sector's interest in cinema during this period.

⁹ Harry Chapin Plummer, "The Industrial Film," *Canadian Business*, February 1947, 23.

¹⁰ Plummer, 23.

¹¹ "The Celluloid Story, or Canadian Industry on Film, a Quick Survey of the Sponsored Moving Picture in Canada," *Industrial Canada*, October 1954, 51.

^{12 &}quot;The Celluloid Story, or Canadian Industry on Film, a Quick Survey of the Sponsored Moving Picture in Canada," 52.

¹³ "The Celluloid Story, or Canadian Industry on Film, a Quick Survey of the Sponsored Moving Picture in Canada," 52.

Industry was not the only institution to take advantage of what Linda West in *Canadian Business* called the potential of the "camera as capitalist tool." Various Canadian government departments did as well through collaborations with the National Film Board of Canada. Established under the National Film Act in May 1939, the NFB was tasked with the mandate to "tell stories about Canadian society in its ongoing formation" through cinema. While the NFB has played a predominant role in shaping Canadian film culture in the postwar period, and Canadians' twentieth-century fascination with oil, histories of the institution have often marginalized important contributions from the private sector, from the work of private production companies like Crawley Films and corporations commissioning film projects. As forms of useful cinema, the films produced by the NFB and Imperial Oil examined in this chapter contribute to what Charles Acland and Haidee Wasson call "the longevity of institutions seemingly unrelated to cinema," namely, extractivist ideologies bolstering Canada's resource economy and the industrial-scientific entanglements underpinning twentieth-century geology.

Within Canada, private and public sector films depicting petroleum extraction engaged with several narratives and mythologies around fossil fuels. Some, like the short documentary *Battle for Oil* (dir. Stuart Legg, 1942) from the NFB's wartime *Canada Carries On* series, sought to contextualize the then-emergent oil industry in Turner Valley, Alberta within global struggles to secure fuel reserves for the war effort. According to the Educational Film Library Association's rental guide for the film, *Battle for Oil* was intended to communicate petroleum's strategic importance to the Allied countries during World War Two, and position the fortification of petroleum resources as a key front within the war effort. Oil—along with its fields and refineries—is the most important resource and strategic military interest of the war. According to the opening of the film, the war can be waged and won by ordinary Canadians in their daily commutes to work, in their homes, and on every street and corner gas station by conserving oil reserves and reducing domestic consumption of petroleum products.

In contrast, other short pictures strove to project an image of petroleum's centrality to modern civilian life in Canada, positioning oil development as a vehicle for progress and

¹⁴ Linda West, "The Camera as Capitalist Tool," *Canadian Business*, October 1978, 74.

¹⁵ As cited in Druick, *Projecting Canada*, 12.

¹⁶ Acland and Wasson, *Useful Cinema*, 4.

¹⁷ "The Educational Film Library Association Offers Battle for Oil" (National Film Board of Canada, c 1942), http://www3.nfb.ca/sg/98030.pdf.

modernization. *The Story of Oil* (1946), for instance, traces this fuel from the fields of Turner Valley through the various stages of surveying, exploratory drilling, drilling and construction of a derrick, and shipment of crude to refineries. The film concludes with a sequence of a representative white Canadian family who might use petroleum products in their domestic lives: a young lad lubricating his bicycle, a girl cleaning her Singer sewing machine, and a housewife pouring paraffin into canning jars to seal her fruit preserves. Declaring oil's importance to "our modern way of living," the voice-over narrator summarizes these staged scenes. Films such as *The Story of Oil* resonate with Brian Jacobson's observation that corporations like Shell and its competitors BP, Total, and Exxon used cinema to "forge positive associations between oil and the good life only it could provide," including air travel, the family car, and leisure activities. Oil, these films softly insinuate, could offer consumers a veritable "ticket to the future," and comfortable lifestyles in the present.

As a useful practice, cinema was not only called upon to act in industrial capacities. The oil and mineralogical films in this chapter also intersect with traditions of scientific and educational filmmaking. As several scholars have shown, popular science deployed celluloid film as an observational tool within early modern scientific fields including human motion studies, physics, and biology.²⁰ In his history of early science films, Oliver Gaycken shows how practitioners and educators used "cinema's ability to visualize the invisible and provide a form of enriched vision" to conduct experiments and communicate ideas about the natural world to non-specialist publics.²¹ The resource films in this chapter, by engaging with geology as a science and exploratory activity, assisted in the creation and circulation of scientific images about

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¹⁸ Brian R. Jacobson, "Big Oil's High-Risk Love Affair with Film," *Los Angeles Review of Books*, 2017, https://lareviewofbooks.org/article/big-oils-high-risk-love-affair-with-film/.

²⁰ Scott Curtis, *The Shape of Spectatorship: Art, Science, and Early Cinema in Germany* (New York: Columbia University Press, 2015), 20.

Oliver Gaycken, *Devices of Curiosity: Early Cinema and Popular Science* (Oxford and New York: Oxford University Press, 2015), 4. For other examples of cinema's historical and contemporary application to communicating popular science, see Bernd Hüppauf and Peter Weingart, eds., *Science Images and Popular Images of the Sciences* (New York and London: Routledge, 2008); Devin Orgeron, Marsha Orgeron, and Dan Streible, eds., *Learning with the Lights Off: Educational Film in the United States* (Oxford: Oxford University Press, 2012); and Bishnupriya Ghosh, "Toward Symbiosis: Human-Viral Futures in the 'Molecular Movies," in *Sustainable Media: Critical Approaches to Media and Environment*, ed. Nicole Starosielski and Janet Walker (New York: Routledge, 2016), 232–47.

environments and the earth's rocky substrates, while reaffirming cinema's potential as a device for non-specialist inquiry about the natural world. At the same time, as geographer and historian David Livingstone shows, practices of science (particularly the development and gatekeeping of scientific disciplines) vary across space and time. National and cultural understandings of science's roles in studying, categorizing, and organizing the natural world maintain a prominent role in how research is enacted.²² Accordingly, these filmic renderings of geological practices, representational methods, and corporate uses are also profoundly shaped by imperial and national discourses specific to Canada and the emergence of geology as a scientific discipline within the country.

Geology on Screen: Scientific Inquiry, Knowledge Production, and Viewing Nature

As a rational scientific discipline, geology offers frameworks for the empirical study of the earth's physical processes, structure, and evolution through planetary time. At the same time, the emergence of geology as a field in Canada is rooted in a complex web of institutions, individuals, and colonial and economic motivations, which in turn frame the NFB's depictions of geological exploration and discourses about knowledge production within mid-twentieth-century oil and mining films. In other words, these nontheatrical films about subsurface extraction present the production of visual knowledge about the physical world as a means of transforming Canada's landscapes into manageable, extractable spaces for industrial and national purposes.

Starting in the 1940s—following the surge of private fortune-seekers, land speculators and corporate geologists (including those working for Imperial Oil) to Turner Valley, Norman Wells, and other parts of Northern and Western Canada—the National Film Board produced many educational and documentary films about the processes of searching for these valuable resource deposits. *The Modern Prospector* (1959) is a prominent example of this theme, comparing prospecting to a type of detective work involving various parties (individual fortune-seekers, mining corporations, government agencies) with an array of traditional tools (pick, axe) and advanced technologies (aerial photographs, seismic surveys) to locate "clues" to hidden

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²² David N. Livingston, *Putting Science in Its Place: Geographies of Scientific Knowledge* (Cambridge and London: University of Chicago Press, 2003).

bodies of minerals.²³ Likewise, *Know Your Resources*, released nine years prior, offers a glimpse into surveying technologies and techniques governmental geologists and prospectors used to map Canadian landscapes and resources. I will unpack how these depictions of corporate prospecting for mineral deposits and geological technologies for investigating the earth's subterranean realms insert scientific norms and practices of disciplinary vision into the NFB's postwar nation-building imaginaries. In this section, I will be primarily approaching these films as texts to read their ideological deployments of geology as a science and industrial practice regarding space. In the subsequent sections, I will turn to the sponsorship of some of these public-sector films, in connection to scientific institutions like the Geological Survey of Canada.

Geology as a scholarly discipline and practice has a long history within Canada, which has served to further British imperialism on the continent and Canadian settler nation-building, particularly following World War Two. While continuities exist between these formulations, most notably in the use of geology to legitimize and enable extractivist relationships to subterranean resources and landscapes, there are also pronounced differences in the shift from a staples economy integrated within European economic systems (as examined in Chapter 2) to a postwar economy seeking to use its raw materials to further domestic manufacturing and trade with the United States. I will return to tensions around the latter in relation to energy sovereignty and the Imperial Oil film *Underground East* in last section of the chapter.

In late eighteenth-century Europe, geological knowledge emerged and consolidated as a scientific discipline in relation to the beginning of the Industrial Revolution and the subsequent demand for minerals and other raw materials to fuel the engines and coal fires of industry.²⁴ As these industries developed in Germany, France, England, Russia, and Scandinavia, states established mining academies to train government officials, with mineralogy and geology forming two of the core subjects of this new form of higher education.²⁵ According to Martin Guntau, this development marked a shift from traditional forms of knowledge about Europeans' environments to new methods of scientific inquiry and resource management. As industrial

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²³ The original, *Le Prospecteur et la technique*, was released in French, with audio recording by Jacques Gadabout. The version examined here is the English-language version, with a new audio track by George Croll.

²⁴ Martin Guntau, "The Emergence of Geology as a Scientific Discipline," *History of Science* 16, no. 4 (December 1978): 280–81.

²⁵ Guntau, 281.

demand for metals and other raw materials accelerated, "practical experience about ores, veins and the search for deposits, handed down for centuries, was no longer sufficient." ²⁶ Instead, as Suzanne Zeller observes, states and individuals turned to systematic scientific inquiry, and approached science as a means of producing "useful knowledge."

European colonization and settlement of Canada had a strong impact on the emergence of the country's geological practices and institutions. English and Scottish geological theories, brought over from Europe during the colonial settlement of Upper and Lower Canada and subsequent confederation, provided the basis for natural scientists' field research and theorization of the continent's unique geological formations, even as industrial and imperial demands for raw materials spurred its expansion.²⁸ In other words, geology became a valuable means of gleaning information about subterranean resources that might have economic value, prompting greater institutional investment in these epistemological methods and associated ways of viewing the world. As Suzanne Zeller shows in her history of Victorian science, geology emerged as one of several inventory sciences in Canada over the course of the nineteenth century, reflecting ideological and imperial ways of viewing the natural world and Indigenous peoples living on the land. Offering a rationalist means of studying, mapping, and cataloguing natural resources and phenomena alongside botany, magnetism, meteorology, and anthropology, geology became one of many crucial tools for colonists seeking to understand and extract value from the North American landscape.²⁹ Similarly, in his study of British imperialism and the natural sciences, John MacKenzie observes how the entanglement of "commercial enterprise and imperial rule" helped to shape the emergence of scientific practices in the late eighteenth and nineteenth century. 30 To put it another way, science, as a means of studying North American

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²⁶ Guntau, 281.

²⁷ Zeller, "The Colonial World as Geological Metaphor," 105.

²⁸ Although this chapter, and much of the scholarship on the history of Canadian science, concentrates on British empire and Anglophone Canada, New France also inherited French scientific traditions, which shaped institutions and scientific practice in Quebec. For an overview of how Anglophone and Francophone colonial subjects, as well as First Nations and Métis, used and participated in geological surveys see: Zeller, 86.

²⁹ Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Montreal & Kingston: McGill-Queen's University Press, 2009), 4.

³⁰ John M. MacKenzie, "Introduction," in *Imperialism and the Natural World*, ed. John M. MacKenzie (Manchester and New York: Manchester University Press, 1990), 5–6.

environments, was born along with the early modern empires that benefited from it, while also responding to the particular qualities of these new landscapes.³¹

Just as Victorian inventory sciences offered an ideological framework to English and French Canadians for making sense of their experiences and colonial environments, 32 the solidifying discipline of geology also contributed to a new conceptualization of nature as a collection of subtractable resources available for humanity's use. This "bourgeois" view of nature as geo-biological-resources as "things-in-themselves" also implied a limited notion of humanity restricted to white industrialized Western societies.³³ Because this science offered a means of making knowledge about the continent's surface and subsurface compositions economically valuable, technologies used to gather this data became associated with technological progress—especially the promise of economic prosperity. Within the films examined here, these ideological and historical applications of geology get taken up through narratives which foreground these scientific methods of studying the physical processes of nature. As I will show, tensions around in these texts between the pursuit of knowledge for disinterested, scientific purposes and for the material benefit of states and industries.

Depicting scientific methods of surveying topographical and subterranean landscapes used by governmental geologists and prospectors in the postwar period, Know Your Resources argues that proper surveying is necessary for building a healthy national economy and careful management of Canada's resource wealth. The film accomplishes this by juxtaposing nineteenthcentury topographical survey methods with mid-twentieth century technologies, arguing that the slow plotting of Canada's resources and topographical characteristics could not "keep pace" with the country's frantic industrialization and postwar population growth. The result of this "unrestrained growth" that brought "ruin to the land," as the narrator describes it, was disaster, represented in the film by dramatic footage of flooded homes and forest fires.

The solution to this problem of a drain on "the whole nation's wealth" the film sets up is the production of geological knowledge. Modernized and refined mapping techniques, backed up by scientific rationalism, offer a means of ordering and managing the country's resource deposits. Footage of Dr. Hugh Llewellyn Keenleyside, Deputy Minister of the Department of

³¹ Antonio Barrera, "Empire and Knowledge: Reporting from the New World," Colonial Latin American Review 15, no. 1 (June 2006): 40.

³² Zeller, *Inventing Canada*. 6.

³³ Moore, *Capitalism in the Web of Life*, 196.

Mines and Resources, speaking at the 1949 United Nations scientific conference on the conservation and utilization of resources hammers home this point. As head of the Canadian delegation, the Deputy Minister informs the camera that Canadians "have been blessed with tremendous resources in our fields, forests, mines and waters," yet because of their accessibility, "we've often been careless and even wasteful in their use." Announcing that Canada must discover the "extent of our resources [...] in our national storehouse," Dr. Keenleyside proposes the creation of systematic surveys as a means of constructing a manifest of the country's "national wealth." Here, geology clearly performs as an inventory science, offering techniques for identifying and cataloguing ore bodies and fossil fuels. In turn, these inventoried materials are infused with ideological meaning as reserves of future national wealth; in other words, both the processes of investigating geological resources and the commodities themselves impart, in Zeller's words, "a sense of direction, stability, and certainly for the future." ³⁴ Know Your Resources engages with an imaginary of a naturalized transcontinental nation by holding up the notion from geology and other inventory sciences that certain, implicitly white, populations have the right to possess things in the world. In this case, this right of possession is justified by claiming these resources are needed for postwar economic development.

In *The Modern Prospector*, geology is likewise taken up as a method for classifying the world and creating economically valuable knowledge about spaces and environments. The film opens on Joe Knox, a well-traveled prospector, who sells land claims to mining companies in search of copper, lead, and zinc. Adopting the perspective of a company executive, to whom the prospector brought his claim, the film emphasizes how various players from Knox to the company's chief geologist Bill Olsen pieced together such "clues." This type of corporate prospecting requires both time and money, involving teams of geologists to inspect claims in the field and compile assessments of rock formations from archives of aerial photographs.

Articulations of natural wealth and scientific resource management in scenes such as these reveal the ideological undertones of visualization practices. Both documentaries rely upon mechanical, scientific, and human vision to generate useful knowledge about surface and subsurface landscapes. Emphasis is placed on the "modern" techniques of studying a claim, through topographical maps and geological imaging. Vision offers a method for knowledge production, which can in turn be monetized by entities like mining companies. Following John

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³⁴ Zeller, *Inventing Canada*, 9.

Pickles, this dependence upon sight, which fosters types of detached, distanced, and seemingly objective knowledge, are a central component of modernity's privileging of human vision and sight. Modern "ways of seeing" included a "cartographic gaze," transmitted in mapping, painting, and scientific observation through techniques such as mathematical representations of reality (Cartesian perspectivalism). Western science and exploration also overlapped through early modern and imperial aspirations to map the world, in which cartography functioned as a tool for territorial acquisition and imperial control. The Within Canada, as Stephen Bocking observes, science has served as one of these instruments for extending state "authority over space," by providing a "material" base of information which can be deployed for national aspirations. Both *The Modern Prospector* and *Know Your Resources* echo some of these ways of viewing, including what Martin Rudwick critiques as scientists' dependence upon geological maps as "natural" and unproblematized representations of the physical world (Fig. 6).

This world-making power of human vision and its technological supports emerges in *The Modern Prospector* through a constant interplay between the cartographic representations of Canada's geological formations and mineral deposits and the field practices required to produce these images. Once the board of the mining company elects to pursue Joe's claim, the rest of the film zealously documents in detail the various types of exploratory technologies from aerial photography to electromagnetic and gravity readings of rocks beneath the surface. These technologies, according to the narrator, enable flight crews and geologists in the field to locate deposits hidden below ground by seeking "clues" hidden to the naked eye on the ground. Augmented viewing, especially through the eye of a camera, enables human perception to pierce the surface of the earth, rendering the normally invisible, visible. As claims such as Joe's are charted methodically square meter by square meter, vision becomes a means of producing cartographic space from nature, by slicing up the world into measurable units, which can then be converted into parcels for resource exploration or purchase. Processes of mapping and

³⁵ John Pickles, *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (London and New York: Routledge, 2004), 77.

³⁶ Pickles, 77.

³⁷ Pickles, 78.

³⁸ Stephen Bocking, "Science and Spaces in the Northern Environment," *Environmental History*, no. 12 (October 2007): 869.

³⁹ Martin J. S. Rudwick, "The Emergence of a Visual Language for Geological Science 1760-1840," *History of Science* 14, no. 3 (September 1976): 151.

cataloguing space, to which I turn now, are prerequisites for organizing knowledge according to David Harvey.⁴⁰

Such cinematic emphasis on new visualization technologies to facilitate resource capture reiterates a connection between the production of geological knowledge and the ordering of the natural world for capitalist ends. Since the 1860s, photography served as a crucial tool for recording surface data. ⁴¹ Much like the use of filmstrips as a recording device within the laboratory, still and moving images served to document types of geological information, and present this data in seemingly objective terms for scientific analysis. The reliance upon aerial photography is foregrounded in both films, such as in one scene from *Know Your Resources* in which two office workers compare air photographs of a stretch of land. These depictions of scientific measurement tools reflect modern science's representational and objectifying function, rendering "the world-as-picture" according to Martin Heidegger, a reservoir of resources waiting for human appropriation and use. ⁴² Cutting from the close-ups of the photographs to another office building, the camera rests on an office door bearing the sign "National Air Photographic Library." In Ottawa, we are told, "over two and a half million photos have been accumulated" in government bureaus such as this one, mapping about "eighty percent of Canada's surface."

Like photography, geological surveys also assume a narrative prominence here, reflecting the historical importance of this technology to the advancement of geology as a practice of rational knowledge—a subject to which I will return shortly in relation to the Geological Survey of Canada. Airborne surveying technologies are given the most attention in *Know Your Resources*. Several scenes carefully explain various tools, such as a seismic reader operated by a technician within an airplane as it flies over the landscape or the airborne magnetometer, typically housed in the tail of an aircraft. Such imagery of machine operators and the accumulation of resulting graphs and other forms of visual data draw a direct line between field technologies, data organization, and the scientific ordering of the world. One such sequence of the magnetometer (which graphs magnetic variations in the ground), for instance, depicts the

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⁴⁰ David Harvey, *Spaces of Capital* (London: Routledge, 2000), 111.

⁴¹ Morris Zaslow, *Reading the Rocks: The Story of the Geological Survey of Canada, 1842-1972* (Toronto and Ottawa: Macmillan Company of Canada Limited in association with the Dept. of Energy, Mines and Resources, and Information Canada, 1975), 433.

⁴² Martin Heidegger, *The Question Concerning Technology and Other Essays* (1982), quoted in Pickles, *A History of Spaces*, 7.

operator's hands rolling up a graph, and placing it in a labeled box, which he closes and piles on a stack of identical boxes on a table. The enormity of the accumulated data is effectively demonstrated in the next scene depicting a vast storage room of such boxes, lining floor-to-ceiling shelves. The motif of aerial footage depicting Canadian landscapes in *Know Your Resources*, much of which is taken by helicopter, frames the various sections of the film, further underlining the significance of these transportation technologies to the production of survey records. Going to great lengths to extol the virtues of the contemporary surveyor's access to aircrafts, the film argues for the efficiency and cost-saving qualities of aerial surveying methods. Aircrafts facilitated the transportation of survey parties to remote areas and assisted supply lines to their field areas; they also served as surveying instruments, when outfitted with photographic and aeromagnetic equipment. If time equals money, and wildcat drilling and mineral prospecting are particularly expensive gambles for industry, then timesaving technologies are particularly valuable by rendering the surveying process more efficient and productive in a capitalist sense.

At the same time, aerial views also function as a distancing device, giving the viewer a position of mastery over the natural landscape. Donna Haraway describes this technique as the "God-trick." The visual organization and reproduction of the physical world through such techniques of spatial representation (aerial viewing and the mathematical modeling of landscapes into simplified, two-dimensional terms) map onto imperialist projects to survey, categorize, and control spaces and living populations. European modernity, writes Pickles, "privileged a particular form of seeing (distanced, objective and penetrating) predicated on an epistemology and politics of mastery and control of earth, nature, and subjects. ⁴⁴ Institutions like the Geographical Survey of Canada, and individual scientists and practitioners, deployed these cartographic techniques to create bodies of knowledge about the North American landscape to render local environments into collections of resources.

Given their narrative importance, one could consider the metaphorical as well as ideological significance of the survey cameras in *The Modern Prospector* and *Know Your Resources*. Standing in for the cameras employed by the NFB to shoot these films, the aerial imaging technologies foregrounded within the documentaries record the Canadian landscape and

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⁴³ Donna J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991).

⁴⁴ Pickles, A History of Spaces, 83.

processes of resource exploration to articulate their usefulness for the country's economy. Read this way, the film's shared boasts about field teams' cutting edge technology—such as the narrator's declaration that the survey plane "carries instruments so sensitive that they can investigate rocks a hundred feet below the surface" in *The Modern Prospector*—make a claim for Canada's modernity. Science, we are shown, has utility as a vehicle for technological and economic progress, even if the forms this progress assumes favour corporations and other institutions wielding these tools. The survey camera, the magnetometer, and seismic graphing all technologically assist and discursively support corporate exploration as a national project, and field science's modes of data visualization and seeing as tools for economic progress. These public-sector films therefore illustrate both scientific visualization technologies and the ways they render space and resources legible, and function as technologies for discursively constituting the nation.

Deep Time, Capitalist Time, and the Nation

Following Enlightenment-era notions of progress and human autonomy from nature—notions wrapped up in racial and gendered hierarchies of white Western superiority—the Industrial and Scientific Revolutions in Great Britain also contributed to the cultivation of new ways to study the natural world outside of religious frameworks and temporalities. Charles Lyell, widely considered to be a leading figure in the invention of geology, laid out many of the tenets of this new science in his three-volume *Principles of Geology* (1830-1833). In it, Lyell argues that our planet is not static, but is in a state of constant and gradual change through the movements of water and volcanic activity. Through the raising and lowing of the land, seabeds, and mountains, Lyell writes, "the configuration of the earth's surface has been remodelled again and again since it was the habitation of organic beings [...]."

Extrapolating from this deep history of geological formation, Lyell also projected future species loss and the total reworking of the physical world as we know it. All signs of human existence will "eventually perish" as "the various causes of change [...] remodel more than once the entire crust of the earth."

The result of early geological publications such as Lyell's was a radical refashioning of people's understanding of

Charles Lyell, "Those Dreadful Hammers: Lyell and the New Geology," in *Eyewitness to Science*, ed. John Carey (Cambridge: Harvard University Press, 1995), 72.
 Lyell, 77.

the physical world, its history, and Western human relations to it. Physical environments, it was understood, were not static but dynamic, in stages of constant becoming. This view dovetailed with other emerging scientific theories about the natural world, such as Charles Darwin's evolutionary theory. Across the British Empire, the relationships between humans (namely, upper-class white men) and environments were being rethought through new bodies of science. Christian notions of time based on Biblical estimations of the earth's age and the life's origins were reconceptualised as well. Natural scientists and philosophers strove to build theories about planetary forces and notions of deep time, which could be extrapolated by studying rocks, fossils, and other components of the earth's crust and applying laws of physics and chemistry. Anthropocentric notions of history, which had been conceptualized as lasting thousands of years since the beginning of human civilization in Mesopotamia, were abruptly telescoped backwards in time to accommodate millions of years of planetary time. This geological scale of deep time would offer Western societies and institutions another framework for viewing the development of the natural world—as well as concepts of prehistory that could be deployed to bolster racial and colonial ideologies of non-Western peoples' inferiority.

The 1966 picture *Riches of the Earth (Revised)* imports this notion of deep time and its associated shift in understanding modern society's relation to geological processes. As *Riches of the Earth (Revised)* focuses on mineral and petroleum extraction for the benefit of an industrializing economy. Offering a playful rendering of North America's physical development from the Precambrian period to the present, the film draws upon traditions of scientific and educational filmmaking to illustrate North America's geological history from the Precambrian period to the present. In doing so, it interweaves three distinct notions of time to frame its history of North America's geological evolution: deep time, capitalist time, and national time. Notably, the Geological Survey of Canada consulted on the production of *Riches of the Earth*, and the rereleased version I focus on here, lent an air of scientific authority to the film's poetic interpretation of North America's geological history.

Beginning in the darkness of space, the film demonstrates how the continent was transformed over millions of years through morphing silhouettes of North America from a

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⁴⁷ Macdougall, *Why Geology Matters*, 3–5.

⁴⁸ Released in 1966, the revised version of *Riches of the Earth* hews closely to the original 1954 film.

prehistoric form to its recognizable, contemporary boundaries, as well as through scenes of geological formation creation. ⁴⁹ In an early scene, the narrator introduces the planet's bare rocky surface as "an empty land." Then, across a three-dimensional illustration of a mountain range, a horizon line is drawn. Smoothly, the landscape is bifurcated into a cross section, echoing the structure of a geological diagram of the earth's sedimentary layers. Viewers are shown how sediments are laid down over hundreds of thousands of years, to be compressed, folded, worn away, and transmogrified to form mountains. Lava splits and melts older layers of rock, and then cools, fragmenting and creating cracks. These cracks are in turn filled by super-heated water, which transports minerals into the hairline fractures. In these crevices, crystals form, creating mineral deposits (**Fig. 7**). These processes, the film assures us, repeated for millennia.

Like early popular-science films which often absorbed visual strategies for depicting scientific ideas or findings from public exhibitions, the popular press, lecture tours, and textbooks, ⁵⁰ Riches of the Earth (Revised) incorporates what Rudwick describes as the "visual language of geology." Such twentieth-century visual modes of geological representation emerged from nineteenth-century natural science publications that incorporated maps, geological sections, landscapes, and diagrams to communicate complex scientific ideas that contributed to new modes of perceiving the earth through its accumulated strata and temporalities. ⁵¹ The film's rendering of complex geological processes like erosion and glacial movement into pictorial form echo the science's abstracted and formalized methods of representing the earth's hidden layers. The common geological section, according to Rudwick, preforms "a kind of thought-experiment, in which a tract of country is imagined as it would appear if it were sliced vertically along some particular traverse of the topography, and opened along that slice [...]". ⁵² This example of the technique helps to illustrate complex geological notions of constant environmental change and deep time, reiterated in the narrator's reminder that the earth's "surface will be worn-down and remade countless times, by the slow erosion of fire, of water, of wind and of ice."

⁵² Rudwick, 164.

⁴⁹ Notably, the contemporary map of North America used in the film is based on the popular Mercator projection, reflecting Western cartographic norms in addition to geological concepts. This projection increasingly distorts the size of landmasses the further out they are from the equator, rendering the poles (including Canada's North) much larger than they are relative to landmasses closer to the equator like North and Central Africa.

⁵⁰ Gaycken, *Devices of Curiosity*, 10.

⁵¹ Rudwick, "The Emergence of a Visual Language for Geological Science 1760-1840," 151.

Such depictions of deep time, stripped from Biblical or anthropocentric timescales, run parallel to capitalist and nationalist notions of time. After demonstrating concepts of glacial formation, the creation of fossil fuels like oil and coal from compressed prehistoric sea life and plants, the radical transformation of rock by water, and the transportation of sediments like gold by rivers, Riches of the Earth (Revised) ends by showing how these geological processes created substances which hold great economic value. In the final sequences, the film's tone and imagery abruptly shifts to a depiction of capitalist industry, at first discernible only by a shot of a drill bit descending into the earth and a musical shift to a more jazzy, frantic score. Oil derricks pop up along the landscape, mining shafts tunnel through the earth, clusters of electrical lights spin outwards from cities, and hydroelectric dams block massive rivers. The visualization technique of the geological cross-section is again deployed to depict the growth of mining shafts, abstractly rendered to resemble the crystals depicted earlier. Significantly, the end of the film refocuses upon the historical (that is, human-centric) timescales of nation-state formation and industrial resource extraction. Through this teleology, which converts geological substances into capitalist raw materials, non-anthropocentric geological processes and deep time are reconceptualised as agents within Canada's nation-state formation and industrial development. National time—that is, the emergence of the nation and the development of a national consciousness, institutions, and civil society—is extended backwards into deep time, to lay claim to petroleum and other subsurface resources that were created over millennia through planetary forces. By collapsing millennia of geological change and material emergence into the human-centric timescales of industrialization, Riches of the Earth (Revised) not only renders geological substances into the raw materials of capital. Non-anthropocentric planetary forces are also reconceptualised as participants in Canada's nation-state formation. Chemical reactions, tectonic movements, and deep time are put to work as economic agents. In other words, nonhuman and natural processes mutate into repositories of capital waiting to be developed, contingent upon market prices and fluctuating resource frontiers. By combining popular science with a national wealth, these forms of human industry are naturalized as logical extensions of geological processes. The result is the transformation of rock and stone, oil and gold into resource frontiers, forged through millions of years of volcanic activity awaiting human development. It is here that geology's entanglements with industry and nation surface to structure cinematic form.

The ideological implications of these linkages between deep time and national or industrial uses of subterranean resources were not lost on the film's producers. A 1956 educational guide compiled by the NFB for *Riches of the Earth* presents it as a "useful [...] introduction to a study of mining in Canada." Intending to hammer home this theme, the guide similarly suggests that educators using this film in the classroom should stress "that Canadians are fortunate in possessing these natural resources in large quantities." Through films such as *Riches of the Earth (Revised)*, the continent's landscape and its rocky interiors are transformed into a substratum of the postwar nation.

The Great Canadian Shield, released in 1945, similarly links subsurface resource extraction to the project of Canadian nationhood by characterizing the Precambrian-era Canadian Shield (also known as the Laurentian Shield) as part of Canada's "heritage of mineral wealth." At first glance, this is a conventional gesture for films of this genre; The Great Canadian Shield is far from the only text to characterize a region's topography, flora, and fauna as part of Canada's national resource wealth. However, given its coproduction between the NFB and the Department of Mines and Resources—the department into which the Geology Survey was reorganized in 1939—The Great Canadian Shield offers another example of the entanglement of public filmmaking and private industry. As an educational film, The Great Canadian Shield serves to introduce viewers to different minerals found within this ancient section of the earth's crust (primarily in Ontario and Quebec), and demonstrates how these resources can be extracted and used to produce a variety of products within Canada and abroad. Yet as a sponsored product in of itself, *The Great Canadian Shield*, like *Riches of the Earth (Revised)*, deploys documentary depictions of geological processes and deep time in service of utilitarian, nationalist aims, rhetorically extending the temporal boundaries of the nation back in time to the Precambrian period while also legitimizing these forms of mineral extraction as necessary for post-war economic prosperity.

Depicting minerals as assorted as gold, nickel, mica, feldspar, magnesium, and iron, *The Great Canadian Shield* explains how such resource deposits within the Canadian Shield were laid down over the course of millions of years, where upon they were pushed up to the earth's

⁵³ "NFB Film Study Guide Riches of the Earth" (Ottawa: National Film Board of Canada, 1956),

⁵⁴ "NFB Film Study Guide Riches of the Earth," 2.

surface and exposed for human use by glacial forces, water, and wind erosion. The opening sequence illustrates part of this geological process using clay model volcanoes, animated to spew smoke with flickering lights to represent molten lava. From this primordial setting, the rest of the film jumps to the present to address mid-century mining and secondary industries dependent upon these raw materials. The Precambrian stratum is the planet's oldest extant sedimentary layer known to geologists, so its prominent location within Canada—covering around half of the country from the Great Lakes to the Atlantic Coast—makes Canada a unique site for both studies of the planet's early history and the industrial exploitation of these ancient minerals. The Shield itself provides the material substructure for the film: from its title and narrative focus on each resource to be found there, to its metaphorical resonances as the geographical birthplace of Canada as a settler formation. It is no coincidence that the Laurentian School (which theorized that Canada's economic and national development emerged as part of an east-west, centreperiphery production and circulation of staples via the St. Lawrence Seaway⁵⁵) draws its name from the same geological feature as the film. Like Innis and other historians of the Laurentian School focused on the developmental importance of key staple industries, *The Great Canadian* Shield concentrates on the economic value of minerals to be found in the Laurentian Shield, a subject which fittingly adheres to the pro-development purview of the federal Department of Mines and Resources. However, Innis's critique of Canada's peripheral status as a staples producer within a trans-Atlantic imperial economy (and the so-called "colonial" relationships between Canada and Great Britain this fostered in the nineteenth century) gives way in the picture to an emphasis on how mineral extraction can serve post-war nation-building.

The film's juxtaposition between the Precambrian geological activity that created the Shield's later mineral deposits and the contemporary applications of these resources argues for a temporal link between the national economy and deep time. Take an early scene depicting the significance of gold, for instance. Gold, the narrator explains, "was among the first minerals to be found within the Shield, the first known discovery taking place in 1866." Footage of a prospector inspecting a large vein of white quartz along Lake Ontario (gold, the film briskly informs the viewer, is often located close to white quartz outcroppings) is juxtaposed with footage of miners commuting to work at a gold mine in Timmons, Ontario. This short section ends with footage of the furnaces in the Royal Canadian Mint in Ottawa, where such gold is

⁵⁵ Buxton, *Harold Innis and The North*.

refined and cast into bars. In doing so, the narrative aims to situate gold mining within the country's economy on two levels: both in terms of the economic contributions the private sector offers to Canada's economy, and as a literal source of wealth to mint the nation's currency. Such depictions of processing minerals seek to characterize Canada as a manufacturing centre, distinguishing itself from being a colonial periphery that only sources raw materials as in Innis's staples theory.

Similarly, a later section of the film dedicated to feldspar explains its consequence to Canadian industry and domestic consumer goods, to situate it—like the other minerals mentioned in the film—within all sections of post-war life. When mixed with clay, feldspar is used for commercial pottery making. After depicting the feldspar crystal in the field, the film cuts from a prospector's handling of the material to another set of hands holding a piece of gold and brown glazed pottery with a heavy sheen to it. The narrator explains that the quality of the clear glaze is due to the inclusion of feldspar. To illustrate its artistic and commercial uses, *The Great Canadian Shield* then depicts what the narrator describes as "a progressive Canadian grade school," in which elementary schoolgirls craft vases out of "Canadian clay" in pottery class. This "art form" is juxtaposed with a staged depiction of two young women drinking tea out of industrially produced pottery, which the narrator reminds us is an example of another thriving domestic industry.

The film's conclusion reiterates the ways in which geology runs through citizens' everyday lives, homes, and workplaces. Tracing the planetary production of valuable minerals from the Precambrian period to the present, from prehistoric volcanic activity to contemporary field geologists squinting at topographical maps of Ontario and businessmen reading *Geology of Canada* over their morning coffee, geology (as science and physical structure) is shown to materially underpin Canada's post-war economic growth and industrial identity. As a scientific practice, harnessed by both industry and state, geology offers a tool for inquiring into the earth's past as well as rendering the rocky formations of that history into financial wealth. "The prospector and geologist," summarizes the narrator, form part of that body of experts who seek "the undiscovered wealth still to be found within the Shield" for "the building of a new world." Within this new post-war world, the geologist and scientist are as much agents of nation-building as the statesman, soldier, bureaucrat, or filmmaker.

Like *Riches of the Earth (Revised)*, the rhetorical gestures in *The Great Canadian Shield* attempt to root the Canadian nation within the landscape. Echoing critiques levied by some political geographers of states' "natural borders" (emerging along topographical features like mountain ranges, rivers, and deserts), the films peg Canada's political boundaries and economic development to the geological substrata of the continent. Returning to Innis's famous quote referenced in Chapter 1, Canada likely may have emerged because of its geography rather than despite it. The nineteenth-century intellectual traditions of geology as a Victorian science behind such geographical determinism 57 can be seen to emerge in these texts, refracted through twentieth-century ideas of Canadian economic development and post-war prosperity.

Scientific Institutions and Geologies of the Canadian North

The Arctic, as I consider in Chapter 2, has long been a subject of scientific inquiry, exploration, and rapt fascination for Southern audiences. This mediation of Northern landscapes within Canadian image production and discourses of national identity is also entangled in the ways in which science has served to mediate knowledge production about these spaces. The Geological Survey of Canada (GSC), the country's oldest scientific agency and one of the first governmental departments established following confederation, played a crucial role in the collection of data about Northern landscapes and the peoples inhabiting them. The GSC was founded in 1841 as an independent scientific agency to help develop colonial Canada's mining industry by compiling data about the continent's geological formations. Today, the Survey remains a leading organization for geo-scientific research, as part of Natural Resources Canada. As mentioned in the previous section, the Geological Survey has consulted on and underwritten the creation of motion pictures about oil and mineral resources, Canadian geology, and Northern industry dating back to the 1940s, typically in collaboration with the National Film Board.

Over the course of its long history, the Geological Survey underwent a number of structural changes, expansions, and formulations as the institution developed from a colonial organ to a federal one. The Canadian government integrated the Survey into the federal Department of the Interior in 1877, moving it from its original headquarters in Montreal to

⁵⁶ Juliet J. Fall, "Artificial States? On the Enduring Geographical Myth of Natural Borders," *Political Geography* 29, no. 3 (March 2010): 140–47.

⁵⁷ Zeller, *Inventing Canada*, 273–74.

Ottawa. During this period, the Survey maintained its former responsibilities, in addition to overseeing water supplies, forest resources, ethnology, and responsibility for a national museum dedicated to geology. 58 In 1936, the Survey was relocated to the Department of Mines and Resources. This department was responsible for many different portfolios in addition to the Survey; it also included a branch dedicated to overseeing Northern development and what was then termed "Indian Affairs." Following three decades of further restructuring and name changes, the Department of Mines and Resources became the Department of Indian Affairs and Northern Development.⁵⁹ Notably, this means that, by 1966, the responsibilities associated with the Geological Survey was part of the Department of Indian Affairs and Northern Development. In other words, as a scientific body within a federal department responsible for administering social services to Northern populations (who were primarily Indigenous), the GSC became a tool of the settler state in its management of First Nations. This institutional shift from an independent Geological Survey of Canada to the Department of Indian Affairs and Northern Development also reframes some of the entanglements of scientific inquiry and resource extraction, as the latter oversaw Indigenous populations, economic development, and scientific investigations in the North. These evolving ways in which the Survey viewed its contributions to the Dominion can be traced through the films' engagements with geology as a means of studying the natural world, and extracting value from it.

Historically, the Survey has also had to navigate interests of private industry in relation to science, a process which continued through to the Department of Indian Affairs and Northern Development. In the 1910s, for instance, oil companies benefited from published results of the Survey's studies, including driving records and subsurface contour maps, as Zaslow informs us, "showing the locations and depths of the various oil and gas-bearing strata" to serve "as a guide to future endeavours by the industry," and the Imperial Oil Company in particular constructed rigs in locations deemed favourable to oil development. ⁶⁰ Similarly, the Survey at times

⁵⁸ R. G. Blackadar, *The Geological Survey of Canada, Past Achievements and Future Goals: A Short History of the Geological Survey of Canada* (Ottawa: Energy, Mines and Resources Canada, 1976), 17.

⁵⁹ Specifically, in 1950, the Department of Mines and Resources became the Department of Resources and Development. From 1953 to 1966, it was titled the Department of Northern Affairs and National Resources. After 1966, the agency became the Department of Indian Affairs and Northern Development.

⁶⁰ Zaslow, *Reading the Rocks*, 316.

collaborated with petroleum companies in the production and accumulation of rock samples, exploratory surveys, maps, reports, and other data in the mid-1940s, which the Survey in turn catalogued and made available to users—including representatives of American and Canadian oil companies. In this way, geologists hired by leading petroleum companies collaborated with and benefited from the work of public sector geologists in their pursuit to locate new crude reserves. After 1945, post-war domestic economic growth further stimulated corporate and governmental demands for geological data, acting as a catalyst for expanded resource exploration further outwards to the far West and North.

Examining films sponsored by the GSC and other governmental agencies offers another means of tracing the financing of cinema by scientific institutions interwoven with the state. Whereas *Riches of the Earth (Revised)* drew upon scientific models to naturalize capitalist and national development, the entangled and at times collaborative relationships between science, government, and industry emerge even more clearly in *The North Has Changed* (1967) and *Search into White Space* (1970). Sponsored by the Department of Indian Affairs and Northern Development, both texts imagine the Arctic as a lucrative economic frontier for Southern Canadians and transnational corporations. Following Stephen Bocking's claim that science functioned as "a chief instrument" of postwar expansions of state and military sovereignty across the North by facilitating the management of resources and territorial control, the intertwining of science, resource development, and federal administration of Northern spaces frames the content and financing of these films. ⁶²

As demonstrated at the onset of this chapter, industrially-backed oil films have sought to associate petroleum with progress and economic prosperity. However, one must interrogate what form this progress assumes within the text. Like the Survey's own institutional histories that espouse its contributions to the growth of science and Canada as a national idea and territory, ⁶³ these films peddle an ideology of progress rooted in the profitable development of Canada's resources. This development, however, is predicated upon the disavowal (if not erasure) of First Nations and Inuit communities. The colonial history of geology resurfaces in productions

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⁶¹ Department of Mines and Resources, *Annual Report* (1947-1948), 71. Cited in Zaslow, 398.

⁶² Bocking, "Science and Spaces in the Northern Environment," 876.

⁶³ For instance, in R. G. Blackadar's history of the GSC, he asserts the agency's significant contributions to "the growth of science" and "the development of the country." Blackadar, *The Geological Survey of Canada, Past Achievements and Future Goals*, front flap.

sponsored by the Department of Indian Affairs and Northern Development in the form of racialized logics of possession. In her analysis of white settler colonialism in Australia, Canada, the United States, and New Zealand, Aileen Moreton-Robinson traces the connections between the possessive and racial logics of settler colonialism. Ownership of nation, she argues, stems from the accumulation by dispossession of Indigenous peoples, backed up by legal systems that support patriarchal and racial hierarchies with society. Moreton-Robinson's assertion that "the logics of white possession and the disavowal of Indigenous sovereignty are materially and discursively linked" maps onto these imperial logics of white men's legal and "natural" right to access and remake the physical world. Assumptions about who has the right and know-how to extract and profit from geological formations comes forward in these texts through discourses supporting racialized limitations to resource access and ownership.

The Department of Indian Affairs and Northern Development actively participated in the production and dissemination of research about the North. This included films, scientific reports, and other materials to attract tourists, investors, mining companies, and foreign governments to these regions. In 1967, for instance, officials organized screenings of *The North Has Changed* and *The Accessible Arctic* (director uncredited, 1967) as part of Canada's centennial celebrations; two productions on which the Department collaborated on with the NFB. He same fiscal year as the release of *Search into White Space*, the Department also launched what its annual report describes as "Prospectus" outlining potential "development prospects in the North" as part of "a major publicity program to attract new investors" to the region. This document was prepared for and circulated to "mining companies, investment houses, banks, insurance companies industries, foreign governments as well as to Canada's missions abroad." As these assorted projects show, the Department's responsibilities to Indigenous communities and resource management could be, at times, in conflict. Such an ambivalence towards balancing

⁶⁴ Moreton-Robinson, *The White Possessive*, xiii.

⁶⁵ "Annual Report 1969 - 1970" (Ottawa: Department of Indian Affairs and Northern Development, 1970), Item no. 36352, Library and Archives Canada, http://central.bac-lac.gc.ca/.item/?id=1969-IAAR-RAAI-e&op=pdf&app=indianaffairs.

⁶⁶ Canada Dept. of Indian Affairs and Northern Development Canada Centennial Commission, "Centennial Program for Premiere Showing of 'The North Has changed' and 'The Accessible Arctic': Centennial Films of the Department of Indian Affairs and Northern Development," 1967

⁶⁷ "Annual Report 1969 - 1970," 187.

needs of Indigenous communities, science, industry, and the settler state inform these cinematic depictions of the North as a marginal zone, ripe for extraction.

Both *The North Has Changed* and *Search into White Space* deploy well-worn metaphors of exploration, struggle, and discovery in their depictions of mining and exploratory drilling in the high Arctic. As I detail in Chapter 2, this double articulation of exploration is bound up in the production of the frontier as a site of economic expansion and imperial conquest. Here, as in the HBC fur films shot around fifty years earlier, ecologically-lively Northern regions inhabited by Inuit and First Nations are transformed into untouched wilderness, empty yet promising potential mineral wealth. Adopting more conventional narrative forms than *Riches of the Earth (Revised)*, the documentaries include aerial shots of breath-taking landscapes, devoid of human life or infrastructures. Such views echo the use of aerial image capture in earlier films about geology and mineral extraction in form and narrative emphasis on scientific visualization technologies—and the ways in which aerial imagery furthers the capitalist and colonial acquisition of these spaces. Despite their visual insistence that the North remains an empty territory, *The North Has Changed* and *Search into White Space* paradoxically call upon the presence of Indigenous peoples to establish the Arctic as a space requiring modernization and industrial change through oil and gas developments.

Search into White Space begins, for instance, with aerial views of the land by helicopter juxtaposed against a scene of Inuit children in jeans and sweaters frolicking by the shore. They are, according to the voice-over narrator, local inhabitants of these spaces. While acknowledging that "the locals" have lived in the Arctic for "thousands" of years, the narrator points out that now, "there are newcomers." White prospectors, scientists, geologists, and industrial workers drawn to the region by the prospect of oil. Significantly, Search into White Space continues to follow these newcomers from the South, removing any further traces of Inuit communities from the screen for the rest of its duration. The beginning of The North Has Changed builds an even sharper contrast between imagery of First Nations and subsurface industries. Footage of Indigenous men canoeing down a river, tranquil in traditional dress, is suddenly cut through by the metallic shriek of heavy machinery. In the next shot, dynamite explodes at a mining site, inaugurating the film's theme: rapid modernization of the North, with the backing of international finance. This textual erasure of Aboriginal peoples in both films to make way for development implicitly carries a colonial undercurrent, similar to pictures depicting the

displacement of Indigenous communities in Southern Canada by white settlers. In this case, however, it is not settlement that moves in, but transnational industry shored up by government. Resource imperialism in the North, spearheaded by Southern governments and industries frequently without the consultation of First Nations, assumes the place of settlement as a means of expanding power over these territories. In the process, the landscapes themselves are radically reformed to make way for the emergent petroleum frontier.

Continuities between the two films belie the somewhat more ambivalent portrayal of development in Search into White Space, however. Early on, the narrator poses the question of how long the North can remain "untouched wilderness." A visual emphasis on rust, decay, and abandoned infrastructures in several sequences might prompt viewers to question the environmental impacts of industry's northward encroachment. Footage of rusted oil drums, decaying metal, and rotting wooden mining camps—all "ruins and rust now" according to the narrator—are evidence of the previous resource frontiers having moved on, with relocated industries leaving only inorganic skeletons in their wake. Such inquiries into the longevity of these Northern resources repeatedly erupt throughout the rest of the film, with sequences adopting an almost experimental pacing as montages of industrial metal refineries and abandoned plants are framed around recurring questions—"how long will it last?"—and percussion beats. Ruminating on a "two-million-dollar drill hole" that turns up dry, the narrator asks in the final scene: "What do you say to the searchers with the little red flags. Better luck next time?" This question hangs in the air, as a surveyor slowly treks across the ice. The cheeky narration accompanying footage of geologists scrambling over the landscape for samples, surveyors taking measurements with their theodolites, and construction crews throughout the film reinforces this tone. During a scene of a claustrophobic mining elevator packed with workers the narrator muses: "Man will search and man will calculate. Why? Because in this ground there's wealth. [...] The first calculation: how much is there under the ground? How long will it last? [...] How long until you must close it down?" These queries, however, remain primarily rhetorical. No estimate of how much mineral wealth lies beneath the ice is given, nor could be known. Rather, the film remains slippery, raising the spectre of a critique but avoiding a direct engagement with underlying capitalist or colonial ideologies of the accumulation of wealth from nature.

As noted in the credits, *Search into White Space* was not only sponsored by the Department of Indian Affairs and Northern Development. Representatives of Panarctic Oils Limited also lent their expertise to the picture. This public-private consortium owned in part by the Canadian government, acted as a vehicle for federal participation in oil and gas exploration in the Arctic Islands, where *Search into White Space* was shot.⁶⁸ The Panarctic Oils logo, like that of Esso and Imperial, appears at several points throughout the picture, on workers' hard hats and cargo train cars. This textual inclusion of Panarctic Oils, and its assistance in the film's production, resonates with another one of the Department of Indian Affairs and Northern Development's interactions with the consortium in 1969. The Department was tasked with preparing publicity materials regarding "the increased government investment in Panarctic Oils," demonstrating how these entanglements included and existed beyond film production.

Through cinema, the Arctic has been historically constructed as a collection of economic peripheries for Southern capital, far beyond the boundaries of Southern settlement. However, to recognize earth science as another tool of capitalist extraction, and its forms of epistemological as well as environmental violence, we can see how these spaces are in fact far from marginal. The North, as mobilized by these films, can be read as an active site of racial exclusion, scientific data gathering, and resource exploration.

Geological Resources of Another Order: Energy Infrastructures and Western Oil

Agricultural economies of the prairies have done much to shape popular imaginaries of the Canadian West, as illustrated in the bucolic scene from *A Mile Below the Wheat* (1949) of golden harvests and assiduous farmers. While farming, and the images of country life and pastoral landscapes that it invokes, may appear to be far removed from the industrialized, gruelling yet highly technical extraction of fossil fuels, several early oil films produced by the National Film

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⁶⁸ Panarctic Oils was established in 1968 as an industry-government consortium. Following the creation of Petro-Canada as a Crown Corporation (a therefore national petroleum company) in 1975 by an act of Parliament, the Canadian government transferred its share in Panarctic Oils to its new national oil company. By 1982, the Government of Canada owned more than fifty percent of Petro-Canada shares. M. J. O'Connor and Associates Ltd., "Panarctic Oils Ltd. Fifteenth Annual Report, 1982," Geological Data Compilation for Marine Areas of the Canadian Arctic Archipelago (Geological Survey of Canada, December 1984), Open File 1159, Natural Resources Canada.

⁶⁹ "Annual Report 1969 - 1970," 187.

Board and Imperial Oil in the years immediately following the Turner Valley and Leduc discoveries nevertheless made a claim for the similarities between oil and these other geological resources of another order. Ranching and wheat agriculture, two agrarian industries which assume prominent roles in *The Story of Oil* (1946) and Imperial Oil titles *A Mile Below the Wheat* and *Underground East* (1953), are dependent upon the nutrient-rich top soils of Canada's Western grasslands, itself a production of glacial movements and other geological forces across what is today Alberta, Saskatchewan, and Manitoba. These three distinct yet neighbouring industries—oil, cattle, and wheat—all involve land-use practices that were often in competition for resources (literally, geographical space) with one another.

In this section, I return to A Mile Below the Wheat, first introduced at the onset of this chapter, as well as two other films offering triumphant depictions of Western oil, to trace how these sponsored and documentary films elected to reckon with oil's real-world entanglements with surface "geological" industries occurring in the same sites where petroleum reserves were found. In all three films, analogies between wheat agriculture, cattle ranching, and petroleum extraction are presented to situate oil development in coexistence with these established industries and their related land-use practices and lifestyles, rather than one that might pose challenges to them. At the same time, Imperial Oil's corporate films also document the construction of pipelines and other transportation infrastructures for moving unrefined crude oil from Imperial's wells to refineries and, finally, market. Consequently, A Mile Below the Wheat and *Underground East* focus less on geology as a science for plumbing the earth's mysteries (as in Riches of the Earth (Revised)) than as a rocky substrate running beneath the derricks, pipelines, storage tanks, waste run-off pits, and other infrastructures enabling the Western oil production. This substrate can be glimpsed through imagery of aerial photography and survey maps used by corporate geologists in A Mile Below the Wheat and Underground East to plan projected pipeline corridors—scenes which have strong parallels to Know Your Resources and The Modern Prospector examined earlier. However, an articulation of geology as a material substructure for the West's regional economy and Canadian national imaginaries comes forward most prominently in cinematic depiction of pipelines and energy infrastructures.

While numerous definitions of "infrastructure" have been proposed following the infrastructural turn in media studies, my usage of the term is influenced by Stephen Graham and Simon Marvin. They characterize infrastructure networks as "capital that is literally 'sunk' and

embedded within and between the fabric of cities," which "represent long-term accumulations of finance, technology, know-how, and organizational and geopolitical power." Graham and Marvin focus on energy and telecommunications infrastructures in urban contexts; nevertheless their assertion that such material systems shape the "experiences of urban culture" is also applicable to imaginaries and experiences of rural spaces. Furthermore, energy infrastructures also function as space-binding technologies, physically connecting distant places and fostering shared economic and political networks for governance and capital accumulation, while also offering an ideological medium for projecting cultural identities or national discourses rooted in a shared investment in large-scale technological projects. As I will show, depictions of pipeline construction and insertion into physical and cinematic landscapes of the West sought to contour perceptions of this quickly-booming industry and its relationships to other regional practices.

According to Geo Takach, landscape and the ways in which people have turned to these environments for survival and economic profit prominently emerge in visual representations of Alberta from the nineteenth century onward. Corporations like the CPR and the Government of Canada capitalized on, and fed into, the economic and cultural importance of the region's land-based industries (from the fur trade to agriculture and mining), deploying popular and romantic images of men working the land and their yields to attract settlers, foreign investment, ranchers and tourists. ⁷³ While popular iconography of the West emerged across both sides of the Canadian-American border, Max Foran contends that the specific "romance associated with ranching" in Canada predates and exceeds Hollywood's more iconic Western mythologies. ⁷⁴ Foran traces examples of ranching imagery back to provincial promotional publications from the 1880s, in which urban marketing strategies and farmers associations positioned Calgary as a beef

⁷⁰ Stephen Graham and Simon Marvin, *Splintering Urbanism: Networked Infrastructures*, *Technological Mobilities and the Urban Condition* (London and New York: Routledge, 2001), 12.

⁷¹ Graham and Marvin, 12.

⁷² Barney, "Who We Are and What We Do," 79.

⁷³ Geo Takach, "Visualizing Alberta: Duelling Documentaries and Bituminous Sands," in *Found in Alberta: Environmental Themes for the Anthropocene*, ed. Rob Boshman and Mario Trono (Waterloo: Wilfrid Laurier University Press, 2014), 89.

Max Foran, "Constancy Amid Change: Ranching in Western Canada," in *Challenging Frontiers: The Canadian West*, ed. Lorry W. Felski and Beverly Rasporich (Calgary: University of Calgary Press, 2004), 313.

capital. ⁷⁵ Grain elevators, Geoffrey Simmins remarks, offered another highly visible and identifiable symbol for the agricultural system in Western Canada from the 1920s onward, emerging as a part of "the mythology of prairie settlement." ⁷⁶ Significantly, many of the infrastructures associated with these agricultural industries of biological fuel production (beef, wheat, corn) appear in *The Story of Oil* and *A Mile Below the Wheat*: grain elevators, fences, railway lines, and cattle guards. The prevalence of such iconography and infrastructures of the West undoubtedly reflect the economic importance of both cattle ranching and wheat agriculture to the region. ⁷⁷

In *The Story of Oil*, petroleum is situated in relation to cattle ranching and metaphors for animal power. As part of the NFB's "Canadian Work and Wealth Series No. 8," the title card for the series includes images of six beavers, each of which is attired to fit a different occupation. These occupations include farmer (complete with a pitchfork and folksy hat), miner, logger (the natural occupation of a beaver, one would expect), businessman porting a briefcase, and fisherman with his catch. As is immediately apparent, most of these occupations align with Canada's resource industries: logging, mining, fishing, and agriculture. From the onset, then, this "story" of oil's exploration and development in Leduc is situated amongst other public sector narratives about the country's political economy, especially its resource industries.

Following the film's opening sequence of a petrol station and an establishing shot of "the foothills of Alberta," in which cars can be seen motoring down a dusty country road, the film juxtaposes the source of this modern fuel with other forms of animal energy in Turner Valley's "range country." A panning shot of a rancher steering a herd of horses down the road, for instance, comes on the heels of establishing shots of the area's tiny residential towns, which mushroomed up alongside the oil fields. The camera pans right to the horses as they meander across the frame to cross a small bridge. The cowboy, wearing his wide-brimmed hat and riding

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⁷⁵ Foran, 313.

⁷⁶ Geoffrey Simmins, "Prairie Grain Elevators: An Old Purpose in Search of a New Forum," in *Challenging Frontiers: The Canadian West*, ed. Lorry W. Felski and Beverly Rasporich (Calgary: University of Calgary Press, 2004), 206. Grain elevators are also referenced as an example of a nation-building infrastructure in Jonathan F. Vance, *Building Canada: People and Projects That Shaped the Nation* (Toronto: Penguin, 2006).

⁷⁷ Since the late nineteenth century, beef has emerged as a key resource staple for the prairies and Canadian export trade, representing one of the most prominent and economically powerful agrarian industries, second only to wheat. Foran, "Constancy Amid Change," 311.

chaps, could have been sliced from an outtake of a Western. As he slowly guides the horses across the bridge, the camera becomes still to include the bridge on the left-hand side of the frame and a tall oil derrick emerging from the local brush and trees on the far right. The shot is short, a second or two, but this momentary juxtaposition nevertheless echoes the narrator's comparison between horsepower as the energy source of old and petroleum as a more powerful, modern fuel source. In this "range country for the herds of half-wild horses," the narrator proclaims, "the towers of a newer power" rise to produce oil power that is "stronger and swifter than they."

Such reference to the cowboy's iconic steed invokes the well-worn articulation of the internal combustion engine in terms of horsepower. While the enormous economic potential (the physical power of propulsion) contained within this fossil fuel is emphasized throughout *The Story of Oil*, its potential to destabilize Western agriculture is carefully papered over in such scenes. The depictions of pipelines put forward in the film, for instance, serve this aim of coexistence by positioning these highly disruptive and risky transportation infrastructures as a new component of the Western range. After establishing this comparison in the aforementioned scene, it is repeated in a striking image of a pipeline running through the prairie grass in the film's conclusion. The camera is low, level of the ground, framing the pipe as it snakes from the foreground and into the distance. Running nearly parallel to the pipeline is a barbed wire fence, demarcating a cattle range, with the Rocky Mountains distantly visible along the horizon. The wind softly rustles the long grasses that shelter the pipe and lower wires of the fence. This highly visual correspondence between the pipeline and the fence line can be read metaphorically, to speak to the coexistence of the two industries.

Within A Mile Below the Wheat and Underground East, documentary footage of the construction of oil infrastructures such as pipelines, roads for transport trucks, tanker-shipping routes, and storage tanks are mobilized on two levels: to situate petroleum within extant popular imaginaries of Western industry, and to serve as technologies for binding the nation together. Maurice Charland theorizes the enmeshment of technology with Canada's economic, social, and national development as a form of technological nationalism. Charland characterizes Canada as "a technological state," which had been materially and discursively constituted as a nation and

"economic unit" by transportation and communication technologies. ⁷⁸ Within Anglophone nationalism, he continues, Canada's constitution through technology became the grounds on which to imagine the country's nationhood. ⁷⁹ For Innis, these technologies included media like the telegraph or radio, as well as transportation technologies such as the transcontinental railroad. Concepts of space and the country's geography were inseparable from the technologies that shaped people's movements and perceptions of these spaces. ⁸⁰ In his 1923 history of the Canadian Pacific Railroad, Innis describes the railroad's emergence as "the history of the spread of western civilization"—white settlement of Indigenous lands—given the railroad's integration of Western Canada into East Coast economic and political systems. ⁸¹

In Darin Barney's view, this material and discursive fabrication of Canada through its infrastructures of resource extraction and commodity transportation is due to its history as a resource economy. Barney contends that pipelines, as invisible yet ubiquitous structures, were rarely "invoked as one of those infrastructures onto which the national imaginary might be projected" until contemporary debates over bitumen-carrying pipeline projects associated with Alberta's oil sands. He continues:

Pipelines do not stand proudly on the horizon in the manner of prairie grain elevators, radio towers, or bridges across a great sea. Instead, they hide underground, insulated from the sort of affective attachment required to fetishize infrastructure technologies as objects of national identity. ⁸³

Nevertheless, several of Imperial's early films commissioned to promote its developments in Alberta and pipeline projects did indeed deploy oil infrastructures in this manner, as structures with comparative ideological significance to infrastructures associated with other regional resource industries. My readings of these films therefore offer an historical parallel to contemporary analyses of pipeline imagery. By positioning oil developments as positive and necessary contributions to Canada's national economy, Imperial used cinema to situate its

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⁷⁸ Maurice Charland, "Technological Nationalism," *Canadian Journal of Political and Social Theory/Revue Canadienne de Théorie Politique et Sociale* X, no. 1–2 (1986): 199.

⁷⁹ Charland, 196–97.

⁸⁰ William Buxton and Charles R. Acland, eds., *Harold Innis in the New Century: Reflections and Refractions* (Montreal and Ithaca: McGill-Queen's University Press, 1999).

⁸¹ Harold A. Innis, *A History of the Canadian Pacific Railway* (Toronto: University of Toronto Press, 1971), 287, quoted in Charland, "Technological Nationalism," 199.

⁸² Barney, "Who We Are and What We Do," 79.

⁸³ Barney, 81.

corporate ambitions within broader public investments in the development of Canada's resources.

Imperial Oil did not establish an independent film unit (as BP and Shell had), financing the production of films for internal and external purposes from the 1930s through the late twentieth century through other production companies. A Mile Below the Wheat and Underground East, released by Crawley Films under the supervision of producer and cameraman Gerry Moses, share several thematic similarities. Like The Story of Oil, they address the extraction and transportation of crude from Alberta oil fields to refineries in other parts of the province and, in the case of Underground East, to as far east as Lake Superior. As infrastructures and evidence of Imperial's technological achievements, pipelines are highly visible in both films. The assembly of these massive hollow networks are celebrated throughout both films, which expand a great deal of narrative detail documenting the processes of welding segments of pipe, before they are buried in fields, sunk beneath rivers, and suspended above ravines. In doing so, the films emphasize the materiality and enormity of these projects. The repeated sequences of burying pipelines also work to physically insert these structures within the Western landscape, paradoxically rendering them more rather than less visible.

Given that Imperial's derricks struck oil within some of the most productive agricultural land in the country, *A Mile Below the Wheat* attempts to project an image of peaceful coexistence between Alberta's oilmen and farmers, and the two industries' respective infrastructures. The film does this in a few ways, formally, narratively, and discursively. As I show in the beginning of the chapter, wheat agriculture is first visually juxtaposed against the infrastructures of petroleum extraction in the film's opening sequences to establish this analogue between the two harvests. These comparisons also emerge in an animated sequence explaining the drilling process. Taking the form of a simplified geological diagram, the sequence depicts a whirling drill bit, plunging downwards through sedimentary strata, until it approaches a trapped pool of black liquid crude trapped below. By focusing on this horizontal layering of rock and resources (soil above, petroleum below), *A Mile Below the Wheat* reiterates the geological interconnectedness of

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⁸⁴ Imperial Oil produced a wide range of films for internal use and public circulation, including several other collaborations with Crawley Films and Gerry Moses like *Decision to Drill* (director uncredited, 1962). For a more comprehensive view of Imperial's experiments with filmmaking, see the finding aid for the Imperial Oil Film Collection at Glenbow Archives: http://www.glenbow.org/collections/search/findingAids/archhtm/iolfilms.cfm.

the two industries. Despite the potential problems that such a stacking of two industries implies (with derricks and pipelines constructed on agricultural lands), the film skims over these concerns, instead cutting to dramatic footage of a geyser of oil bursting from a successful drill hole.

Unlike most industrial and educational films from the 1930s to the 1950s, which relied upon a single expository "voice of god" narration, *A Mile Below the Wheat* features two narrators, each of whom serves to communicate one of two interwoven narratives about oil's discovery. The first narrator performs the part of a local, hardworking farmer, who speaks with a slightly regional accent and first person statements to describe his "little market town of Leduc." In his portions of the film, he describes the coming of the oilmen and the positive improvements oil development had on his farming community. Paired with his testimony are pastoral images of rural Canada and small-scale family agriculture, in which farmers are shown still harvesting wheat by horse-drawn wagon. "Signs of the new crop are all around," the farmer states, as the film depicts an oil well logo on an advertisement for a local cafe. The positive consequences of oil development are shown through an expansion of service infrastructures, such as the electrical grid, to remote communities and new residential areas. More oil also means more fuel for farmers, according to the narrator, linking the expansion of agribusiness to petroleum-powered technologies.

The second speaker imitates a more typical newsreel or documentary narrator, recounting the history of exploratory drilling and pipeline construction in a brisk, authoritative tone. He provides the film's exposition: explaining the drilling process, arguing for oil's contribution to the modernization of industry and infrastructures, and demonstrating how workers install pipelines without disturbing local farmers. By switching between the two narratives and the two voices, the film weaves together an imaginary of the local with that of industry, to create an idealized portrait of Western Canada in which both agriculture and fossil fuels can co-exist. The film's final montage summarizes this portrait by transposing iconography of the wheat harvest to represent oil. Following several shots of oil derricks punctuating tall fields of grain, a series of quick shots of wheat being rapidly thrashed and transported on grain belt conveyors are juxtaposed with shots of dark crude being sprayed into retaining ponds (Fig. 8). A close-up of kernels of wheat pooling is similarly paired with a close-up of petroleum gushing from an open

pipe. Positioned visually and narratively as "another harvest," oil is situated in Alberta's landscape as merely one of several fuels to be cultivated by industrious men.

Underground East moves further afield from the specifically Western industries of wheat and ranching, but it too remains invested in developing a visual language for oil by comparing it to other key resource industries. Produced by Imperial in connection with the Interprovincial Pipe Line Company, Underground East documents the construction of what was the longest pipeline in the world at the time, stretching 1,129 miles from Edmonton, Alberta to Superior, Wisconsin to transport crude oil to Canadian East Coast refineries. The pipeline in question was initially constructed in the summer of 1950. Three years later, the Interprovincial Pipe Line Company expanded it to traverse an additional 643 miles to Sarnia, Ontario, where tankers then transported Western crude across the Great Lakes. The film comprises documentary footage of the pipeline's construction from both 1950 and 1953. Describing Canada as an "important oilproducing nation" following Leduc, Underground East seeks to document the process of the pipeline construction and also rhetorically situate it in relation to pre-existing regional staple economies from across Canada. 85 Over the course of the narrative, the film shows how workers constructed the pipeline to connect Alberta's oil fields to refineries in southern Ontario, emphasizing the steep environmental challenges the workers faced along the way (Fig. 9). The film concludes with footage of two public ceremonies marking the pipeline's completion: the first in Edmonton with Alberta Premier Ernest Manning opening a valve to release the flow of oil east, and the second in Sarnia featuring Ontario Premier Leslie Frost greeting the arrival of the

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Industrial films were not the only industry mouthpieces for Imperial Oil at the time. The company also published the *Imperial Oil Review*, an industry magazine. The August 1951 issue of the *Imperial Oil Review*, also covered the shipment of Western crude to Ontario refineries. In one of the articles, the President of Imperial Oil, G. L. Stewart, is quoted similarly affirming the importance of the Interprovincial pipeline to Canada's national development. Stewart contends that the growth of the country's oil industry (steered by Imperial Oil, of course) will benefit the "whole Canadian economy" by stimulating further development across secondary industries; in short, "the economy is further strengthened by the expanded use of our natural resources." While reading these industrial films in tandem with Imperial's other sponsored productions exceeds the scope of this article, the resonant language between *Underground East* and the *Review*'s coverage of the same events underlines the significance and consistency of the corporate message across media forms. "Western Oil Reaches Ontario," *Imperial Oil Review*, August 1951, 5.

Imperial Leduc tanker on its maiden voyage porting Alberta crude, billed as "the world's largest freshwater tanker" by the *Imperial Oil Review*. 86

Pipelines like those operated by the Interprovincial Pipe Line Company and Imperial Oil are as much a "product of political will" as they are a corporate achievement. ⁸⁷ Like the Canadian Pacific Railway, which Charland theorizes as another large-scale, space-binding transportation network, these infrastructures physically and discursively connected Western settlements and industry to the center of the country. The narrative's emphasis on the successful collapsing of distance enabled by the pipeline, which was capable of transporting crude oil to its destination in twenty-six days, also echoes the achievements of the Canadian Pacific Railway as a transportation infrastructure and communication technology. By carrying fuels cross continent, pipelines also facilitate social and economic activities, and power an array of different media.

In the opening sequence of *Underground East*, an animation of oil derricks and introductory text makes a claim for the importance of the Interprovincial Pipe Line as a "record" of "Canadian achievement" and "milestone in the nation's progress." By describing the pipeline in these terms, Imperial seeks to locate this infrastructural project within national narratives of economic and technological progress from the onset. This point is reiterated in the following colourful sequence, which commences with a close-up of two fishermen scooping sardines and other baitfish from a bulging net suspended from the side of their boat. In the quick subsequent montage, a man porting a vibrant red winter coat stacks pine logs in a pile on the edge of a snowy forest, a farmer forks wheat onto a thrashing belt under a cerulean sky, a miner grimy with coal dust beneath his hard hat drills deep underground, and two roughnecks carefully attach another length of pipe to their drill, caged within an oil derrick. The montage ends with a long shot of a derrick whose vertical thrust is parallel to heavy black plumes of smoke billowing up from a nearby gas flare on the flat prairie countryside. Over these shots, the narrator intones: "The story of Canada is the story of resources. Search, discovery, development. And the newest resource is oil." Petroleum, the film articulates, is the most recent discovery to be made profitable in in the country's long history of commercial resource developments. Significantly, coal, wheat, timber, and fish are all examples of staples cited by Innis in his economic history of Canada, which I examined in the preceding chapter. Although Innis did not specifically write

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⁸⁶ "Western Oil Reaches Ontario," 4.

⁸⁷ Charland, "Technological Nationalism," 196.

about the Western petroleum boom (in fact, he passed away one year prior to the release of *Underground East*), by appropriating the language of Innis's staple thesis to situate oil in relation to these other industries, *Underground East* argues for a rhetorical continuity between extractive practices. Both the transportation infrastructure of the pipeline and crude oil as Canada's next fuel industry are presented as components of Canada's future staple economies.

Later in *Underground East*, Innis's notion of a staples economy is once again taken up, again in nationalist terms. Alberta oil, the film claims, has the potential to facilitate Canada's energy sovereignty from American economic imperialism. Paraphrasing Premier Frost's speech, the narrator declares: "When the western crude arrived [...] the new resource had brought sweeping savings to the prairies and to the country as a whole." With savings of "hundreds of millions of US dollars no longer spent on imported crude," Leduc oil, and thereby Imperial Oil, can work to keep Canadians' dollars within the country and out of American markets. In effect, such rhetoric positions oil as a solution to the problem of Canada's dependence on American markets. Pipelines, then, could be seen to contribute to the nation's postwar development by extending Ottawa's control over Western oil reserves, not unlike the railroad once again. Whereas the CPR helped the federal government to establish political control over Western territories and thwart an American economic presence in Western Canada, "8 *Underground East* calls for a similar independence from American energy (and the temporary exclusion of the American imperialism from Western oil markets) through pipeline construction.

Underground East, like The Story of Oil and A Mile Below the Wheat, portrays commercial oil exploration and pipeline construction as important mechanisms for Canadian economic development and manufacturing. The three films erect analogies between oil and other resource industries in Western Canada, from cattle ranching to wheat agriculture to the notion of a staples economy itself, in an attempt to link petroleum to prior resource industries, experimenting with how to visually depict this emerging energy sector through various formal and narrative strategies. In this sense, these government productions and Imperial Oil films insert oil into pre-existing visual imaginaries of Western Canada to legitimize the presence of commercial oil developments on landscapes that were already being used and cultivated for other purposes.

⁸⁸ Charland, 199.

In presenting a cinematic reworking of "on the ground" relations between oilmen and Alberta farmers, these texts also disavow the lived complexities, and sometimes painful realities, of these entanglements. Petroleum is represented as a new force in the region, yet one that does not destabilize earlier farming practices. However, if we inquire into the specific land use practices of each industry, the potential implications of these overlapping resource geographies that the films attempt to paper over become more visible. Historically, ranchers in Alberta's foothills faced a variety of pressures from agricultural lobbies, resulting in land lease battles in the early twentieth century between ranchers and government bodies and federal edits around farmers' leaseholds. 89 Exploratory drilling in Turner Valley since the 1910s, land speculation following the assorted boom and bust cycles, and the sea change that the Leduc strike represented could only exacerbate previous tensions in the region around land use. Legal distinctions between the ownership of surface rights and mineral rights in Alberta, for instance, served to slice property ownership and leasing rights into two strata, one at the surface of the land and the other below. 90 Such complications, while not explicitly referenced, can be inferred in scenes depicting the consultation process Imperial had to undertake with landowners, when proposed pipelines would traverse private properties.

In *Underground East*, the route of the Interprovincial Pipe Line stretched from the prairies to the American Great Lakes region. All civilian landowners whose properties lay across the proposed path, claims *Underground East*, were consulted and permissions secured prior to the laying of the pipeline. Potential conflicts over pipelines' right of way across farmers' fields, let alone the potential environmental risks to crops posed by pipeline leakages or soil contamination, are all easily glossed over. Instead, as we are told in *A Mile Below the Wheat*, farmers cultivating lands around Leduc were compensated for the pipelines' right of way across their fields and any inadvertent "loss of crops." The social or environmental consequences posed by other oil infrastructures to farmers, ranchers, and civilian landowners depicted in these films (refineries, tanker shipping routes) are also pointedly avoided. Given that many Western farmers who held surface rights might not have also held the mineral rights that governed mineral substances found on and under a property (including petroleum and natural gas reserves), such

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⁸⁹ Foran, "Constancy Amid Change," 314–15.

⁹⁰ "About Mineral Ownership," Alberta Energy (Government of Alberta, 2017), http://www.energy.alberta.ca/minerals/4081.asp. Accessed October 12, 2017.

evasions of the real-world complexities of land use around these geological resource industries serve to reaffirm corporate myths of coexistence.

Conclusion

An entanglement of state, corporate, and colonial interests framed the discipline and practice of geology in Canada since its emergence in the nineteenth century, carrying over into twentiethcentury cinematic engagements with the science. The Imperial Oil and NFB productions examined in this chapter provide a glimpse into the material practices through which geologists and other scientists interacted with natural environments. Here, petroleum and other subsurface resources are configured as outcomes of geological activity over deep time as well as national resources that are available for the economic and political benefit of Canada and its industries. In this chapter, I have sought to show how these interests are intertwined in the production of scientific knowledge, as well as ways of viewing the world and binding nations through infrastructural projects. At the same time, it is important to recognize that scientific disciplines and practices were also, in turn, shaped by their research subjects. The North American landscape—its topography, geological strata, and surface environments—not only influenced the emergence of scientific practices in Canada as geological knowledge responded to the continent's specific formations. Canada's physical geology also left impressions on the country's film history, as corporations like Imperial Oil and the NFB used cinema as a pro-industry communication strategy.

Within my thesis, this chapter serves as a bridge of sorts between two types of filmmaking, public and private, and changing discourses around natural resource extraction. While the texts examined in this chapter take up geology and oil to pose extraction as a logical practice of capitalizing on a nation or region's natural wealth, the ways in which individuals and institutions approached resource development began to fluctuate in these decades. Although oil and rare minerals were recognized as non-renewable resources, and thus in limited supply, industrial development is presented as a boundless activity. However, by the early 1970s, public and scientific attitudes towards the country's environments were shifting, reflecting rising concerns about resource scarcity, industry's adverse impacts on Northern landscapes, and intensifying political resistance by Indigenous and Inuit communities. *Search into White Space*, despite similarities to earlier depictions of subsurface extraction and the entanglement of

Northern industry and science, stands as a testament to these shifting norms. Nevertheless, ideological frameworks for viewing the world as an assemblage of natural resources for human development remain remarkably persistent. In Chapter 4, notions of resource conservation and management will come to the fore in another collection of public-sector films, this time depicting Atlantic fisheries and offshore oil. In these films, concerns around which communities have the right to access resources, and how community can be produced through economic activity, frame continuing conversations around industry and environment on screen.

Introduction

In 1978, the Canadian Department of Fisheries published a report assessing the status of Newfoundland and Labrador's fishing industry and possible avenues for future expansion. Entitled *Fish is the Future: The Development Program for the Newfoundland and Labrador Fishing Industry to 1985*, the report sought to position the fisheries—in the words of Fisheries Minister Walter C. Carter—as the "hope" for the province's "economic future." Describing fish as "the original Newfoundland resource, and the mainstay of its economy," the publication argued for new state-led management strategies to expand and modernize the inshore and offshore fisheries, while asserting the importance of fish to the region's economy and cultural heritage. Government studies of the fisheries such as this offer insights into regional and federal concerns over the productive management—and continuation—of declining cod and other fish stocks in the Grand Banks during the latter part of the twentieth century.

At the same time, other sectors of the federal and provincial government—as well as energy companies—had their eyes on another potential energy source in the offshore. In the year following the publication of *Fish is the Future*, Chevron, an American multinational corporation, identified oil deposits buried beneath the seabed of the Grand Banks, several hundred kilometers away from St. John's, Newfoundland. Discovery of the Hibernia oil field was followed by three more in the following decade—Hebron, Terra Nova, and White Rose.³ The location of these

¹ Bonnell Public Relations, "Fish Is the Future: The Development Program for the Newfoundland and Labrador Fishing Industry to 1985" (St. John's, Department of Fisheries, 1978), 1.

² Bonnell Public Relations, 2.

³ Exploratory drilling for petroleum and natural gas in the Northern Atlantic began in the mid-1960s. Of the four major fields located in the Grand Banks, the Hibernia field was found in 1979, with Hebron following a year later, and Terra Nova and White Rose in 1984. Commercial production of the fields commenced decades later, however; Suncor began commercially operating Terra Nova in 2002 and Husky Energy in White Rose in 2005. The Hebron project—a shared venture between ExxonMobile, Nalcor, Statoil, Suncor, and Chevron—began producing oil as recently as November 2017. "Hebron Project Produces First Oil" [press release], Hebron Project (ExxonMobil Canada Properties, 28 November 2017),

offshore petroleum reserves profoundly reshaped local, national, and global relationships to the Grand Banks and its ecological health.

The Grand Banks, an undersea plateau hugging the eastern and south-eastern coasts of Newfoundland on the North American continental shelf, was once home to some of the most prolific fishing grounds in the world. Carved out of the earth's crust by glacial forces during the last ice age, the Grand Banks offer especially fertile grounds for fish to feed and spawn through the confluence of two major ocean currents. Cod, in particular, thrived within the Grand Banks. The species became one of the crucial food supplies for European fishermen, and later, European settlements along the continent's east coast. The salt cod industry dominated Newfoundland's economy since the sixteenth century as Basque, English, French, Portuguese, and, later, Irish vessels began venturing annually to these fishing grounds. The invention of diesel-powered commercial fishing trawlers in the mid-twentieth century, and the 1979 discovery of Hibernia, radically reshaped the resource geography of Newfoundland's offshore. Although the cod industry has been enmeshed in global trade networks from its emergence, the scaling-up of industrial fishing, privatization of fishing vessels, and expansion of exploratory drilling indexed a deepening entanglement between global capital, emerging neoliberal economic practices, and offshore industries over the course of the 1980s.

In this chapter, I consider aspects of this entanglement of fishy and fossilized fuels in the Grand Banks through cinematic imaginaries of Newfoundland's intertwined economic, ecological, and energy futures through offshore resource industries. ⁵ Building from my

http://www.hebronproject.com/mediacentre/2017/firstoil.aspx.

⁴ Numerous historians and popular writers have written about the cod fisheries. Prominent texts include: Harold A. Innis, *The Cod Fisheries: The History of an International Economy* (Toronto: University of Toronto Press, 1954); Mark Kurlansky, *Cod: A Biography of the Fish That Changed the World* (New York: Penguin/Walker and Co., 1998); Dean Bavington, *Managed Annihilation: An Unnatural History of the Newfoundland Cod Collapse* (Vancouver and Toronto: UBC Press, 2010).

⁵ I would like to foreground two remarks on the scope of this chapter. First, given the different histories of colonialism and settlement between Labrador and Newfoundland (and the ways in which filmmakers and institutions have response to this), I have elected to focus solely on films from Newfoundland. Nevertheless, Labrador also has a rich history of resource cinema and Inuit filmmaking, which are well worth study. Second, I am also not addressing films about seal fisheries, or the controversies surrounding these practices. For a perspective on seal hunting, see: Noreen Golfman, "Documenting the Seal Fishery: A Short History of Newfoundland Film," in

theorization of fur as a fuel in Chapter 2, fish here also emerge as a fuel that powers both metabolisms and community formation. Like Nova Scotia, New Brunswick, and Prince Edward Island (which constitute the region of Atlantic Canada together with Newfoundland and Labrador), Newfoundland's culture, economy, and ecosystems have been deeply shaped by humans' complex relationships with the sea. From the experiences of outport communities⁶ traditionally dependent upon fish to communities' concerns about land speculation in places like St. John's as oil corporations moved in, cinema has been used to reflect and structure Newfoundlanders' relationships to offshore resource industries, and the ocean. Concentrating on a number of sponsored and publically-funded films made prior to the federal government's notorious 1992 moratorium on cod fishing, the films investigated in this chapter track the former abundance and precipitous decline of fish stocks in the Grand Branks alongside the rise of offshore oil extraction. Specifically, I examine films about fish and the fisheries released by the National Film Board in the decades following Newfoundland's 1948 referendum on the question of confederation, as well as pictures about offshore oil, fishing, and energy regimes produced by Memorial University of Newfoundland (MUN) Extension Service following the discovery of petroleum offshore.

The Film Board, as traced in the preceding chapter, has collaborated with several federal departments, institutions, and independent production companies since its creation. Famously, in 1967, the NFB partnered with MUN Extension Service (founded in 1959) as part of its experiment with participatory filmmaking through Challenge for Change/Société Nouvelle. Despite the scholarly attention paid to the resulting Fogo Process films directed by Colin Low (known also as the Newfoundland Project) and interest in Atlantic Canadian cinema in recent years, comparatively little work has been done on MUN Extension's later collaborations with

Rain/Drizzle/Fog: Film and Television in Atlantic Canada, ed. Darrell Varga (Calgary: University of Calgary Press, 2009), 67–81.

⁶ In Newfoundland, the term outport refers to an isolated coastal community. Historically, outports originated from temporary European fishing villages, and many outport economies continued to depend upon the fisheries and transportation by boat well into the twentieth century. After confederation, the provincial government undertook a contentious resettlement program to relocate outport inhabitants to inland areas with better government education and health programs, even as it meant the collapse of these communities.

These include: Darrell Varga, ed., Rain/Drizzle/Fog: Film and Television in Atlantic Canada (Calgary: University of Calgary Press, 2009); Jerry White, The Radio Eye: Cinema in the North Atlantic, 1958-1988 (Waterloo: Wilfrid Laurier University Press, 2009); Darrell Varga, Shooting

the NFB in the 1980s, characterized by different production methods, outcomes, and participation from local and provincial players. Extension's Film Unit was established by Memorial University in 1968 with the support of the National Film Board following Memorial's collaboration on the Fogo Island films. The Film Unit, among other initiatives, produced films and videos as tools for adult education and community outreach. Such community-based education and engagement programs frequently concentrated on the economic development of fisheries industry and workers' skills in the 1960s and 1970s, as well as the potential offshore oil and gas industry. The reason I have elected to focus on this selection of films is the prominent position both institutions have held within the province's filmmaking history, and the moments of transition they document.⁸

In the first section of the chapter, I consider the ways in which films about the fisheries promote what Stewart L. Udall calls the "myth of superabundance" and its implications for the subsequent economic and ecological collapse of the cod fisheries. Inside Newfoundland (dir. Stanley Newman and Roger Morin, 1951), High Tide in Newfoundland (dir. Grant McLean, 1955), and Trawler Fishermen (dir. Martin Defalco, 1966), all productions of the NFB, offer fruitful texts for this work. I also examine two Fogo Process films, Billy Crane Moves Away (dir. Colin Low, 1967) and Brian Earle on Merchants and Welfare (dir. Colin Low, 1967), which foreground the dire implications of declining fisheries on outport communities. Taking up Dean Bavington's study of fisheries management and theories of the commons, I show how these documentaries constitute fish as resources to be managed "in common," even as the Grand Banks are over-fished and their longevity threatened. Following the work of Mario Blaser and Marisol de la Cadena, I also inquire into how these texts participate in the act of "commoning," or creating communities around access to shared resources.

from the East: Filmmaking on the Canadian Atlantic (Montreal & Kingston: McGill-Queen's University Press, 2015).

⁸ The Extension Service Film Unit was established in 1968 following the collaboration between MUN Extension and the National Film Board on Fogo Island. The Film Unit went on to produce many other television and video projects focused on the fisheries, particularly in relation to economic and social development of Newfoundland's outport communities. During its heyday, it provided some of the only financial and technological infrastructures for localized film production outside of the NFB's Atlantic Studio located in Halifax. For a history of the establishment and closure of Memorial's Extension Service, see: Jeff A. Webb, "The Rise and Fall of Memorial University's Extension Service, 1959-91," Newfoundland and Labrador Studies 29, no. 1 (2014): 1719–26.

The second portion of this chapter turns to a collection of films engaging with offshore oil as an emerging energy frontier in the Grand Banks, and the possibilities and threats this new resource poses to the fisheries, as well as to those workers and communities dependent upon fish. Here, conservation and management take on a very different hue. As related outcomes of a collaboration between the NFB's Atlantic Studio and the Extension Service, *Speculation* (director uncredited, 1980), *Offshore Oil: Are We Ready?* (dir. Paul MacLeod, 1981), and *Oil Means Trouble* (dir. Bruce MacKay, NFB, 1985) consider some of the potential economic, social, and environmental consequences of deep sea petroleum development. The films addressed here are shaped by, and reflect, anxieties around continued access to offshore resources on several scales. Questions regarding the sustainability of these renewable and non-renewable resources are further heightened by the continuing decline of cod stocks over the course of the century (even prior to the 1992 moratorium). While treatment of the moratorium on screen exceeds the scope of the chapter, I conclude by turning to competing visions of the future offered by fish and the "promise" of oil.

These collaborations between MUN Extension Service and the NFB were not the only texts that speculated upon some of the potential implications of offshore oil developments on marine and coastal environments, Newfoundland outport communities, and local and regional economies. Recognizing that both institutions engaged in film production alongside other projects, I situate my film analyses within a media ecosystem of government and corporate publications on offshore energy and other sponsored NFB productions about offshore oil, namely *Ressources sous-marines* (dir. John Ralph, sponsored by Energy, Mines and Resources Canada, 1973) and *Operation Conservation* (dir. Andy Thomson, produced for the Department of Defence, 1979). I also investigate some of the implications of preserving and digitizing these archival films today as examples of Newfoundland and Canada's "cultural commons."

By tracing cinematic entanglements with emergent popular concepts of environmental conservation and resource management, the films demonstrate changing understandings of human-marine relationships and practices of consuming the ocean. Such shifting attitudes

⁹ Entanglements of oil and fish might have even contributed to local and federal governments' interest in offshore oil exploration in Newfoundland. Environmental historian Steve Penfold claims that the province's "perennial underdevelopment and [...] collapsing cod fishery" framed its political commitments to oil development following Hibernia's discovery. Penfold, "Petroleum Liquids," 286.

towards the nonhuman world by the late-twentieth century also mediate cultural understandings of ecological futures, such as the preservation of ocean biodiversity, cod fish stocks, and human communities dependent upon these waters. One through-line running between the preceding chapter and this one is an interrogation of how scientific management of the physical world is positioned within resource capitalism. Whereas in Chapter 3 I excavated depictions of geology as a rational science and applied practice, here I probe how management models were deployed to *conserve* certain resources, while developing other energy frontiers. Through both collections of films, science along with politics are shown to be important means of governing human entanglements with the material, nonhuman world. Like the surface and subsurface landscapes of Western and Northern Canada in Chapters 2 and 3, the Grand Banks became a site of conflicting practices of environmental use, with both fish and oil being articulated in terms of different futures. As a site of an emerging petroleum frontier in the late twentieth century, as well the ecological and industrial collapse of the cod fisheries, the offshore can be viewed as the product of competing resource demands, attitudes towards managing the natural world, and hopes for future times.

Enclosing the Oceans, Creating the Commons

Much has been written about the Atlantic cod moratorium of July 1992. In the months and years following Fisheries Minister John Crosbie's announcement that the cod fisheries were officially shuttered, around 50,000 workers and nearly fifty percent of harvesting plants were made redundant within Newfoundland and Labrador, while hundreds of communities dependent upon the industry saw their economies gutted. ¹⁰ In response to the declaration of cod as a "commercially extinct species," ¹¹ Canadian news broadcasters focused on the tragedy of the out-of-work fishermen and the economic devastation wrecked upon their communities. Filmmakers also monitored the disaster and its aftermath, with documentaries like *Taking Stock* (1994) by Nigel Markham. ¹² Many scholars have pointed to this collapse of the cod fisheries as an example of what American ecologist Garrett Hardin theorized in 1968 as the "tragedy of the commons." In his foreword to Dean Bavington's history of fisheries management, for instance, Graeme

¹⁰ Elspeth Probyn, *Eating the Ocean* (Durham and London: Duke University Press), 123.

¹¹ Original emphasis. Bavington, *Managed Annihilation*, 2.

¹² Darrell Varga discusses *Taking Stock* in relation to the political mismanagement of the fisheries in Varga, *Shooting from the East*, 207–8.

Wynn characterizes the moratorium as "a classic tale of human rapaciousness and the plundering of nature's bounty" writ large, culminating in the decimation of one of the world's most prolific shared resources. Hardin himself also cited the world's fisheries as an example of how shared resources beyond states' legal jurisdiction are doomed to overexploitation and collapse: "the oceans of the world continue to suffer from the survival of the philosophy of the commons," as "Maritime nations [...] bring species after species of fish and whales closer to extinction." Considering Atlantic cod as a resource grouping, a species whose range is delimitated as much by human activity as by the watery currents of the Grand Banks, invokes questions of how societies demarcate (or enclose) certain resources as held in common. Further, since access to the commons includes types of resource management, attending to the commons also requires an examination of the economic, political, and legislative systems practices which govern access to them, as well as cultural norms and social contracts. The federal moratorium can be characterized as one example of this form of regulation.

The concept of the commons dates to the sixteenth-century enclosure movement in England, and the origins of capitalism as an economic system. In the late 1960s, Garrett Hardin revived the term to think through the perceived "population problem" of the era in terms of resource use and scarcity. Hardin conceptualizes physical environments as collections of shared resources, which he argues were historically held for communal or shared use. Using the metaphor of a shared grazing pasture for privately-owned cattle, he contends that holding a resource for collective use always already opens that resource up to over-consumption and collapse. Herein lies the so-called "tragedy of the commons": because the commons are always a finite resource, the unhindered economic "freedom" to access and consume it opens the commons to perpetual over-exploitation. The ecological drain of added use on the commons—typified in his article by a herdsman's addition of another cow to the shared pasture—appears

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¹³ Graeme Wynn, "Foreword: This Is More Difficult Than We Thought," in *Managed Annihilation: An Unnatural History of the Newfoundland Cod Collapse* (Vancouver: UBC Press, 2010), xi.

Garrett Hardin, "The Tragedy of the Commons," *Science*, no. 162 (December 1968): 1245.

¹⁵ Johanna Dahlin and Martin Fredriksson, "Extracting the Commons," *Cultural Studies* 31, no. 2–3 (2017): 253.

¹⁶ Hardin, "The Tragedy of the Commons," 1243.

¹⁷ Hardin, 1244.

¹⁸ Hardin, 1244.

marginal compared to the economic gain for an individual. However, if all members of a community act rationally according to capitalist economic theory, the commons will eventually come to ruin due to a lack of economic incentive or socio-political imperative to manage the commons more sustainably for future shared use.¹⁹

Hardin proposes two potential solutions to this problem of weighing the individual's short-term gains over society's long-term use of a shared resource. First, access to the commons can be rationed through various means of legislation or other policies to enforce the management of shared resources. Second, the commons can be privatized. In his view, both options can have negative consequences however. Privatizing property can remove some of the deterrents preventing corporations or individuals from releasing pollutants on their property, even as (according to Hardin) private ownership dissuades resource over-consumption. 20 These solutions, as well as the logics on which they are based, have faced numerous critiques from political theorists, economists, and environmental scholars alike. David Harvey argues that there is a "scale problem" in Hardin's famous metaphor of the cattle grazing the shared field, which makes it difficult to scale up solutions for more sensible management of commonly-held resources from local to global scale problems. 21 Moreover, Hardin's assessment of human behaviour when they have the "freedom" to access and exploit resources in the commons is predicated upon models of rational behaviour influenced by Western liberalism and classical economy theory. Likewise, a belief in the free market's ability to best allocate resources, and private property's inherent ability to ensure actors' more reasonable consumption of resources, incorrectly assume humans act in rational ways, which does not often correlate to the real world.

The problem of the commons has implications for the capture of fish, or other forms of life that can easily traverse vast distances across human-made political boundaries. (Or to paraphrase one of Elspeth Probyn's informants: fish have tails and tend to move.²²) H. Scott Gordon, in a 1954 article that anticipates some of the same concerns raised in Hardin's theory of the commons, proposes that there is "some truth in the conservative dictum that everybody's property is nobody's property" when it comes to the fisheries. Unless caught, the "fish in the sea are valueless to the fisherman, because there is no assurance that they will be there for him

¹⁹ Hardin, 1244.

²⁰ Hardin, 1245.

²¹ Harvey, "The Future of the Commons," 102.

²² Probyn, *Eating the Ocean*, 8.

tomorrow if they are left behind today."²³ Perhaps it should be of little surprise, then, that language of the commons and their collapse has eddied and swirled around scholarly, cinematic, and environmental discussions of the Atlantic cod. Prior to 1992, however, were other less well publicized, slowly escalating disasters within the Grand Banks fisheries. These had their own impacts on ocean ecologies and fishing people, as fluctuations in stocks (and market prices) contributed to a long-term worsening of economic conditions for many outport communities prior to the 1990s. At the same time, the moratorium requires contextualization within the longer history of the fisheries, given that, over the course of the nineteenth century, catch-rates per person had already dwindled by approximately two-thirds and overall cod hauls were in decline at the start of the twentieth century.²⁴ As the number of fishermen working in the Grand Banks (and the number of hours workers were out on the water) fluctuated over the course of the twentieth century in response to two world wars, instability in the global salt fish markets, and Newfoundland's entry into Canada, Newfoundland witnessed the industrialization and modernization of the fisheries with the introduction of corporately-owned fishing trawlers and industrial freezing plants.²⁵ All this troubles the popular narrative of the sharp collapse of the fisheries in the 1980s due to overfishing by local parties, and opens up questions about the constitution and maintenance of these fishing grounds as a commons.

Rather than wading into debates around which actors (local, national, transnational) were responsible for the ecological and economic demise of the cod fishery, I am interested in how the bountiful waters off the coast of Newfoundland were constituted as commons through cinema, and its implications for community formation. This collection of films from Newfoundland's post-confederation years foreground the precarious conditions of the fisheries as an industry and offshore ecology, as well as the equally shaky longevity of onshore communities. They also offer at times conflicting depictions of the health of fish stocks—narratives that are in part shaped by the funding bodies and institutions behind their production. Yet their emphasis on the cultural, social, economic, and personal links between fishing communities and their catch create spaces for inquiry into tensions between the onshore and the offshore—and the permeable boundary

²³ H. Scott Gordon, "The Economic Theory of a Common-Property Research: The Fishery" (1954), 124. Quoted in Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge and New York: Cambridge University Press, 1990), 3.

²⁴ Bayington, *Managed Annihilation*, xii.

²⁵ Bavington, xiii.

between the two. From the enclosure of the Grand Banks, we can trace how onshore and offshore commons are managed, conserved, and used to constitute community on screen.

Responding to contemporary extractive resource developments in Latin America, Mario Blaser and Marisol de la Cadena contend industrial resource extraction is predicated upon the enclosure of environments as "common goods" for state and corporate development—at the same time that complicit governments portray these extractivist projects as being undertaken for the populace's "common good." They argue that such conflicting articulations of the common good, and whether it can be achieved through the enclosure of commons or through environmental and social justice defence of the commons, in fact share similar assumptions about humanity's place in the nonhuman world. Contrary to conventional conceptualizations of "enclosure" and "the commons" which place the two in opposition under capitalism (as the former destroys the latter), the ideas in fact converge through their shared assumption of humans and nonhumans "ontological discontinuity" and a generalized category of the "human" (ignoring how histories of empire, colonialism, and capitalism create more precarious and privileged human groups). These ontological assumptions, in their view, objectify "non-humans as natural resources," while papering over the ways in which extraction, transportation, and access to these resources produce asymmetrical relationships between people. 27

"Commoning" and Building Community on the Backs of Fish

Produced as part of the NFB's Canada Carries On series, Inside Newfoundland (1951) presents post-confederation Newfoundland to mainland viewers. The film incorporates a combination of techniques, including newsreel footage of Joey Smallwood signing Newfoundland's confederation into law, views of the province's rocky coast that might appeal to Canadian summer travelers, and a fictionalized story of a "representative" outport family. As a projection of mainland expectations and stereotypes of Newfoundlanders, this overly quaint family is

²⁶ Mario Blaser and Marisol de la Cadena, "The Uncommons: An Introduction," *Anthropologica*, no. 59 (2017): 185. For more, see: Alberto Acosta, "Extractivism and Neoextractivism: Two Sides of the Same Curse," in *Beyond Development: Alternative Visions from Latin America*, ed. Miriam Lang, Lyda Fernando, and Nick Buxton, trans. Sara Shields and Rosemary Underhay (Quito (Ecuador) and Amsterdam (the Netherlands): Transnational Institute / Fundación Rosa Luxemburg, 2013), 61–86.

²⁷ Mario Blaser and Marisol de la Cadena, "The Uncommons: An Introduction," *Anthropologica*, no. 59 (2017): 186.

deeply entwined with fish. The patriarch is a fisherman like his father before him; his wife is a homemaker who tends to their young daughter, Hazel. White and working class, the family's survival depends upon what the husband can pull out of the sea. This deeply felt, yet economically tenuous connection between them and the ocean is neatly summarized in one word at a later point in the narrative. In a staged classroom scene set in Hazel's village school, the schoolteacher asks her students what Newfoundland can bring to Canada; "fish!" she immediately replies.

Against the backdrop of these connections, the rest of *Inside Newfoundland* attempts to make sense of the ambivalent relationship between the new province's predominately rural population and maritime heritage, and the rapid modernization of parts of the island's industry and transportation infrastructures (such as Gander International Airport, one of the region's major hubs for trans-Atlantic air traffic). This tension is best encapsulated in the subject of the cod fisheries. Through images of fishermen out at sea, juxtaposed against footage of an industrial processing plant, the film explains that modernization has "revitalized the fisheries" for the more than fifty percent of the populace who "depend on fishing for their livelihood." With improved "inspection of dried and salted cod" and "highly mechanized quick-freeze fish plants," the film claims that new methods for managing the harvesting and processing of fish have expanded the markets for local catch.

Such cinematic narratives of Newfoundland's economic underdevelopment, the coming modernization of the island's industries and society, and rich traditional culture bound up in the fisheries and coastal life conform to popular depictions of Canada's then-newest province from the 1950s and early 1960s. *Encounter at Trinity* (dir. Allan Wargon, NFB, 1957) about whale hunting and *Terra Nova* (dir. Roger Blais, NFB, 1964), depicting the island's heritage as a colourful product of the fisheries and surface resource industries like paper pulp, firmly ground Newfoundland as a folkloric province, with its metaphorical feet in the sea. Similarly, *Newfoundland Scene* (dir. Frank R. Crawley, 1951), produced by Crawley Films Limited and Imperial Oil Limited, associates folk culture with traditional seal and whale hunts to create a dramatic portrait of Newfoundland's landscapes and people.²⁸

²⁸ Multiple years have been identified as the official release of *Newfoundland Scene*. Darrell Varga, for instance, attributes the film to 1952. However, an article in *Atlantic Guardian* marks 1951 as the film's premiere. In 1972, *Newfoundland Scene* was re-released with a revised

These narratives about economic underdevelopment were not limited only to films about Newfoundland's outport fishing communities. *The Rising Tide* (dir. Jean Palardy, NFB, 1949) also addresses the financial destitution of fishing communities in the Maritimes and Cape Breton. Released the same year that Newfoundland entered the Canadian confederation, *The Rising Tide* depicts the emergence of cooperatives in those communities for whom, as the narrator commends, "the sea is their livelihood." The film calls for the diversification of the region's resource economy to include coal mining, agriculture, lumber, and steel manufacturing as a solution to its economic depression. As part of this strategy, the film endorses the notion that study groups, organized through workers' cooperatives, could help fishermen educate themselves about more productive techniques for harvesting fish and selling their catches to processing facilities (Fig. 10). In keeping with prevalent documentary techniques used by the NFB during this period, *The Rising Tide* narrativizes these issues through the representative story of Willie LeBlanc, a French-Canadian fisherman and member of one such cooperative. The Rising Tide contextualizes the predicament of Maritime fishing communities within the economic depression of the 1920s, and the collapse of a regional market for fish. In doing so, it emphasizes the precariousness of these communities and offers an ambivalent portrait of traditional folk cultures in the Maritimes as well as Newfoundland.

Inside Newfoundland, like other films of its ilk, narrowly constitutes Newfoundlanders' sense of individual and communal identity through their entanglements with fish. While reductive in many ways, these films nevertheless also tangentially participate in the process of what Blaser and de la Cadena term "commoning" through the "uncommons." In their theorization of the commons, they point to the "heterogeneous assemblages of life" that transcend or exceed the process of constituting certain materials as being held communally. This "entangled excess," which they call "the uncommons," does not conform to colonial or capitalist epistemological distinctions between humans and nonhumans. Fish, as autonomous species entangled within human societies and economics but irreducible to them, can be conceptualized in these films as part of the uncommons. Blaser and de la Cadena mobilize this term to argue for a more nuanced theorization of the commons that calls attention to the ways in which the world is produced as "shared ground" and sheds light on the very process of creating community

narration voiced by Gordon Pinsent, and the whaling sequence removed. Varga, Shooting from the East, 229; "Newfoundland Album: Newfoundland Scene," Atlantic Guardian, May 1952, 28. around the notion of a common good. In this vein, they speak of "commoning" as an action and process that can include humans and nonhumans alike as "active agents." ²⁹

The process of commoning is therefore constitutive; it involves drawing a line around a space and collection of materials or species (an act of enclosure) to render them a commons. *Inside Newfoundland* offers one such example, proposing a "common future" for Newfoundland and Canada, but one which renders the former's raw materials—water, wood pulp, minerals—accessible to the latter. The film celebrates the project of confederation, extolling "the dream of confederation" in one scene, which unites Labrador and Newfoundland with the rest of Canada "not only by geography but by political fact." The act of commoning in this text aligns with federalist visions of a transcontinental nation. Through the shared experiences of "climate and geography," residents of Newfoundland and Canada are presented here as members of a shared community, bound by Newfoundland's shared resources, which the film implies are held "in common" for all Canadians to benefit from.

In Blaser and de la Cadena's view, both the "uncommons" and "commoning" as an active process also productively destabilize assumptions that the world can be neatly sectioned up into objectified resources. Here, the complex entanglements of planetary forces, human and nonhuman life, and complex cosmologies can no longer be reduced to capitalist articulations of shared interests and "stakeholders." Focusing on making commons as an activity, rather than a noun, prompts us to foreground the ways in which resource extraction constitutes societal relationships to other humans, in addition to society's relations with the nonhuman world. ³⁰

Entanglements between humans, fish, and the world's oceans are inescapably complex. As Probyn observes, human understandings of "fish-as-food" are snared in this web of nonlinear historical and colonial commodity chains, local labour, technology, and global industry. ³¹ Although Newfoundland floats off the edge of mainland Canada, it nevertheless remains enmeshed in colonial histories of European migration to the Grand Banks to fish and later settle, as well as ongoing economic inequalities between mainland Canadians and Newfoundlanders post-confederation. Cinematic depictions of Grand Banks fishing are weighted with distinctly Western ontological assumptions about human-nature entanglements, which differ from those

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²⁹ Blaser and de la Cadena, "The Uncommons," 186.

³⁰ Peter Linebaugh, *The Magna Carta Manifesto: Liberties and Commons for All* (Berkeley: University of California Press, 2008), 279.

³¹ Probyn, *Eating the Ocean*, 5.

within Indigenous cosmologies. Through her anthropological fieldwork on human-fish relations in Paulatuug in the Northwest Territories, for instance, Zoe Todd observes how "fish exist in a pluralities of ways" for the Inuvialuit of Paulatuug, which are irreducible to Southern Canadian and colonial attempts to regulate and manage Arctic fisheries.³²

What brings people together to create a commons is not always the same, even if it involves seemingly shared interests—such as fishing for profit. Describing how actors can be drawn together with interests that may not be reconcilable, Blaser and de la Cadena assert that difference and unruliness can erupt through these asymmetrical stakes. One such space of potentiality is created in *Trawler Fishermen* (1966), a documentary touting the ostensible marvels of industrial-scale fishing produced by the National Film Board for The Department of Fisheries of Canada. Shot a year prior to the Newfoundland Project, *Trawler Fishermen* offers a valuable glimpse into how this agency sought to represent the Grand Banks fisheries, and the struggles fishermen in Atlantic Canada faced in the 1960s. Shot upon the waters of the Grand Banks, Trawler Fishermen adapts popular folkloric imagery of Maritime culture to frame its depiction of deep-sea trawlers as a continuation of traditional fishing culture, rather than an economic and technological disruption to it. This technique is quickly established in the opening sequence, a montage depicting the life and labour aboard a trawler from Halifax named The Cape Nova. Close-ups of men repairing nets by hand and pulling in the catch are accompanied by folk music (composed by a band fittingly named the Stormy Clovers), heavily derivative of Canadian folk pop in the vein of Gordon Lightfoot and Maritime musical traditions. This is juxtaposed against the industrial nature of this new mode of offshore fishing, distilled in the next scene's sounds of heavy machinery as workers help lead the enormous, florescent orange trawl nets aboard. The nets are heavy, laden with fish, as they are pulled from the choppy waves. The first of the film's many voice-over "testimonies," or dramatic expressions of the fishermen's thoughts, explains the nature of the job. "The faster the net comes in," one man states, "the faster it's out again for fish."

At the same time, the film's emphasis on the all-male crew, masculine labour, and the homosocial space of the trawler sows the seeds of homosocial community through a shared love of fish—even as industrial-scale fishing threatens the ecological health of the fish themselves. At

³² Zoe Todd, "Fish Pluralities: Human-Animal Relations and Sites of Engagement in Paulatuug, Arctic Canada," Études/Inuit/Studies 38, no. (1-2) (2014): 218.

several points, the camera lingers on what could be constructed as domestic spaces like the mess hall and brief moments of relaxed intimacy between fishermen off the job. These homosocial scenes are folded in the narrative's overall claim to fishing tradition, yet also exceed these. The men, for instance, are shown as wedded to the sea and this lifestyle because of their shared maritime heritage. One fisherman mentions that his father taught him to fish as a child, so he became committed to the sea from an early age. Another young man becomes engaged to his girlfriend on a craggy cliff against the backdrop of the sea, reiterating the inter-generational connection these men have to the ocean for their livelihood, sense of identity, and masculinity (**Fig. 11**). The homosocial nature of fishing is hinted at again in another scene of leave time. In it, adolescents are shown having a rip-roaring time at a country fair, riding a rollercoaster, eating French fries, and winning prizes for their lady friends. Yet this scene of cross-gender festivities and flirting offers only a brief interlude in both the film and the men's time aboard the ship. Before long, the film (and the fishermen) return to the trawler, back to the community of men, physical labour, and long hours at sea. Another voice summarizes this return saying: "You're glad to get back to sea when you're with a good crew. And when you can look forward to the times ashore." Despite the film's insistence upon intergenerational love of fish and ocean, reproduction here is not so much achieved through the heterosexual family (like that fictionalized family at the center of *Inside Newfoundland*), but through the masculine spaces of work and homosocial education aboard the ship. As one man explains in voiceover at the end of the film, over a night scene of the trawling nets going out, "I remember when I was young, going out with my father, I used to love fishing. Still do." The eroticism of the sea, and the intergenerational nature of this aquatic passion, bubble up in such casual moments, in close ups exhausted men relaxing next to each other aboard the ship or joking over a hot meal in the mess hall, cigarettes balanced on their lips.

The importance of extractive industry as a site for building the homosociality of the trawler cannot be understated. The workers' shared experience in an isolated space, collective physical danger, and shared commitment to life at sea provide the ties that bind. Depictions of male sociability through extractive, gendered labour run through other films about other industries, offshore and on. Like *Ressources sous-marines* (1973), in which women are not allowed into the all-male space of the offshore rig (supposedly for safety purposes), or the quiet domestic scenes of the Western oil workers sleeping and eating in *Roughnecks: The Story of Oil*

Drillers (dir. Guy L. Côté 1960), masculine brotherhood is constituted through extraction. At the same time, these practices of building shared community is implicated in trawlers strip-mining of the Grand Banks fisheries, which rendered the lives of fish stocks and livelihoods of inshore fishermen precarious. In her analysis of gender in the fisheries, Nicole Gerarda Power contends that the interactions between capitalist limitless accumulation, patriarchy, and masculine dominance have exacerbated resource over-consumption and environmental degradation, as well as societal responses to it.³³ Such industrial-scale production of commodities under capitalism takes the place of biological reproduction; men can fish further and further afield, upgrading their equipment and technologies to ensure full catches and make human labour productive. However, in doing so, they ignore the biological realities of reproduction, in that the fish stocks cannot physically reproduce fast enough to replenish the seas. Metaphorically and materially, production is taken out of the realm of biological reproduction and female labour (of human women, as well as fish), and firmly placed within the hands of men. These varied images of fishermen and outport towns constitute Newfoundland's communities through their shared harvesting of the sea, albeit through a variety of interests that are not necessarily held in common. At the same time, fish prove to be unruly beings, assemblages that can exceed such processes of commoning just as the communities themselves resist easy classification into federalist or heteronormative discourses about Newfoundland.

Conservation and Management, Onshore and Off

Resource conservation comes in many forms. From initiatives to encourage reduced fossil fuel consumption to the protection of endangered animal habitats, conservation points to humanity's interest in finding ways to manage the natural world, and human relations to it. Conservation encompasses both the ideal of the protection and maintenance of human and nonhuman ecologies, cultures, and systems into some future time, as well as the various methods one might put into practice to facilitate it. In this sense, conservation enlists the tools of large-scale management to maintain the conditions of these ecosystems, relationships, cultures, or infrastructures. Managerial approaches to nature, according to geographer and environmental historian Dean Bavington, are predicated upon a belief in humanity's moral authority and ability

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³³ Nicole Gerarda Power, *What Do They Call a Fisherman?: Men, Gender, and Restructuring in the Newfoundland Fishery* (St. John's: ISER Books, 2005), 203.

to control complex organic systems, climatic contingencies, and human behaviour. In his historical account of Grand Banks fisheries management, Bavington argues that the scientific and technological manipulation of these oceanic ecologies encompassed notions of control and caretaking. Fisheries management creates hierarchical environmental and social relations by transforming humans and other species into "standing reserves" with instrumental value, which can be quantified, re-allocated, consumed, and controlled from a distance. ³⁴ Managerialism positions the organization and control of environments as a generalized and universally-applicable technology, reducing the world's complex entanglements to simplified, smaller units to which technical solutions can be developed and applied. ³⁵ Critical histories of managerial responses to the commons such as Bavington's therefore seek to re-examine beliefs in scientific administration as a solution to ecological and social problems, while tracing some of the intersections of environmental management with state and colonial control of bodies and geographies. ³⁶ In this section, I examine how efficient resource management is presented in a variety of films about the fisheries both in relation to conservation and imagined futures.

Documentary and sponsored films about the Grand Banks made by Memorial University Extension Service and the National Film Board in the decades leading up to the cod moratorium depict conservation and resource management of offshore industries—and the people entangled with them onshore—in several dialectical ways, reflecting the different historical roles and potential threats posed to fish and oil. Within fisheries-focused films, state management is shown to offer methods for facilitating the conservation of a species through modernization and up scaling. At the same time, these management strategies promote the longevity of the industry at the expense of the ecological health of the oceans. With offshore oil, however, because of the layers of uncertainty around whether offshore extraction might pose an ecological or social threat to coastal communities (and whether petroleum could be profitably extracted on an industrial scale), several films about this then-emergent resource frontier engage more explicitly with

³⁴ Bavington, *Managed Annihilation*, 5.

³⁵ Bavington, 7.

³⁶ Some scholars examining the role of science in today's current petroleum-driven environmental threats have lobbied similar critiques of positivist beliefs in technology's ability to innovative us out of these problems. Imre Szeman, for instance, argues that techno-utopian narratives, which elevate scientific progress as a means to "mitigate the end of oil," support managerial and technological solutions to avoid challenging capitalist economic norms and consumption patterns in the Global North. Szeman, "System Failure," 812–13.

concerns about the conservation of marine life and traditional Newfoundland culture. Further, a growing awareness of the global insecurity of oil reserves in the wake of the OPEC crisis in 1973 positioned fossil fuel conservation as a method for ensuring the continuity of petro-modernity. In effect, these films portray the management of resource commons—of fish and fossil fuels—to potentially conserve environments, while nevertheless expanding resource frontiers.

Conservation, like maintenance, is deeply implicated in temporal as well as material questions. If a species, wild space, or economic sector is to be conserved to ensure continued survival, at what point will this process prove successful and warrant the termination of managerial intervention or stewardship? Given the second law of thermodynamics, which proposes that all matter will eventually deteriorate over time as the energy embodied in it becomes less ordered, conservation is always already embedded in the temporal question of "until when"? This question has received attention from environmentalists, policymakers, and scholars within the environmental humanities, given contemporary concerns about humancreated climate change and rapid resource depletion. Since the late 1980s, concepts of sustainability and sustainable development—which Cheryl Lousely defines as forms of development that can meet the needs of the present without endangering future populations' ability to meet theirs³⁷—have gained currency within public consciousness, and institutional and corporate approaches to the natural world. Yet like a perpetual motion machine, sustainability, in Lousely's words, can "only be recognized as achieved if it does not end." Examining the ways in which conservation and sustainable scientific management are invoked in films about offshore resource commons therefore involves an attention to temporality and their implications for human-nonhuman relations within capitalism.

Before proceeding, I would like to situate these productions within a broader history of Canadian resource management and ecological conservation. In the mid-nineteenth century, popular interest in nature and wilderness preservation emerged as beliefs in resource "superabundance" and unlimited "natural wealth" began to give way to some of the realities of over-exploitation, diminishing natural spaces, and resource scarcity. Governmental policies towards natural resource extraction and the creation of national parks at the turn of the twentieth

³⁷ Cheryl Lousley, "Global Futures Past: Our Common Future, Postcolonial Times, and Worldly Ecologies," *Resilience: A Journal of the Environmental Humanities* 4, no. 2–3, Environmental Futurity (Spring-Fall 2017): 22.

³⁸ Lousley, 26.

century adhered to a financial model of "revenue generation" over investments in preserving specific populations or habitats for their own sakes.³⁹ While middle-class Canadians participated in the cultural and aesthetic appreciation of nature and outdoor leisure activities like hiking, canoeing, or nature watching, governments continued to measure the importance of wildlife and natural landscapes in financial terms.⁴⁰ Around this time, the 1930s, concepts of "conservation" and "ecology" began to emerge within the public sphere and federal policies; in the early 1970s, environmental conservation became institutionalized through wildlife service bureaus and environmentalist groups like Greenpeace who contributed to public discourses about human-environmental relationships.⁴¹

As a former colony and settler nation, the implementation of conservation practices to preserve individual species (and later ecosystems) also bore the weight of colonial implications. Scrutinizing French and British conservation practices in their colonies, John MacKenzie observes how imperial governments backed up conservationist ideas with Western science while devaluing Indigenous cultural practices and cosmologies. 42 In some colonial territories, the protection of biodiversity included removing human populations from these spaces and barring traditional (Indigenous and non-Indigenous) access to these resources on the assumption that these land-use practices were detrimental to the environs. In Canada, the implications of resource conservation have similarly been felt unevenly across rural, outport, and other geographically remote white and Indigenous communities. Governmental policies surrounding land management and environmental conservation—as I have argued across Chapters 2 and 3 in relation to Western land sales and governmental collaboration with corporations to facilitate petroleum developments in the North—were entangled in Canada's colonial history of settlement and the displacement of First Nations and Inuit peoples. Although the Canadian Wildlife Service began to institute scientific wildlife management practices following World War Two, local private game associations also took a leading role in promoting and enacting these practices. In the Western provinces, wildlife conservation sometimes took on overly racial and colonial overtones, as local hunting and fishing organizations accused Indigenous peoples of overhunting

³⁹ Hood, *The Beaver Manifesto*, 104.

⁴⁰ Hood, 104.

⁴¹ Loo, *States of Nature*, 3–4.

⁴² MacKenzie, "Introduction," 9.

and attributed the disappearance of wildlife on non-white immigrants. ⁴³ "Conservation," according to Karla McManus, "was not just about protecting the natural resources of a region: it was driven by the local interests of settler groups who saw the wealth of the natural world as their own." ⁴⁴ Indigenous ecological knowledge and cosmologies respecting the complexity of human-animal relationships were also often excluded from state-driven wildlife management policies, or shoehorned into prevailing legal and Western epistemological frameworks. ⁴⁵

Like Inside Newfoundland, High Tide in Newfoundland (1955) promotes the modernization and industrialization of the province's commercial fisheries as a route to increased production. High Tide in Newfoundland opens by establishing historical linkages between the white settlement of Newfoundland and European cod fishing in the Grand Banks. This connection between white European settlement and the island's resource economy is therefore similar to the narrative of This Is Our Canada, discussed in Chapter 1. High Tide in Newfoundland offers a laudatory depiction of the province's fishing industry in the early 1950s, which it depicts as having broken from traditional, "slow" methods and technologies of catching cod. Juxtaposing shots of frozen cod filets and a modern factory processing the raw resource into frozen foods for consumer markets with images of traditional coastal life, it promotes a vision of a modernized fishing industry, replete with state-of-the-art packaging plants and new technologies for catching fish. By focusing on the transformation of fishing from a traditional, small-scale practice to a market-led, modernized industry, it also depicts the early years of industrial-scale fishing featuring commercial fishing vessels like draggers (or trawlers). Such methods, according to the film, ameliorate the daily working conditions for fishermen and assist in the expansion of the province's economy.

The emphasis on scientific management as a tool for expanding Newfoundland's fisheries to compete with enterprises in mainland Canada and abroad has strong parallels to the floating factories of *Trawler Fishermen*. Outfits of this type employ dozens of workers onboard to operate the nets and gut and freeze their catch, producing in a single trip what independent outfits would take dozens of voyages to accumulate. Imagery in both films bolster their claims that these operations represent the height of modern, industrial-scale fishing for their respective

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⁴³ McManus, "These Diminished Waters," 69.

⁴⁴ McManus, 69.

⁴⁵ Todd, "Fish Pluralities," 221.

periods. The celebratory depiction in *Trawler Fishermen* includes numerous sequences of bursting nets of fish, gutted fish pouring over the sides of the freezer bins, and discarded parts swilling in the bottom of the boat. The role of trawlers such as these in the assembly-line manufacture of food for shipment to domestic and foreign markets is reiterated at several points, particularly in shots of an onshore processing plant. Here, the scaly bodies are chopped, pressed, and otherwise standardized into geometrically-severe fish sticks and fish cakes—capitalism's production of nature into easily consumable commodities *par excellence*. 46

Through the language of capitalist competition, both films balance the survival and expansion of Newfoundland's fisheries upon improved technologies, bigger boats, and modernized infrastructures. In one scene from *Trawler Fishermen*, a man explains that in order to compete with the "foreign trawlers" out in the Grand Banks—located "right off Canada's coast, [in] our backyard"—domestic fishermen have "got to smarten-up to compete. Get bigger ships, bigger fleets, and the best trained crews to man them." Fishing, in order words, is an arms race, in which the success of a catch depends upon scaling up and expanding one's reach. Depictions such as these belie the reality of the fish stocks' decline (as scientists, researchers, and inshore fishermen already recognized by the 1960s), while also reproducing what Stewart L. Udall calls the "myth of superabundance." Udall coined the phrase in 1963 to describe the (mistaken) conviction that environments provide an inexhaustible supply of natural resources so humanity could continually expand its consumption without risking the earth's depletion. While today the entirely fictitious nature of this belief appears self-evident, Udall's work emerges from the American conservation movement of the 1960s, and this context structures his concern for white Americans' relationships with the natural environment. White explorers and settlers coming to the continent, he argues, developed this state of mind when confronted by the relative abundance of water, timber, minerals, and wildlife in North America compared to the significantly more exhausted environments of Europe. These experiences, in turn, "enticed men to think in terms of infinity rather than facts [...]."47 This concept of hyper-extraction rooted in the myth of North America's unlimited resource wealth also relates back to expanding resource frontiers, which I theorize in Chapter 2. As the frontier of a given industry moves, that resource

⁴⁶ Smith, *Uneven Development*.

⁴⁷ Stewart L. Udall, *The Quiet Crisis* (New York, Chicago, and San Francisco: Holt, Rinehart and Winston, 1963), 54.

will become exhausted, leaving behind damaged ecosystems in its path. Udall theorizes this movement and production of ruined landscapes in his writing on the lumber industry: "Lumbering, in its raider phase, was a strip-and-run business: the waste of wood was enormous, and when the best stands hand been cut, the operator dismantled his mill and moved it farther West [...]," thereby leaving the ravaged landscape behind as the frontier moved.⁴⁸

In challenging this myth of superabundance, Udall also warns of modern society's hubris in its belief in "dominion over the physical environment," arguing instead for a model of environmental "stewardship" that conserves wilderness, while also preserving modern society's respect for natural spaces. 49 While Udall does not use the term "management" per se, his endorsement of environmental stewardship as a conservation model conforms to Bavington's critique of environmental management as a form of benevolent control, which upholds a faith in managerial solutions to environmental crises. Cinematic depictions such as these that favour the expansion of the fisheries through better management techniques and new technologies reinforce this competitive logic of extractive capitalism. At the same time, this logic altered the temporality of cod as a renewable resource, that is, as a species that could repopulate itself. Cinematic depictions of the economic devastation facing rural Newfoundlanders with the loss of fish, like in the Fogo Process films to which I turn shortly, limitless extraction of the ocean commons rendered fish a nearly non-renewable resource.

Notably, these films were released prior to the introduction of individual transferable quotas (ITQs) in Canada (along with several other fishing countries like Australia and Iceland) in the late 1970s and 1980s. As a management strategy, the ITQs consolidated industrialized fishing in the powerful hands of a few companies, further ramping up the replacement of smaller-scale practices of fishing "in common." 50 Nevertheless, the acceleration of this logic behind the corporate consolidation and scaling-up through larger operations and more advanced deep-sea detection technologies to track fish shoals can be traced through these films.

The Farming of Fish (dir. Paul MacLeod, 1977), co-produced by MUN Extension and the Film Board's Atlantic Studio, offers another perspective on the entanglements of conservation and fisheries management by proposing a model of conservation that maintains the fisheries as

⁴⁸ Udall, 56.

⁵⁰ Probyn, *Eating the Ocean*, 4.

an industry, rather than the long-term survival of fish species. According to promotional coverage of the film in Memorial University's campus newspaper MUN Gazette, the idea for this documentary emerged from discussions between Extension's Film Unit and filmmakers at the NFB about "farming the sea," and attention that Norwegian experiments with aquaculture received in Canada's Atlantic provinces.⁵¹ Produced with the intention of circulating information to Newfoundland communities groups who might have an interest in this practice, 52 The Farming of Fish depicts family-led and operated fish farms in some of Norway's coastal communities. Consisting of interviews with family farmers, community development workers, and scientists, the documentary concentrates on smaller-scale fishing enterprises as a counterpoint to largerscale industrial operations. Yet this mode of cultivation still inscribes fish within the industrial production of food, while diversifying fish frontiers to feed consumer markets. By mobilizing pre-existing labour forces and infrastructures for aquaculture, the film depicts a shift from inshore harvesting of wild fish to fish farming, an industrial practice of aquatic food production. Workers' livelihoods and some species of wild fish might be conserved if aquaculture was to take off in Newfoundland as the film suggests, but here the conservation of marine ecosystems takes a backseat to the creation of economic opportunities and preservation of coastal communities.

Collectively, these films concern themselves very little with the onshore implications of a threatened marine ecology through over-fishing or with the consequences for people within human-fish-sea entanglements. Probyn's query "what happens to human-fish settlements when the fish disappear?" ⁵³ offers a productive frame for examining documentaries from the Newfoundland Project about fisheries decline. ⁵⁴ Films like *Brian Earle on Merchants and Welfare* (1967) and *Billy Crane Moves Away* (1967)—made collaboratively by MUN Extension Services, residents and fieldworkers on Fogo Island, and the NFB—give voice to the experiences

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⁵¹ "The Farming of Fish," MUN Gazette, October 21, 1977, 5.

^{52 &}quot;The Farming of Fish," 5.

⁵³ Probyn, *Eating the Ocean*, 12.

⁵⁴ For more extensive studies of the Fogo Island films and their production, see: Susan Newhook, "The Godfathers of Fogo: Donald Snowden, Fred Earle and the Roots of the Fogo Island Films, 1964-1967," *Newfoundland and Labrador Studies* 24, no. 2 (2009): 171–97; White, *The Radio Eye*; Thomas Waugh, Michael Brendan Baker, and Ezra Winton, *Challenge for Change: Activist Documentary at the National Film Board of Canada* (Montreal & Kingston: McGill-Queen's University Press, 2010).

of rural and economically marginalized residents of Newfoundland's peripheral outport towns as the economic and political structures of the fisheries shift to favour consolidated industrial extraction models. In other words, these films testify to the ability of capitalism to "create and then dismiss a way of life," to draw on the words of anthropologist Jane Nadel-Klein. What they describe as the failures of fisheries management in these documentaries are the other side of the industry's success projected in *Trawler Fishermen*. Progress and scaling-up in the short term create longer-term ramifications for ecological sustainability and labour. In other words, these Fogo Process films visualize the uneven weighting of resource entanglements, through management and its failures.

Scholars of Canadian documentary cinema who have written about the "Fogo Experiment" have typically done so in the context of the National Film Board's turn towards activist filmmaking and citizen participation documentary in the late 1960s.⁵⁶ However, these accounts often characterize the Newfoundland Project primarily as a creation of the Film Board, which were enabled by the local knowledge and on-the-ground connections of Extension staff but were not necessary a product of institutional collaboration. Susan Newhook takes issue with such a characterization, arguing that the Fogo Island films were in fact a collaborative project between MUN Extension, the NFB, and the residents of Fogo. Newfoundlanders were not "passive recipients of an intellectual transfer from Montreal," she asserts, but rather were collaborators with the NFB.⁵⁷ From this perspective, these productions were one of several projects undertaken by the Extension Service through their fieldwork and community development programs across the province. Scholarship about the Newfoundland Project also frequently becomes ensuared in federalist and mainland assumptions about Atlantic Canada's economic development and modernity. Diverging from these previous accounts, I instead shift my analysis to the films' emphasis on the economic conditions of rural outports and declining fishing industry that frame so many of the residents' stories.

⁵⁵ Jane Nadel-Klein, *Fishing for Heritage: Modernity and Loss Along the Scottish Coast* (Oxford and New York: Berg, 2003), 1.

⁵⁶ Jerry White, *The Radio Eye: Cinema in the North Atlantic, 1958-1988* (Waterloo: Wilfrid Laurier University Press, 2009); Thomas Waugh, Michael Brendan Baker, and Ezra Winton, *Challenge for Change: Activist Documentary at the National Film Board of Canada* (Montreal & Kingston: McGill-Queen's University Press, 2010).

⁵⁷ Newhook, "The Godfathers of Fogo," 173.

It is necessary to recognize, however, that the "Fogo Process"—the method of using film as a catalyst for social change by enabling a community to participate in the filmmaking process as a means of viewing itself⁵⁸—did help facilitate the expansion of Extension's communitybased filmmaking in the following two decades. By the end of the 1960s, cinema had become "a major instrument" in the institution's community and social development work according to Memorial University's 1968-1969 President's Report, which it characterizes as "the process whereby people are led to diagnose their own problems and to help themselves to find a remedy."59 The Service's first experiment with cinema through its collaboration with the NFB enabled the new Film Unit to expand into other areas of the province, capitalizing on the international attention brought to the project. 60 Filmmaking about the fisheries and offshore oil at MUN Extension also engaged with the institution's other areas of service. These included its field services in rural communities, information and research projects (including publications like the bi-weekly magazine *Decks Awash* and public conferences), and adult education courses. Running throughout these different programs and media productions is an emphasis on supporting the economic development and autonomy of rural communities through organizations such as workers' co-ops and skills acquisition.

In *Brian Earle on Merchants and Welfare*, Fred Earle—an Extension Service field officer and relative of Brian Earle, although the film includes no mention of their family ties⁶¹—has an interview with a local fisherman, Brian Earle. Their conversation takes place in front of a small harbour, on which local workers stack dried salt cod and children play. The film's narrative concentrates on the relationships between fishermen and the merchants who buy their catch to sell to processing plants and markets. It begins with a quick establishing shot of the outport town on Fogo Island. The foreground of the scene is all water, a natural cove, on the edge of which nestles the fishing village. Wooden boats are moored in the water; the saltbox houses and steeple of the local parish perch on the rocky shore behind them. In the immediate foreground, a man totes some wooden boards by motorboat. The roar of its gas-powered engine abruptly breaks the silence of this otherwise tranquil scene. From this view, the film cuts to an interview between

⁵⁸ Mike Riggio, "Atlantic Echoes," *Cinema Canada* 82 (March 1982): 12.

⁵⁹ "President's Report 1968-1969" (St. John's: Memorial University of Newfoundland, September 1970), 6.

^{60 &}quot;President's Report 1968-1969," 6.

⁶¹ Newhook, "The Godfathers of Fogo," 195.

Brian Earle (located on the left side of the frame) and Fred Earle (on the right). Throughout the film, the camera remains mostly concentrated on the two men, framing them as they speak, but the camera is also quite fluid, panning and zooming to show the men in their boats in the background and school-aged boys hanging around the wooden deck behind them. Their exchange concentrates on relationships between self-employed fishermen like Earle, and the merchants who purchase their catches to sell to processing plants. The two men also discuss the complexity of the "labour problem" facing Fogo islanders, which hinges upon the federal welfare system as much as it does the government's attempts to study, industrialize, and modernize the inshore fishing industry.

Similarly, *Billy Crane Moves Away* documents an interview between Billy Crane, a fisherman on Change Island who decides to move his family to Toronto because of the depressed economy, Fred Earle, and Cato Wadel, a Norwegian sociologist doing comparative field research on Norwegian and Newfoundland fisheries. ⁶² Crane critiques the government's model of throwing its support behind the construction of new processing plants or dryers, rather than addressing inequalities in access and scale between private fishermen and corporate trawlers, and fishermen's inability to compete in a changing market. Explaining that he attempted to secure a loan or government subsidy to purchase a schooner (this larger vessel would have enabled him to reach less-exhausted fishing grounds further North along the coast of Labrador), Crane laments the government's lack of investment in rural fishermen like himself. Like Brian Earle, he argues that the problem is a failure of government support and management, by making funding available for resettlement programs rather than rural economic development.

Emerging from these exchanges are the multiple ways in which management of humanfish relations renders both forms of life more precarious. The simultaneous up-scaling of corporate fishing models and the pushing-out of small scale, family enterprises like Brian Earle's

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buring the late 1960s, Cato Wadel was conducting research on unemployment in the fisheries while also teaching at Memorial University as an assistant professor in the Department of Sociology and Anthropology. His research on Norwegian and Newfoundland fisheries played a role in both the Fogo Process films and the Extension Service's later research and video production on offshore gas and oil. Wadel also appears in *Thoughts on Fogo and Norway* (dir. Colin Low, 1967), discussing structural differences between Norway and Newfoundland's fishing industries. His research appears in his co-edited collection *North Atlantic Fishermen: Anthropological Essays on Modern Fishing* (Wadel and Anderson, 1972) and "Communities and Committees: Community Development and the Enlargement of the Sense of Community on Fogo Island, Newfoundland" (1969), commissioned by Memorial University.

or Billy Crane's weaken fishing communities economically, while exacerbating the ecological damages caused by overfishing. Scientific management neither aims to conserve the economic longevity of traditional outport communities nor assists in the survival of fish species. Instead, as the films vividly argue, policies offer economic incentives for workers to go on welfare rather than compete with industrial trawlers. Sustainability, here, gives priority to industrial maintenance, rather than the persistence of the particular types of human-fish relationships that had historically scaffolded outport community life. To put it another way, Probyn critiques such models of sustainable fishing for "evinc[ing] little concern or interest in what it would take to sustain the biocultural relatedness of fish and humans that is millennia old." These managerial models perpetuate epistemological biases as well. According to Bavington, policymakers privilege the technical knowledge of managers and experts over the knowledge or lived experiences of supposed "non-experts" and others "identified as problems in need of management," such as those like Earle or Crane. As we can see from these films, different actors with shared interests in the fisheries nevertheless hold diverging ideas about how to ensure their continued survival and accessibility to fishermen.

Fuel Conservation, Environmentalism, and the Limits of Sustainability

The question of whose interests to protect when it comes to conservation runs through cinematic depictions of exploratory drilling for petroleum and natural gas offshore, as well as images of the fisheries. In these offshore oil films, management and conservation are similarly bound up in tensions between the conservation of ecologies (and fuel reserves) and the longevity of economic practices. *Operation Conservation* (1979), produced by the National Film Board for the Department of Defence, offers another example of how sectors of the Canadian government were participating in conversations about resource management. As a sponsored production for the Canadian military, *Operation Conservation* aims to promote domestic petroleum conservation by recommending ways to reduce military and civilian fuel consumption. The film frames its concern over energy conservation through the geopolitical concerns of the day—namely, the impending threats of raising crude oil prices resulting from the OPEC crisis and fears that demand may outstrip global petroleum supplies by the following decade—and the military's

⁶³ Probyn, *Eating the Ocean*, 7.

⁶⁴ Bavington, Managed Annihilation, 7.

heavy reliance upon petroleum to meet its energy needs. Much like *Battle for Oil* (1942) mentioned in the preceding chapter, *Operation Conservation* is evidence of the close links between military and industry through the entanglements of oil. Considering this, energy conservation functions as a tactic to reduce the military's vulnerabilities and dependence upon the fluctuations of the global energy market, rather than an environmentalist one. Nevertheless, *Operation Conservation* adopts the language of the then-growing environmentalist movement, by articulating the reduction of fuel consumption through collective action.

Foregrounding its aim of raising awareness of energy conservation, the film's narrative emphasizes recently introduced governmental policies, such as energy conservation week, which seek to draw Canadians' attention to their daily energy consumption. Asking for "your attention" and "your cooperation" through these initiatives, *Operation Conservation* positions fuel conservation as a communal project. The film's bilingual narration, which trades off between a male Anglophone and female Francophone, assists this cause, while also meeting the aims of the 1969 Official Languages Act, which gave French and English equal legal standing in the Canadian government. Each narration is a direct translation of the other, making the film linguistically accessible and an exercise in bilingual nation-building. However, the narrators' non-regionally specific accents convey a sense of universality, while sublimating any political or separatist connotations of speaking Québécois French.

Throughout the film, energy conservation in the Department of Defense is brought into focus, but in such a way as to weaken the boundaries between the military and the citizen public. After recounting internal policies to promote reductions in energy use within the military, the film switches tracks to focus on how members of the military need to bring energy conservation into their homes to complement the policies being put in place in their workplace. This includes the purchase and use of energy efficient appliances, thereby posing energy conservation in capitalist terms as well as policy ones. Here, the viewer is constituted as a consumer-citizen, who can become an agent of change by voting with her loonies, connecting government policies—like the introduction of energy week—to individuals' consumer decisions. In this vein, *Operation Conservation* offers easy tips to viewers about how they too might live a more energy-efficient lifestyle, by turning down the home thermostat or closing the curtains at night to conserve heat within the building. The homes depicted within sequences such as these are distinctly middle class, located in suburbs and inhabited by white nuclear families. Post-war

NFB productions like *Operation Conservation* can be read for their constructions of and contributions to making the country's white middle-class citizenship, and the ways in which government documentaries functioned according to Zoë Druick as "a technology of social science" and "liberal democracy." Although the narrative obliquely references some renewable energy sources such as electric cars for military use, overall it promotes a discourse of citizen self-governance to facilitate energy sustainability while carefully avoiding challenges to overall consumer habits or military energy practices. As the Anglophone narrator explains: "The most important thing of all is to make the next generation aware of how little energy is left, and what they can do to make it last." In its simplest form, conservation is about reduction, rather than structural change. No indication is given of what will come to pass when petroleum runs out, because even though energy sustainability can prolong and attenuate the end of oil, it does not resolve the ultimate concern briefly raised in the beginning of the film: the peak and projected exhaustion of global petroleum supplies.

Despite its focus on energy consumption, little mention is made of how citizens' more conscientious use of fossil fuels might in turn have material impacts on the production of this commodity. Fossil fuel extraction is only referenced in passing, in the opening shot of *Sedco-H*, an offshore oil platform out of Halifax, which was also depicted in *Ressources sous-marines*. 66 The actual location of the platform, however, is stripped of its geographic and temporal specificity. Only expert viewers familiar with the names of individual rigs, or who closely followed the industry, would likely recognize the platform and identify its location offshore of Nova Scotia. Like the natural gas we use to light our stoves or gasoline we pump into our cars, this site of extraction is rendered geography-less, an industrial system divorced from its highly local and regional impacts on human and non-human communities and ecosystems. The prospective environmental consequences of oil spills in fishing waters, or implications for workers in these zones of extraction whose occupations are tied to the sea and coastlines, are entirely overlooked.

Operation Conservation points to a key issue implicit within conservation narratives: if consumer-citizens only moderate their own individual usage habits with an eye to reducing waste

⁶⁵ Druick, *Projecting Canada*, 23.

⁶⁶ In fact, the footage of *Sedco-H* used in the opening scene of *Operation Conservation* is the very same as that used in *Ressources sous-marines*, a 1973 NFB production for Energy, Mines and Resources Canada.

or expanding reserves of a given resource (petroleum, animal species) for more years, the capitalist system and societal norms which facilitate unfettered fuel consumption, market growth, and the expansion of petroleum frontiers remain unexamined. Yet, like the other films examined in this chapter, *Operation Conservation* also links energy sustainability to Canada's future through its address, pronouncing: "for it is you who [...] are putting into effect the energy saving habits that must become part of our way of life in the future." As this film shows, part of managing offshore oil from a governmental perspective includes the opening of deep-sea oil deposits to exploratory drilling to ensure the continued availability of fuel resources even as it advocates for reduced consumption at home. Yet the flip side of commercial development of this new resource frontier in the Grand Banks is a growing concern over the ecological implications of this emerging industry in the future. In the next section, I turn to the temporal implications of conservation, to tease out the implications of how speculative engagements with future petroleum developments off Newfoundland's coast include managing ecological concerns about the inevitability of oil disaster and financial futures.

Offshore Oil and Temporal Speculations

The late 1970s and 1980s were poised as a pivotal period of change for residents of Atlantic Canada, as governments and multinational industries turned their sights towards the offshore waters (and seabed) of Newfoundland and Labrador in the continuing quest for oil. While the offshore reserves of the Grand Banks might be "out-of-sight-out-of-mind" for many residents of mainland Canada today, these decades saw the transport of the offshore into people's living rooms, classrooms, and community halls by way of cinema. Coverage of offshore oil extraction in the mainstream media, within the province and nationally by the CBC, collapsed some of the geographical distance between the exploratory rigs "out there" and the consumers who depended on oil and gas to maintain their industries and domestic standards of living. One subject which gained a great deal of coverage in the mainstream media was the legal struggle between federal and provincial governments over competing jurisdiction claims brought on by this economic expansion into the offshore. The CBC's television series about Atlantic Canada, *Land and Sea*, for instance, broadcast an episode in 1976 (prior to the Hibernia discovery) about this issue of offshore oil rights, focusing on debates over Newfoundland's jurisdiction of any offshore petroleum reserves located beneath the Atlantic.

It is against these events that *Speculation* (1980), *Offshore Oil: Are We Ready?* (1981), and *Oil Means Trouble* (1985) questioned some of the implications of the coming oil development for Newfoundland, and the forms that entanglements between onshore and offshore communities and ecologies might take in the future. As speculative, forward-looking texts, these films sought to engage with future potentialities around offshore oil developments in the Atlantic by engaging with the recent experiences of North Sea, oil-producing countries. Consider the years in which these films were released: although the Hibernia reserves were mapped out in 1979, drilling did not begin until 1986, with commercial production (led by Chevron, ExxonMobil, and Suncor) finally commencing in 1997. The films were therefore shot, edited, publically screened, and—in the case of *Offshore Oil: Are We Ready?*, revised and released as another feature—prior to the opening of the offshore fields for large-scale, profitable development. As such, they offer a glimpse into this pivotal period of imagination, hope, and concern about what the future of offshore oil and gas might bring to Newfoundland's environments, local communities, and struggling economy before this resource horizon was proven viable.

In the production of the Grand Banks as a commons, different communities were correspondingly brought into being: local inshore and deep-sea fishermen were constituted as a generalized labour unit, provincial and federal regulatory bodies were created, and local workers' cooperatives and fisheries associations were formed to consolidate and represent different groups with (at times diverging) interests in how to use these commons. The discovery of offshore oil fields beneath these fishing waters further complicated this elaborate calculus as to how the commons would be reformed and managed, especially as the number of different groups with varying interests in oil proliferated. Frictions between oil and fish, the ways in which films about these two offshore industries position both resources in relation to promising economic futures or failed projections of the future from the past, make space for insights into how these futures are imagined, and what actors might shape them.

By the time oil was detected offshore, the world's oceans had already been integrated into capitalist networks of labour, transportation, trade, and resource extraction. However, this period witnessed an acceleration of the sea's entanglements with capital through the rise of various offshoring practices and the emergence of globalization. Sociologist John Urry defines the contemporary phenomenon of offshoring as a product of capitalism and globalization, which

is also deeply linked to neoliberalism and accelerating income disparity within society.⁶⁷ Today, the strategy of offshoring is frequently linked to tax evasion and financial offshoring of wealth in physical or legal "islands" of tax havens. Offshore oil extraction, as an industrial practice integrated within global finance and supply lines, has historically been less visible due to geographical location and business practices that frequently obscure corporations' financial operations. For this reason, I wish to locate it within the offshoring matrix Urry outlines, as the geographic displacement of various legal and illegal practices, goods, and services from mainlands to islands, container ships, and other jurisdictional peripheries. Processes of offshoring therefore render these activities partially or entirely outside of government regulation, thereby restructuring global structures of power and capital.⁶⁸

Urry contends that offshoring emerges as a practice out of late capitalism and the transnational systems of mobility fostered by neoliberalism. Globalization and its accordant neoliberal processes began to emerge and accelerate in the 1980s and 1990s, with the move towards deregulation and privatization in the United States, Great Britain and Canada, under Prime Minister Brian Mulroney, as well as the collapse of the Soviet Union and state communism. The development of offshore oil in Atlantic Canada and the legal debates over provincial, federal, and international regulation of corporate activities in the offshore can be situated within the early years of neoliberalism and energy offshoring. Even as borders became increasingly transparent and transgressed in globalized commerce and people's everyday lives in the decades that followed Hibernia's discovery, the offshore sector emerged as a more tangible energy frontier, given accelerated exploration by states and corporations for new reserves of petroleum to develop towards fuel globalization. Offshoring, Urry observes, requires abundant supplies of fossil fuels to power manufacturing and the globalized transportation of people and goods. ⁶⁹ Yet offshore oil development also requires pre-existing mobile energy to fuel the transportation of workers and raw crude from deep-sea sites of extraction to consumer markets. The myth of boundless economic growth, which undergirds capitalist expansion and constitutes one of the preconditions of offshoring, reveals to us the entanglement of contemporary globalization, petro-capitalism, and offshoring of energy, lifestyles, and services.

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⁶⁷ John Urry, *Offshoring* (Cambridge and Malden: Polity Press, 2014), 1, 11.

⁶⁸ Urry, 9.

⁶⁹ Urry, 99.

The conditions of globalization and deregulation of the offshore Urry theorizes predate the appearance of the offshore oil sector. The identification of petroleum beneath the Grand Banks, the North Sea, Gulf of Mexico, and other watery bodies exacerbated the production of the ocean, to adopt Neil Smith's critique of capitalism's production of nature into "the offshore" as a site of hyper-capitalist exchange beyond most governmental regulation. As these films show, the financial, legal, and political landscapes of offshore oil extraction in the 1980s have parallels to the industrialization of Atlantic Canada's fisheries. As early as the 1960s, as these fishy films attest, international trawlers traveled to the Grand Banks. Attempts by the Canadian government in 1977 to regulate foreign access to these waters by imposing a 200-mile limit on international trawlers also failed, as foreign vessels continued to fish in the eastern tip or "nose" and southern end or "tail" of the Grand Banks outside Canada's jurisdiction. In other words, as global capitalism expanded and neoliberalized, it continued to produce nature in new forms; in this case, the offshore as a site of unregulated capital, labour, and accelerated resource extraction.

Correspondences between the structures and practices of these two offshore industries are given form in the last scene of *Trawler Fishermen* with a long shot of the dusky horizon of the ocean broken up only by the silhouettes of several trawlers. One of the ships is lit up, the white lights offering the only other source of illumination against the dramatic, rosy hue of the evening sky. While beautiful, this scene also proves haunting to contemporary viewers like myself, who are more familiar with images of offshore petroleum infrastructures. The shape of the vessels resonates with that of an oil platform illuminated at night. Like trawlers, semi-submersible rigs such as the *Sedco-H* in *Ressources sous-marines* operate as little islands, inhabited factories floating above the waves on huge ballasts, and operational twenty-hours a day. When viewed in the dusk, these infrastructures of offshore industry and men easily come to resemble one another: visually, as well as materially as extractive machines which cruise the offshore in search of catch.

The development of offshore oil reserves depicted in *Offshore Oil: Are We Ready?*, *Speculation* and *Oil Means Trouble* predates the twenty-first offshoring practices Urry describes. However, they clearly exhibit the seeds of the globalization and neoliberal conditions that were to follow. *Speculation* explores the potential consequences of the influx of global capital and national and foreign land speculators on local communities living close to onshore refineries and other facilities related to offshore extraction (**Fig. 12**). Both *Offshore Oil* and *Oil Means Trouble*

⁷⁰ Smith, *Uneven Development*.

affirm the transnational connections between sites of offshore extraction, not only through parallels between the countries' fishing industries but also by reminding the viewer that the corporations which profit from these developments typically act outside local legal frameworks and environmental protocols. In all three, the offshore is a geography to be negotiated, a site onto which residents of Newfoundland could project their hopes and anxieties about the future.

Offshore Oil: Are We Ready?, a 1981 co-production between the NFB's Atlantic Studio and Memorial University Extension Service, takes up speculative questions about the connections between resource capitalism and the future turning a key historical moment. Following the 1979 discovery of petroleum reserves and the increasing globalization of regional economies, the film uses offshore oil to interrogate potential routes for Newfoundland's economic future, and trans-Atlantic relationships between oil producing regions and soon-toproducers. The documentary opens with the claim that, "with the increasing world demand for energy, the oil industry has turned its attention westwards to our side of the Atlantic Ocean." On the accompanying animated map, grey dots symbolizing oil wells mushroom up along Canada's eastern coast. The discovery of the Hibernia site, the film claims, offers a promise of new energy futures (although the platform did not begin producing oil until over a decade later). In an attempt to divine what Canada's energy futures might resemble, and the potential consequences of oil exploration to surrounding communities and environments, Offshore Oil turns to what it describes as the "North Sea experience" for answers. Asking what might ensue if "Hibernia's reserves are proven in commercial quantities," the film seeks to imagine the potential consequences and economic benefits of commercial offshore oil development through comparisons to similar events in Norway and Scotland. However, in doing so, Offshore Oil relegates Atlantic Canada to a different temporality of development than Western Europe. The documentary proposes that commercial, multinational development of the province's natural resource wealth is not only inevitable, but also the logical trajectory for remedying its lack of coeval status with central Canada and North Sea countries—even as the film paradoxically hints at the cultural and environmental consequences of this form of development.

Apart from several establishing shots of the city of St. John's and Memorial University, and the animated maps of the Canadian Atlantic coast, *Offshore Oil* depicts its namesake through images of Scottish and Norwegian oil infrastructure and interviews with members of these communities reshaped by petroleum extraction. The three sites of comparison in the film are the

coastal cities of Stavanger, Norway and Aberdeen, Scotland, along with several small towns in Scotland's Shetland Islands. Both Stavanger and Aberdeen are shown as port cities with global transportation networks and therefore logical sites for offshore oil development. For Stavanger, the oil industry spurred the development of the city's municipal and commercial infrastructures, a growth in its population, and its further integration into global commerce. This form of development both subsidized the city's cultural preservation and furthered its integration into global commerce, as the narrator's observation that Stavanger could restore historical warehouses into "attractive office buildings for multinational corporations" makes clear.

At the same time, the sweeping footage of offshore oil rigs, towering transport ships, and busy transport harbours in Aberdeen does more than communicate the enormity of petroleum infrastructure in the North Sea. These images of European extraction sites are also used to portend Newfoundland's potential futures. By incorporating images of oil infrastructure from other offshore extraction sites, *Offshore Oil* effectively transfers the documentary value of these images from one precise geography and moment in history to another. In other words, the film endeavours to visualize energy futures that have not yet come to pass for Atlantic Canada, by relying on the truth claims of interviews, audio, and image recordings documenting a related but distinct experience of extraction. This transference of documentary evidence, and its use to speculate upon events that have not yet come to pass, also belies the similarities between North Atlantic cultures and levels of development that *Offshore Oil* aims to establish. For instance, the narrator attests that fisheries in these countries "catch many of the same species of fish" and underpin the "Northern way of life," thus forming a deep connection between Norway, Scotland, and Newfoundland despite geographical and linguistic differences.

These comparisons established between the three countries work to place the recent past of these European counterparts as Newfoundland's future. In doing so, *Offshore Oil* signifies a temporal lapse through uneven states of development across the offshore. Cheryl Lousley argues that we must be attentive to the distribution of power and resources when imagining progress and global futures, and "whose futures are envisioned and enabled to flourish." Furthermore, we must be critical of what is relegated to "later times," as opposed to the present, in such narratives about political, economic, or social futures. Different rates of change across diverse geographies are bundled into a single view of time, so that development will be enacted unequally across

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⁷¹ Lousley, "Narrating a Global Future," 246.

multiple temporalities. Considering Lousley's analysis of development and futures, we can see how *Offshore Oil* composes Canada's future visually and narratively as Scotland and Norway's past. Newfoundland, as it is implied at several points, is more traditional, geographically peripheral, and less economically "advanced" (with all the problematic hierarchies the term implies) than the rest of Canada. Since the "imported culture of the oil man often runs counter to local customs and beliefs," the traditional identity of Atlantic Canadians is therefore likely to be changed by the influx of commercial oil development, which the film also aligns with modernity and multinational capitalism. Deep-sea oil platforms, like those proximal to Stavanger and Aberdeen, often interrupt fishing waters. These platforms, the narrator concludes, are built in communities "where life has always been lived on a less frantic scale;" that is to say, where the temporalities of daily life do not as neatly conform to capitalist temporalities of progress, productive labour, and acceleration.

This positioning of Newfoundland and the Atlantic coastal region as out of step with the present or with modern ways of life has strong correlations to earlier films about the region explored in the previous section. By depicting the province as a living remnant of Canada's white settler past and authentic folk culture, these films offer Newfoundland as a testament to Canada's past, a past which becomes accessible to the rest of urbanized, postwar Canada through recreational travel, fish, and other forms of consumption. In this way, residents of Newfoundland are denied the same temporality as the rest of Canada. Johannes Fabian describes this "denial of coevalness" as a tactic to create temporal distance between the anthropological observer and the object of this observation, often to render the observed as a primitive "other." Residents of Newfoundland are not portrayed as inhabiting the same modernized, postwar present as mainland Canadians who travel to, study, or otherwise act upon the province, its people, and its natural resources. The "united future" projected here rests predominantly upon Canada's ability to access and develop this aforementioned "natural wealth," not whatever self-determined future Newfoundlanders might imagine.

While *Offshore Oil* reiterates the proposed similarities between these North Atlantic societies on both sides of the ocean, the two-fold denial of coevalness—between Newfoundland and the rest of Canada, and Atlantic Canada and Norway and Scotland—in fact distances these

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⁷² Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (New York: Columbia University Press, 2014), 25.

communities from one another. Wadel's passing reference to the latent colonial legacies of oil development in one of the film's interviews demonstrates the film's prevalent silence on this subject. "Oil and fish is kind of like the white Americans and the Indians," he declares; before arguing that since fishermen worked the coastal waters prior to the incursion of multinational oil corporations, they ought to have their economic rights legally protected from disenfranchisement. By drawing this provocative parallel between the struggles of Indigenous peoples in North American and coastal Norwegians' traditional culture and industries which would be threatened by oil corporations, Wadel points towards capitalism's imperial and extractive practices. At the same time, he also reiterates this alignment between traditional forms of resource development and pre-modern existence as being temporally removed from the present.

Another way these films project and examine expectations about the future consequences of oil is through the spectre of financial speculation. The influx of capital onshore following in the wake of offshore developments dangles the promise of economic revitalization to areas hit hard by the fisheries decline, as well as capitalism's excesses, such as the inflation of real estate markets. "Speculation" becomes the catchword of the moment in a nontheatrical video with the same title, produced by MUN Extension for a public town meeting in January 1980. Explaining the threat of land speculation in Goulds, a municipality outside St. John's zoned for agricultural purposes, *Speculation* addresses local viewers in an area in which many residents were farmers or working class.⁷³

The video remediates some of the documentary footage shot for *Offshore Oil*, including that of a public speech given by chief executive of the Shetland Islands Council Ian R. Clark in 1979. It similarly uses comparisons to other coastal North Atlantic communities to conjecture the potential effects of the fossil fuel industry on local Newfoundland communities—specifically the price of real estate in St. John's—and the regional economy. Whereas *Offshore Oil: Are We*

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⁷³ Archival metadata, *Speculation (edited)*, MUN Extension Service Cat. 00567, Oil and Gas Tapes Sub-collection, CITL-MUN Archive Video Collection (pre 1994), Memorial University of Newfoundland, http://collections.mun.ca/cdm/singleitem/collection/extension/id/545/rec/1. This event is also referenced in: "Do I Hear \$10,000, \$20,000 - Sold to the Highest Bidder," *Decks Awash*, February 1980, 20.

Although no director is named within the archival metadata for *Speculation*, given Paul MacLeod's involvement in the production as the film's narrator and his work on *Offshore Oil: Are We Ready?*, it is likely that he acted as one of the leading creative forces on *Speculation* as well. There were also, in fact, two versions of the video made, both of which are available in

Ready? and *Oil Means Trouble* interrogated Newfoundland's potential future as an oil-producer by looking beyond the island's shores towards the North Sea, *Speculation* focuses explicitly on the potential implications of development "on the ground" in St. John's.

Like *Offshore Oil*, *Speculation* references two historical precedents in Scotland to explain some of the risks posed by land speculation to St. John's and nearby townships. In Aberdeen, skyrocketing real-estate prices because of the offshore oil industry priced out residents, whereas some communities in the Shetland Islands attempted to channel oil developments in such a way as might benefit them. After exploring these two alternatives, *Speculation* directs its local audience in Goulds to "Think, Learn, Plan" (presented in bold animated titles) and seek the "best legal assistance we can get" in the months and years going forward. *Speculation* is designed to mobilize its spectators to become active citizens, to work with their elected local leaders to limit instability in domestic and commercial real estate markets. Footage of Clark speaking in October 1979 at an oil and gas conference organized by Memorial University Extension Service concludes the video, reiterating its appeal to action. ⁷⁵ "The developments will either be controlled by you," Clark intones, or they will determine "your community's future."

Projections like *Speculation* reflect the Extension Service's investment in cinema as a means of public education, and fits alongside the institution's other learning initiatives, conferences, and screenings during the period. The same year the video was created, the Extension Service also sponsored an education program focused on oil and gas at several locations across the province. Using the topic of impending oil development to frame to discussions of resource development, it included over fifty public screenings and seminars engaging with the potential effects of oil and gas on the province. As with the Extension Service's other cinematic collaborations with the NFB, *Speculation* reflects a belief in people's ability to contribute positive "social and economic change" in their communities.⁷⁶ By seeking to engage local audiences by bringing screenings to residents' co-operative meeting halls or church

Memorial University's oil and gas archival video collection. *Speculation (edited)* runs nearly a minute shorter than *Speculation*, and includes slightly different animate sequences, although it follows nearly the same narrative as the unedited version.

⁷⁵ Coverage of this October 1979 conference is featured in the "Energy" issue of *Decks Awash* Vol. 9, no. 1 (February 1980).

⁷⁶ "Fogo Island in the Movies," *Decks Awash*, August 1968, 5.

basements, *Speculation* reflects the Service's broader focus on community development through education as well as cinema's promise as a useful communication technology.

Oil Disaster and Ecological Futures

Oil Means Trouble, released four years after Offshore Oil: Are We Ready?, supplements speculations on the province's energy and financial futures with concerns about environmental contingencies for the Grand Banks and coastal areas. Significantly shorter than its 1981 predecessor, Oil Means Trouble was designed as an adaption for Canadian classrooms.⁷⁷ Like Offshore Oil, Oil Means Trouble addresses the potential economic, social, and environmental impacts of developing the Hibernia oil fields by offering a comparative portrait of the offshore oil sectors in both Scotland and Norway. In many ways, the two films are quite similar. A primary focus of Oil Means Trouble is the entanglement of the fishing and oil industries, and the resulting erosion of traditional livelihoods—primarily fishing, as well as agriculture and textiles. Footage from Minister of Mines and Energy for Newfoundland and Labrador Leo Barry's iconic press conference in September 1979 (in which he held up a vial of greasy crude for the cameras to advertise that the offshore was open for business) as well as interviews with Wadel, representatives from fishermen's associations from Scotland and Norway, and members of the Loch Caron Council are also featured in Oil Means Trouble. The animated maps of Atlantic Canada and the North Sea from the original also depict sites of offshore oil exploration off the coast of Newfoundland through proliferating white dots. The dramatic environmental consequences of oil pollution, on shoreline ecologies as well as Shetland sheep farmers' livestock, are also addressed through the perspectives of two conservationists working in Shetland. The scientists point to seabirds covered in crude and sheep flocks poisoned by ingesting petroleum residues on coastal plants, to demonstrate the impacts of offshore extraction on traditional industries and nonhuman life. Most people featured in the two documentaries, except for the government officials like Barry or experts like Wadel, are working class, reflecting an emphasis on populations who more directly felt impacts of extractive industry on their daily lives. Other than government employees, there are no representatives of the oil corporations interviewed and much less attention is given to industry perspectives.

⁷⁷ "Oil Means Trouble [study guide]" (National Film Board of Canada, 1986), http://www3.nfb.ca/sg/66271.pdf.

However, the differences between the two films are also quite significant as they serve to convey a more critical stance towards offshore oil development. The film's opening shot depicts an unidentifiable offshore oil platform somewhere in the Atlantic Ocean, over which the film's title—*Oil Means Trouble*—is quickly superimposed. The contrasting film titles clearly show a shift from questioning whether Atlantic Canadians are ready for the wave of challenges that correspond to offshore development to staking a claim for the industry's negative consequences. The title itself is lifted from Wadel's interview, in which he paraphrases a cautionary exchange between Saudi Arabia and Norway prior to the opening of the North Sea to development. Oil, he states with an orientalized flourish in imitation of the Saudi official, "means *trouble*."

The film's change in tone instilled within the title is echoed through its formal construction. The music is more ominous; featuring drone-like hums in some scenes, heightening the sense of suspense and unease at an unknown impending future. This affective use of sound and tangible feeling of disaster is further expressed through the revised narration, voiced by Linda Lee Tracy. Breaking with the conventional male speaker, as in *Offshore Oil* and most other NFB documentaries from the 1940s through the postwar era, the sound a woman speaking helps to destabilize more authoritarian aspects of the genre. Her narration potentially also injects a more anti-establishment perspective into the subject matter, reflecting emerging countercultural and environmentalist movements.

The ambivalent play of temporalities in *Oil Means Trouble* underscores its more explicitly environmentalist politics. On the one hand, the narrator's prologue establishes that Canadians "have time to consider the impact this industry has had on other nations before we develop our first offshore oil field." Despite the concentrated exploration efforts in the Grand Banks, the fact that "the techniques to bring the oil to market have not yet been finalized" potentially creates an opportunity to reflect upon the social, environmental, and economic consequences of offshore oil. On the other hand, however, the consequences outlined in the Scottish and Norwegian examples are depicted as having occurred in the very recent past. No signposts are given as to when this footage was recorded nor is the passage of time between the 1981 original and the 1985 re-release remarked upon. As a result, *Oil Means Trouble* uses this temporal slippage between the recent past and the present to reinforce a more critical depiction of oil exploration on traditional livelihoods, the fisheries, and coastal environments.

The threat of marine and coastal pollution from oil spills depicted in *Oil Means Trouble* reveal the closeness of the offshore to coastal communities, despite the geographical distance and seeming invisibility of deep-sea rigs (**Fig. 13**). As the Scottish scientists interviewed on the Shetland Islands about the damaging effects of oil slicks to onshore flora and fauna attest, the risk of oil to coastal ecologies exceeds geopolitical boundaries and the initial moment of disaster. As a form of slow violence, disasters on this scale expand across temporalities, as pollution continues to cling and accumulate in the bodies of sea life, dispersed by waves across vast distances. Spills, leaks, and other types of oil disaster point to the nature of petro-modernity's slow violence in the commons, threatening present and future generations of life. Although efforts can be undertaken to mitigate the possibilities of accidents—as *Ressources sous-marines* argues in its depiction of safety protocols to manage risk—oil leaks are not a matter of "if" but "when." Such a model requires strict attention in the present to forestall disaster into the future, but in a way that is not sustainable, particularly as petroleum companies continued to push for self-regulation into the new century.

There are layers of imaged futures in these films: for Newfoundland within Canadian confederation, for the province's economy, and for marine ecologies and coastal communities faced with the potential threats posed by oil. When read alongside each other, the contested nature of economic futures emerges through competing visions of which resource might hold Newfoundland's prosperity: in fish or in fossil fuel? The government report *Fish is the Future* with which I opened this chapter demonstrates a continuing investment in the fisheries from some government sector like the Department of Fisheries, promoting the industry as ripe for renewal and expansion. Yet the report, like the Department's sponsored film productions, still offers a useful summary of the tensions surrounding resource staples in the province. Whereas, for instance, the Fogo Process films testified to the economic destitution and rampant unemployment of many outport communities in the mid-1960s, only a decade later, the Minister of Fisheries Walter C. Carter sought to promote "the fisheries as the real hope for our Province's economic future." He writes in his introduction to *Fish is the Future*: "The future is ours at last" (**Fig. 14**).⁷⁹ In contrast to corporate research on offshore reserves and speeches from politicians

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⁷⁸ Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011).

⁷⁹ Bonnell Public Relations, "Fish Is the Future," 1.

like Newfoundland Premier Joey Smallwood favouring industrial development, which served to shore up the promise of oil, this report offered a competing imaginary of Newfoundland's prosperous future.

The significance of these conflicting projections lies not in which resource ultimately proved to be better managed or more profitable; rather, this way of describing future potentialities—future prosperity, future health of environments—share an assumption that society's impending wealth and growth has a causal relationship to resource consumption patterns in the present and recent past. While seemingly evident at face value, this claim requires further unpacking because it is based on several assumptions. First, that future resource use and consumption practices will remain (nearly) the same as they do currently, negating the eventuality that there will be shifts in societal norms, new technological inventions, transitions to new energy or food sources, or global events (wars, natural disasters) which shape economic practices and resource needs. Second, this claim offers rigid conceptualizations of "the future" portends. What might these "futures" consist of, how far off into "the future" are we looking, and from what perspective are we viewing these "futures"? Linear and casual relationships between the past, the present, and the future belie the complexity of environmental-economic-societal relations, and the ways in which they stretch across space and time. Societies and communities, from nations to local cooperatives, are enmeshed in asymmetrical and unruly resource entanglements, whose constant flux makes it impossible to draw direct correlations between singular events and consequences. Linear conceptualizations of "futures" such as this also reflect capitalist notions of time, which I explored in Chapter 3. Although capitalism itself is an expanding system—continually seeking new frontiers to develop and exploit before moving on to other resources, spaces, or markets—it evaluates time in financial terms, according to how much capital can be created through minimal inputs like labour. Through this lens, "the future" is rendered economically in correlation to future prosperity: future growth of markets, future production, and future development of new frontiers.

Public Filmmaking and the Commons: Resource Cinema as Shared Resource

As this chapter has sought to show, the industrial extraction of raw materials like cod and hydrocarbons is entangled in the production of communities with shared experiences of working within these activities and living close by them. Processes of making commons through resource

management and conservation for the future are not only applicable to offshore oil and the fisheries, however. The enclosure of the Grand Banks has parallels to the production of Newfoundland's heritage as a cultural commons, and the ways in which cinema is likewise managed, conserved, and used to constitute community. As examples of resource cinema, the films examined here are also public resources in and of themselves, held in common by institutions with the intention of fostering communities through shared access to them. Both the National Film Board and Memorial University are publicly funded and involved in the production of Atlantic Canadian cinema on two levels: first, as financers and production centres during the mid- to late twentieth century, and second, as contemporary leaders in the digitization and online exhibition of these films. This two-fold participation in the production and continued longevity of resource cinemas engages with questions of cultural maintenance and conservation, viewing communities, and how publicly-funded resource films are constituted as a shared cultural commons for Canadians, "on island" (that is, within Newfoundland) and off.

In Chapter 1, I introduced resource cinema as a category of filmmaking to characterize a mode of film production entangled thematically, financially, and institutionally with the production of raw materials as staples or natural resource commodities within global capitalism. However, the films taken up in this chapter are also products of the Canadian government's investment in public education and cultural production during the second half of the twentieth century. Today, nearly all the films examined here are accessible to researchers and members of the public online, through the NFB's Screening Room and the Digital Archives Initiative (DAI) at Memorial University Libraries. While not archives in the physical, brick-and-mortar sense, these online collections nevertheless contribute to the public circulation and cultural longevity of these texts by making digitized copies accessible for free to anyone with an Internet connection. Following what Caroline Frick articulates as a "cinematic heritage" discourse to justify their material preservation as texts and objects, these institutions present these films as a

⁸⁰ The Screening Room and DAI collections are accessible at: http://www.nfb.ca; http://collections.mun.ca/cdm/.

For studies of online repositories, digitized archival materials, and the processes of writing history, see: Renée M. Sentilles, "Toiling in the Archives of Cyberspace," in *Archive Stories: Facts, Fictions, and the Writing of History*, ed. Antoinette Burton (Durham and London: Duke University Press, 2005), 136–56.

cultural commons, as part of their respective digitization and cultural preservation initiatives.⁸² While these projects likely do contribute to the conservation of maritime and moving image heritage by making rare images of the past accessible to future generations, we must also recognize that the process of transforming these productions into public commons also open them to potential enclosure and neoliberal extraction.

Earlier in this chapter I provided a brief overview of Memorial University Extension Service's history as a film and video producer in Newfoundland as part of the institution's mandate favouring human and economic development across the province.⁸³ MUN Extension used cinema, along with other types of media and adult education programs, to constitute Newfoundlanders (and especially outport populations) as a community with a shared maritime heritage, economic challenges, and history of drawing sustenance from the sea. The Digital Archives Initiative, launched at Memorial in February 2008, is one of the university's most recent projects that continues this focus on community development and what journalist Stephanie Porter describes as future-oriented "cultural research" within the province. 84 Funded by the President's Office at Memorial and a grant from Heritage Canada, the DAI includes digitized records held at the university through the Centre for Newfoundland Studies, Archives and Special Collections, and various academic departments, as well as partner organizations like the Heritage Foundation of Newfoundland and Labrador, Cape Breton University, and the Society of United Fishermen. 85 In press releases and interviews, Slavko Manojlovich, associate university librarian and Chair of the DAI Advisory Board, describes the initiative's objectives as twofold: to digitize and make available Memorial's "cultural resources" to users worldwide, while also preserving obsolete or deteriorating archival media. 86 In doing so, the collection also seeks to reinforce the significance of Newfoundland and Labrador's cultural heritage and history, particularly to remote or off-island researchers.

⁸² Caroline Frick, Saving Cinema: The Politics of Preservation (Oxford and New York: Oxford University Press, 2011), 5–6.

⁸³ According to Extension Service Director A. Sullivan, the mandate of the Extension Service was to "help people throughout the Province assess and develop their potential." "President's Report 1976-1977" (St. John's: Memorial University of Newfoundland, June 1978), 56.

⁸⁴ Stephanie Porter, "A Never-Ending Story," *The Independent*, February 22, 2008, 9.

⁸⁵ Jeff Green, "Archival Material Gets New Life," February 22, 2008, http://today.mun.ca/news.php?news_id=3578; "Memorial University DAI" (Memorial University of Newfoundland), accessed March 8, 2018, http://collections.mun.ca/.

⁸⁶ Green, "Archival Material Gets New Life."

The Film Board, especially through its Atlantic Studio which oversaw regional productions, similarly functioned as an organ for cultural production, public education through moving image media, and heritage conservation for both post-Confederation Newfoundland and Atlantic Canada. Since the early 1990s, however, the NFB has faced increasing funding cuts from the federal government, prompting transitions within its services and mandate, including a shift away from film production in favour of preservation. Starting in 2007, the NFB began digitizing portions of its holdings to make its film archive accessible to the public on the web.⁸⁷ Druick, drawing upon Frick's analysis of film preservation as a means of socially produced "cinematic heritage," demonstrates how the NFB's digitization efforts reflect a heritage discourse. The Board's five-year plan for this period of digitization work, 2008-2013, describes the institution as "the steward of one of the world's great audiovisual collections," maintaining "an invaluable heritage for Canadians and for the world." 88 This message is echoed in the institution's description of its role in contributing to the nation's collective memory, which states: "Through digitization, the NFB is transforming a heritage collection into a vital cultural and economic asset for all Canadians."89 Like Memorial's DAI, the NFB's mandate therefore engages with heritage discourses to position public-sector cinema as a cultural commons. Yet this cinematic heritage is not only fashioned for mainland Canadians. The DAI presents its materials to promote and conserve evidence of Newfoundland and Labrador's own distinct history, as a former British colony, autonomous Dominion, and finally, Canadian province. The constitution of these films as a cultural commons also raises the question of the target audiences, given that many of these films are regionally specific (particularly highly local films like *Billy* Crane Moves Away and Speculation) but readily available online to those "offshore" (whether mainland Canadians or international viewers). In doing so, both digitization projects seek to shape and reinforce notions of national and cultural communities through a shared cultural, and especially visual, heritage.

⁸⁷ Zoë Druick, "Sampling Heritage: The NFB's Digital Archive," in *Cinephemera: Archives, Ephemeral Cinema, and New Screen Histories in Canada*, ed. Zoë Druick and Gerda Cammaer (Montreal & Kingston: McGill-Queen's University Press, 2014), 313.

⁸⁸ Tom Perlmutter, "NFB Strategic Plan, 2008-2009-2012-2013," (Ottawa: National Film Board of Canada, April 2008), 13. Quoted in Druick, 317.

⁸⁹ "Collective Memory" (National Film Board of Canada, June 20, 2017), http://onf-nfb.gc.ca/en/about-the-nfb/the-nfb-today/collective-memory/.

However, following David Harvey's critique of how heritage industries commodify practices constituted as "cultural commons," the process of rendering a resource in common (like cinema) also opens it up to enclosure. Broadly speaking, there is a tension between the economic exploitation of cinematic resources (through the monetization of stock images, for instance) and the conservation or preservation of these objects as communally-held cultural heritage. Druick's study of the NFB's reliance upon heritage discourses in its strategic plans and Screening Space offers one such example of how cultural commons can become entangled with economics; in this case, "neoliberal market discourse." In this era of federal budget cuts to public spending on the arts, education, and research, publicly-funded institutions like the Film Board continue to face financial and political challenges to their work. The NFB's use of heritage discourses to rationalize its investment in digitization is paired with an economic incentive to capitalize upon, and thereby enclose, these resources. As stated on the Film Board's website, the cultural commons are open for mining by the institution, for promotional purposes and to subsidize its funding: "These digitized assets yield significant economic benefits, enabling the NFB to better leverage our brand visibility while exploiting the "long tail" economics of productions that appeal to a wide range of niche markets."92 Such digital practices offer parallels to contemporary neo-extractivist developments undertaken by socially progressive governments, which invest revenues produced from the enclosure and privatization of publicly-held resources like oil or timber into social programs. 93 As a result, researchers and other members of the public can access digitized selections of the NFB's holdings deemed historically significant or relevant to current events, yet this process of digitizing certain titles over others (and the potential economic benefits associated with these selections) underlines the complexities of institutionally managing cultural commons and resisting enclosure.

On the textual level, many of the NFB productions about Newfoundland prior to Challenge for Change/Société Nouvelle also make use of heritage discourses to articulate federalist goals of integrating Newfoundland into the Canadian confederation by presenting the newest province as a playground for tourism and source of wealth to be developed by off-island corporate and governmental interests, including the Grand Banks fisheries. In promoting this

Harvey, "The Future of the Commons," 103.
 Druick, "Sampling Heritage," 318.
 "Collective Memory."

⁹³ Blaser and de la Cadena, "The Uncommons," 185.

vision of Newfoundland's productive future through modernization and participation in Canadian society, films like *Inside Newfoundland* and *High Tide in Newfoundland* rely upon generalized regional depictions. Other than the visible distinctions between St. John's and more rural areas, there is no attempt to ground these images in any specific locations on the island. In some instances, the conditions depicted could as easily occur in fishing communities from other parts of Atlantic Canada. Collectively, these public-sector films position Newfoundland's fishing heritage and maritime cultures in cities like St. John's and outport towns as a cultural commons for viewers. Much like the repacking of Scottish fishers' heritage into an "economic resource and nation-building device" examined by Nadel-Klein, ⁹⁴ these early Film Board productions articulate Newfoundland history and culture in federalist terms for mainland viewers, even as the films are today discursively presented as part of Canada's cinematic heritage. In other words, by constituting these resource films as a cultural commons—resources originally financed by the public sector and today made available for public use through federal and provincial funding—both the NFB and Memorial's DAI participate in a complex negotiation of the boundaries of the commons and which communities they form.

Conclusion

This chapter dove into a collection of films produced by the National Film Board and Memorial University Extension Centre about the production of offshore resources—fish and fossil fuels—to examine the ways in which commons are managed and act as catalysts for community formation. Through questions of management and conservation of these resources, I examined how temporalities and place give form to these practices through cinema, most notably in the imagination of future times. As cultural texts recorded during moments of destabilization and structural change within Newfoundland's fisheries, and the emergence of offshore oil as a new, promising frontier, these films also serve as indexes of the various ways in which capitalism structures human and nonhuman relations. As Tsing, Smith, and Harvey convincingly demonstrate, capitalism is a force that produces human nature and ecologies, rendering life precarious in the process even as it also builds commonalties between humans and the lives we devour like fish through environmental threats. By turning from extraction within terrestrial geographies in the preceding chapters to extractive practices in the ocean, I followed Probyn's

⁹⁴ Nadel-Klein, Fishing for Heritage, 7.

hope that more sustained attention offshore can inspire new angles on inquiry and political intervention. 95

Living with the uncertainty of the offshore stretches from social, ecological, and economic concerns in the present into future times, often invoking anxious demands to manage risks, known and unknown. These institutional productions from the NFB and MUN Extension are invested in imagining what might be, to track backwards into the present to imagine the steps we must take to enable or avoid these futures from coming to pass—reaffirming linear thinking. cause-and-result, and notions of progress. To paraphrase Donna Haraway, in times of urgency and crisis, there can be an impulse to cushion ourselves by resorting to apocalyptic visions of the future (to concede our lack of control), or by rendering the future safe, halting events that are already in the process of unfurling. 96 Yet these moments of crisis, as Jason Moore observes, also act as "turning points in the systematic organization of power and production" by drawing attention to both what capitalism does to nature, and the limits of what nature can produce for capitalism.⁹⁷ Neither Haraway nor Moore advocate giving oneself over to environmental disaster however, succumbing to its inevitability to avoid challenging the state of affairs. Rather, to survive in the "Capitalocene," when nature is no longer abundantly available for exploitation, we must "stay with the trouble." ⁹⁸ In contrast to these films about the offshore that concentrate on future times, Haraway sketches a different course. "Staying with the trouble," she writes, "does not require such a relationship to times called the future." Instead, we must learn to be "truly present [...] in the entanglements which bind, mold, and empower us."99 In other words, survival within capitalism, in which both first and second nature (human behaviors and the physical world) are sculpted through the mechanisms of value production and rendered precarious, requires us to tear our eyes away from the unknowable to concentrate on making kin, altering relations, and leveraging entanglements in the here and now. Such a turning away from futures to fully inhabit the present might help us find ways of living within capitalism, while making space to imagine more reciprocal ways of relating to fish and the marine world.

⁹⁵ Probyn, *Eating the Ocean*, 11.

⁹⁶ Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016), 1.

⁹⁷ Moore, Capitalism in the Web of Life, 27.

⁹⁸ Haraway, *Staying with the Trouble*, 1.

⁹⁹ Haraway, 1.

In this thesis, I have sought to take up entanglements of resource industries with film production in Canada, as an example of a national and settler colonial cinema practice, to explore how culture, economy, and environments became intertwined under capitalism. Canada poses a particularly fertile example of the ways in which cinema informs and participates in imagined and material links to landscape, geology, and animals because of its deeply rooted industrial history. Theories of Canada's political economic development, such as Harold Innis's staples thesis, and histories of European settlement have contributed to this cultural construction of white Canadian identity through specific practices of land and natural resource use. Mobilizing this history to examine a broad collection of twentieth-century nontheatrical and nonfiction films about national resource extraction, I have proposed the category of "resource cinema" to characterize the ways in film production has been taken up by corporations, states, and other publicly-funded institutions to promote practices and ideologies of environmental use and the extraction of capital from the natural (that is, nonhuman) world. Focusing on three periods of institutional filmmaking which coalesced around different natural resource or staples industries—the fur trade in 1920, mid-century conventional oil and subsurface mining, and offshore fisheries and oil from the mid-1960s to the mid-1980s respectively—I have examined the ways in which these films communicated these extractive practices for different audiences, and how related narratives about settler Canadian identity, resource use and conservation, regions and landscapes, and communities (settler and Indigenous) changed over time.

In Chapter 1, I sketched out the conceptual issues and histories at play in the thesis by reading *This is Our Canada* (1945) as an example of what I have called Canada's "resource cinema" in relation to settler colonial theory and scholarship on economic-ecological entanglements. Building upon this focus on Indigenous-settler relations, Chapter 2 theorized the formation of economic frontiers within the fur trade and their relation to the expansion of white settlement in Western and Northern Canada, through films sponsored by the Hudson's Bay Company. Chapter 3 turned to a collection of mid-century films about Western oil and subsurface resource extraction, analysing their take up of geology as a science, industrial

practice, and metaphor to constitute the natural world in terms of "national" resources. Lastly, in Chapter 4, I inquired more deeply into resource conservation and management by theorizing how public sector films about Newfoundland's dwindling fisheries and emergent offshore oil industry constitute onshore communities through these oceanic commons. At the same time, I also examined the competing energy futures these two offshore industries proposed through cinema. This type of comparative study serves to highlight the recurring nature of some of these resource and land use practices depicted on screen, while also attending to supporting discourses to which these films participate and contribute (ranging from critiques of cheap nature to the myth of superabundance). In doing so, I sought to trace some of the messy relations between human societies and the nonhuman world, while attending to the unequal ways in which these entanglements shaped communities structured by class, race, gender, and colonialism.

The scope of this project is, necessarily, limited. I elected to circumscribe this study to modes of public sector and corporate filmmaking—and Canadian resource industries—prior to the consolidation of global capitalism, and the concurrent emergence of digital cinema, to focus on specifically national and colonial manifestations of resource entanglements. As such, I would like to conclude by proposing a few future lines of inquiry, which might build upon the historical and theoretical foundations this thesis sought to excavate. As scholars, policy makers, and artists increasingly take stock of the planetary and social consequences of global capitalism and the imbrication of contemporary media with petro-modernity, we might consider the ways in which institutions and media-makers respond to the acceleration of extractivism as a global ideology, as well as the environmental crises caused by fossil fuel pollution and other externalized costs of human activity.

Large-scale extraction projects, from the Athabasca oil sands to Northern mining developments, continue to make headlines in Canada and face critique. In the summer of 2017, as I wrapped up my thesis research, I began to document the abundant street art and political posters appearing on the streets of major Canadian cities, including Montreal, Toronto, and Winnipeg. Posters calling for "No Pipelines on Stolen Land" and decrying the state-sponsored Canada 150 celebrations of the sesquicentennial anniversary of confederation as "Fake News" (**Fig. 15 and 16**) drew attention to on-going practices of settler colonialism, from government support of contested pipeline projects to the allocation of public funds to commemorate a narrative of white conquest. Such political interventions into public space also link struggles for

Indigenous sovereignty to environmentalist concerns and the construction of energy infrastructures on seized lands. These two posters can be seen as continuations of other negotiations of Canadian identity in relation to industry and colonialism through public art, such as the bas-reliefs in the Montreal Central Train Station I analysed in Chapter 2.

Such resource developments also continue to be the subject of film and media projects. Two celebrated web documentaries launched in 2013, Fort McMoney (dir. David Dufresne) and Offshore (dir. Brenda Longfellow), incorporate interactive game features and speculative storytelling to interrogate twenty-first-century oil frontiers: the oil sands of north-east Alberta and offshore oil developments. After the Last River (dir. Victoria Lean, 2015) and Angry Inuk (dir. Alethea Arnaguq-Baril, 2016)—about the impacts of commercial diamond mining and Western animal rights activism on Inuit hunting practices—offer productive avenues for continued inquiry into entangled resource regimes and settler culture. At the same time, resistance to pipeline construction and other forms of extractive industry by First Nation and non-Indigenous communities are becoming more visible in North America, due to strategic uses of social media, aerial drone footage, performance, and artists' collaborations. Transnational oil companies and other corporations continue to wade into these subjects as well, although with somewhat different methods than the industrial films analysed in Chapter 3. Operators of the Hebron project for instance 1—the most recent platform to be constructed and towed out to Atlantic Canada's offshore oil fields—used still and moving images as a public relations tool. Time-lapse videos of the construction of the platform's Gravity Based Structure (GBS) were screened for visitors at the Bull Arm Information Centre in Trinity Bay, Newfoundland in 2015 and remain available online on the project's website and YouTube.² Industry in the oil sands. including energy companies Cenovus Energy and Enbridge, also use a range of advertising media to build positive associations between bituminous oil and modern living, as Patrick McCurdy has shown.³ Such examples demonstrate the abundance of media forms circulating

¹ ExxonMobile Canada is the primary shareholder, along with Chevron Canada and Suncor Energy (each holding over 20 percent interest in the project), Statoil Canada, and Nalcor Energy.

² ExxonMobil Canada Properties, "Hebron Project - Project Videos," 2015, http://www.hebronproject.com/modiscontro/videos.org/

http://www.hebronproject.com/mediacentre/videos.aspx.

Thre Szeman "Crude Aesthetics: The Politics of Oil Do

³ Imre Szeman, "Crude Aesthetics: The Politics of Oil Documentaries," *Journal of American Studies*, no. 46 (2012): 423–39, https://doi.org/10.1017/S0021875812000151; Patrick McCurdy, "From the Natural to the Manmade Environment: The Shifting Advertising Practices of Canada's Oil Sands Industry," *Canadian Journal of Communication* 43, no. 1 (2018): 33–52.

around contemporary resource development projects, created by corporate actors as well as media-makers with different political and economic stakes.

Alternatively, this study might also fuel—to take up another metaphor from energy studies—future work on manifestations of cinema-resource entanglements through other staples economies, such as nuclear, timber, coal, and hydroelectric power. Given the nationalist and colonial histories of such megaprojects and energy regimes, further inquiry into their media histories and entanglements with visual cultural production could also contribute to a deepening of other areas within the emerging field of energy studies, of which petrocultures is only the most prominent example.⁴

Returning to Leanne Betasamosake Simpson's interview with Naomi Klein with which I opened this thesis, I wish to conclude by turning from the paths already taken to those that may follow. Reflecting upon what the alternative to extraction might resemble, Simpson proposes that it is "deep reciprocity." In contradistinction to the "unsustainability of settler society" and the ways in which distant, globalized commodity chains insulate us from "the negative impacts of extractivist behavior," she suggests that only relationships based upon "responsibility" and local connection offer possible ways forward. Anna Tsing is also heavily invested through her anthropological research in charting more reciprocal ways of living with and on a damaged planet. "Neither tales of progress nor of ruin," she muses, can "tell us how to think about collaborative survival." Excavating media histories of resource development, colonial displacement, and ecological collapse—as this thesis seeks to do—offers only the first step, by identifying and critically examining the logics and representational practices bound up in extractive structures. Subsequently, we might begin to imagine alternative, more reciprocal ways of thinking, communicating, and relating differently.

Such speculative exercises are not idle work. As researchers and educators working within settler nations, and witnessing the worsening environmental consequences of our energy systems (particularly upon Northern climates), I believe that we need to seek avenues through

⁴ Examples of studies of energy regimes beyond oil within cultural and communication studies include: Peter van Wyck, *The Highway of the Atom* (Montreal & Kingston: McGill-Queen's University Press, 2010); Yaeger et al., "Literature in the Ages of Wood, Tallow, Coal, Whale Oil, Gasoline, Atomic Power, and Other Energy Sources"; Desbiens, *Power from the North*.

⁵ Klein, "Dancing the World into Being."

⁶ Tsing, *The Mushroom at the End of the World*, 19.

which we might mobilize knowledge production to intervene in the normalization of extractive practices, while learning to live cooperatively within ecological precarity. This thesis is intended to serve as a trail marker, contributing to a much longer process of wayfinding through and beyond extractivist logics. In other words, attending closely to the emergence and recurrences of resource entanglements offers opportunities to imagine different worlds, even from within settler and capitalist systems. The films analysed within this thesis, despite documenting resource practices harmful to human and nonhuman life, might nevertheless serve as a compass to orient the ways change has occurred in the past, from which we can consider new ways of being in the future. Only upon excavating these cinematic histories of extraction, colonial displacement, and ecological collapse can we begin to imagine alternative, more reciprocal ways of thinking, communicating, and relating differently.

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Note: entries are listed by original film title, rather than by director, reflecting the varied production processes of these works. Bilingual titles have been included in parentheses where applicable.

- A Mile Below the Wheat (1949). 15 minutes. Director uncredited, photography by Gerry Moses. Sponsored by Imperial Oil Limited. Produced by Crawley Films Limited. Title ID 11117, Shelf no. M00456. Moving Image Resource Centre, Concordia University. 16 mm.
- Accessible Arctic, The (1967). Director uncredited, produced by David Bairstow. Produced by the National Film Board of Canada in cooperation with the Department of Indian Affairs and Northern Development.
- Age of the Beaver (L'Âge du castor, 1952). 16 minutes, 47 seconds. Dir. Colin Low. Produced by the National Film Board of Canada. DVD.
- Angry Inuk (2016). 82 minutes. Dir. Alethea Arnaquq-Baril. Produced by the National Film Board of Canada with EyeSteelFilm. DVD.
- Battle for Oil (La Bataille du pétrole, 1942). 18 minutes, 30 seconds. Dir. Stuart Legg. Produced by the National Film Board of Canada. Available online: http://www.youtube.com/watch?v=BsUmpvhMdzQ.
- Billy Crane Moves Away (Newfoundland Project, 1967). 17 minutes, 40 seconds. Dir. Colin Low. Produced by the National Film Board of Canada in collaboration with Memorial University of Newfoundland. Available online:

 http://www.nfb.ca/film/billy_crane_moves_away/
- Brian Earle on Merchants and Welfare (Newfoundland Project, 1967). 10 minutes. Dir. Colin Low. Produced by the National Film Board of Canada in collaboration with Memorial University of Newfoundland. Available online:

http://www.nfb.ca/film/brian earle on merchants and welfare/

Decision to Drill (1962). 26 minutes, 28 seconds. Director uncredited, produced by Gerry Moses.
Produced by Crawley Films Limited, sponsored by Imperial Oil Limited. Item 216647,
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- Encounter at Trinity (1957). 28 minutes. Dir. Allan Wargon. Produced by the National Film Board of Canada. Available online: http://www.nfb.ca/film/encounter_at_trinity/.
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- Great Canadian Shield, The (Le Grand bouclier canadien, 1945). 11 minutes, 37 seconds.

 Director uncredited, produced by Laurence Hyde. Produced by the National Film Board of Canada in cooperation with the Department of Mines and Resources. DVD.
- Heritage of Adventure, The (1920). 35 mm on 8 reels, 89 minutes. Cinematography by Harold M. Wyckoff and Bill Derr. Produced by Educational Films Corporation and released by the Hudson's Bay Company. F122, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- High Tide in Newfoundland (1955). 20 minutes. Dir. Grant McLean. Produced by the National Film Board of Canada. Title ID 10789, Shelf no. M00175. Moving Image Resource Centre, Concordia University. 16 mm.
- Hudson's Bay (1941). 95 minutes. Dir. Irving Pichel. Produced by 20th Century Fox. DVD.
- Hudson's Bay Company Centenary Celebrations (1919). 35 mm, on 18 reels. Cinematography by Harold M. Wyckoff and Bill Derr. F119, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- Hudson's Bay Company Pageant (1920). 35 mm on 2 reels, 24 minutes. Cinematography byHarold M. Wyckoff and Bill Derr. F123, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- Inside Newfoundland (1951). 11 minutes. Dir. Stanley Newman and Roger Morin. Title IDN0203, Shelf no. O00426. Moving Image Resource Centre, Concordia University. 16mm.
- It's a Great Life—If (1921). 35 mm on 1 reel, 12 minutes. Cinematography by Harold M.

- Wyckoff. F121, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- Know Your Resources (1950). 23 minutes. Dir. David A. Smith. Produced by the National Film Board of Canada. Title ID N0188, Shelf no. N01456. Moving Image Resource Centre, Concordia University. 16 mm.
- Loon's Necklace, The (1948). 11 minutes. Dir. Judith Crawley and Frank R. Crawley. Produced by Crawley Films Limited and distributed by Imperial Oil Limited. Title ID 11028, Shelf no. C00162. Moving Image Resource Centre, Concordia University. 16 mm.
- Modern Prospecter, The (Le Prospecteur et la technique, 1959). 15 minutes. Dir. Jean-Yves Bigras. Produced by the National Film Board of Canada. Title ID 11126, Shelf no. M00203. Moving Image Resource Centre, Concordia University. 16 mm.
- Nanook of the North (1922). 79 minutes. Dir. Robert J. Flaherty. Financed by Revillon Frères.
- New Homes within the Empire (1922). Director uncredited. Sponsored by the Canadian Pacific Railway. Produced by Associated Screen News.
- Newfoundland Scene (1951). 39 minutes. Dir. Frank R. Crawley. Produced by Crawley Films Limited and Imperial Oil Limited. Title ID 11198, Shelf no. M00488. Moving Image Resource Centre, Concordia University. 16 mm.
- North Has Changed, The (Au Nord: Bien du nouveau, 1967). 27 minutes. Director uncredited, produced by David Bairstow. Produced by the National Film Board of Canada and presented by the Department of Indian Affairs and Northern Development. Title ID N0413, Shelf no. N02386. Moving Image Resource Centre, Concordia University. 16 mm.
- Offshore (dir. Brenda Longfellow, with Glenn Richards and Helios Design Labs, 2013). Available online: http://offshore-interactive.com.
- Offshore Oil: Are We Ready? (1981). 37 minutes. Dir. Paul MacLeod. Produced by Memorial University of Newfoundland Extension Service and the National Film Board of Canada Atlantic Centre. Title ID N0693, Shelf no. N03536. Moving Image Resource Centre, Concordia University. 16 mm.
- "Offshore oil rights," *Land and Sea* (1976). 26 minutes, 52 seconds. Canadian Broadcasting Corporation. MUN Extension Service Catalogue no. L-1254, Assorted Topics Subcollection. CITL-MUN Archive Video Collection (pre 1994), Digital Archives

- Initiative, Memorial University Libraries. Available online: http://collections.mun.ca/cdm/singleitem/collection/extension/id/794/rec/2.
- Oil Means Trouble (1985). 15 minutes, 27 seconds. Dir. Bruce MacKay. Produced by the National Film Board of Canada. Title ID N0860, Shelf no. N00177. Moving Image Resource Centre, Concordia University. 16 mm.
- On the Trail of the Far Fur Country (2014). 80 minutes. Dir. Kevin Nikkel. Produced by Five Door Films and distributed by The Winnipeg Film Group. DVD.
- Operation Conservation (Opération conservation, 1979). 23 minutes. Dir. Andy Thomson. Produced by the National Film Board of Canada for the Department of Defence.

 Available online: http://www.nfb.ca/film/operation_conservation/.
- Other Side of the Ledger: An Indian View of the Hudson's Bay Company, The (1972). 42 minutes. Dir. Martin Defalco and Willie Dunn. Produced by the National Film Board of Canada. Available online: http://www.nfb.ca/film/other_side_of_the_ledger/.
- Patrol to the Northwest Passage (1937). 67 minutes. Cinematography by Richard S. Finnie.

 Sponsored by the Canadian Department of Mines and Resources. Item 5670, accession no. 1973-0128. Richard Sterling Finnie collection, Library and Archives Canada.

 Reference copy.
- Pelts: The Politics of the Fur Trade (1989). 56 minutes. Dir. Nigel Markham. Produced by the National Film Board of Canada. Available online:

 http://www.nfb.ca/film/pelts_politics_of_the_fur_trade/.
- Peoples of Canada (Les Peuples du Canada, 1940). Dir. Gordon Sparling. Produced by Associated Screen News and the National Film Board of Canada. Item 19622, accession no. 1975-0227. Academy of Motion Picture Arts & Sciences fonds, Library and Archives Canada. Reference copy.
- *Ressources sous-marines (Offshore*, 1973). 19 minutes, 46 seconds. Dir. John Ralph. Produced by the National Film Board of Canada for Energy, Mines and Resources Canada. DVD.
- Riches of the Earth (Revised) (1966). 16 minutes, 20 seconds. Dir. Colin Low, produced by Sidney Goldsmith and Barry Helmer. Produced by the National Film Board of Canada with the assistance of the Geological Survey of Canada. DVD.
- Rising Tide, The (1949). 31 minutes. Dir. Jean Palardy. Produced by the National Film Board of Canada. Title ID 11514, Shelf no. B00150. Moving Image Resource Centre, Concordia

- University. 16 mm.
- Romance of the Far Fur Country, The (1920 [2015]). 120 minutes. Cinematography by Harold M. Wyckoff and Bill Derr. Produced by Educational Films Corporation and released by the Hudson's Bay Company. Reconstructed and released by Five Door Films, distributed by The Winnipeg Film Group. DVD.
- Roughnecks: The Story of Oil Drillers (Les Maîtres-Sondeurs, 1960). 21 minutes. Dir. Guy L. Côté. Produced by the National Film Board of Canada. DVD.
- Search into White Space (1970). 16 minutes, 26 seconds. Dir. James Carney. Produced by the National Film Board of Canada in cooperation with the Department of Indian Affairs and Northern Development. DVD.
- Speculation (1980). 22 minutes, 10 seconds. Director uncredited, narrated by Paul MacLeod.

 Produced by Memorial University of Newfoundland Extension Service and the National Film Board of Canada Atlantic Centre. MUN Extension Service Cat. 00568, Oil and Gas Tapes Sub-collection. CITL-MUN Archive Video Collection (pre 1994), Digital Archives Initiative, Memorial University Libraries. Available online:

 http://collections.mun.ca/cdm/singleitem/collection/extension/id/546/rec/2.
- Speculation (edited) (1980). 21 minutes, 15 seconds. Director uncredited, narrated by Paul MacLeod. Produced by Memorial University of Newfoundland Extension Service and the National Film Board of Canada Atlantic Centre. MUN Extension Service Cat. 00567, Oil and Gas Tapes Sub-collection. CITL-MUN Archive Video Collection (pre 1994), Digital Archives Initiative, Memorial University Libraries. Available online: http://collections.mun.ca/cdm/singleitem/collection/extension/id/545/rec/1.
- Story of Oil, The (1946). 18 minutes. Director uncredited, produced by Guy Glover. Produced by the National Film Board of Canada. Item 1190, accession no. 1985-0292. National Film Board of Canada/Office national du film du Canada: 1982-1985 fonds, Library and Archives Canada. Reference copy.
- *Taking Stock* (1994). 47 minutes. Dir. Nigel Markham. Produced by the National Film Board of Canada, Atlantic Studio. VHS.
- *Terra Nova* (1964). 18 minutes, 50 seconds. Dir. Roger Blais. Produced by the National Film Board of Canada. Available online: http://www.nfb.ca/film/terra_nova/.
- This is Our Canada (Terre canadienne, 1945). 20 minutes. Dir. Stanley Jackson. Produced by

- the National Film Board of Canada and sponsored by the Rehabilitation Information Committee. Item 17089, accession no. 1973-0132. National Film Board of Canada/Office national du film du Canada: Nitrate fonds, Library and Archives Canada. Reference copy.
- Thoughts on Fogo and Norway (Newfoundland Project, 1967). 16 minutes. Dir. Colin Low. Produced by the National Film Board of Canada in collaboration with Memorial University of Newfoundland. Available online: http://www.nfb.ca/film/thoughts on fogo and norway/.
- To the North, 'Nascopie' Voyage, 1937 (1937). 16 mm on 4 reels, 60 minutes. Cinematography by Edwin W. Mills. F35, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- Trawler Fishermen (1966). 22 minutes. Dir. Martin Defalco. Produced by the National Film Board of Canada for The Department of Fisheries of Canada. Available online: http://www.nfb.ca/film/trawler_fishermen/.
- Trials and Tribulations of a Cameraman, The (1920). 35 mm on 2 reels, 14 minutes, 48 seconds. Cinematography by Harold M. Wyckoff and Bill Derr. F120, Hudson's Bay Company Archives, Archives of Manitoba. Reference copy.
- Underground East (1953). 17 minutes. Director uncredited, photography by Gerry Moses.
 Sponsored by Imperial Oil Limited. Produced by the Interprovincial Pipe Line Company and Crawley Films Limited. Imperial Oil Film Collection, Series 1: Public Relations films, 1939-1970s. Glenbow Archives. Available online:
 https://www.youtube.com/watch?v=dalnrpVXaFc.





Figure 1: Northern imagery at the Gare Centrale de Montréal Photo by author (June 2018)



Figure 2: Historical Treaties of Canada, prior to 1975

Published by Indigenous and Northern Affairs Canada, Government of Canada



Figure 3: Nation-to-nation discussion of Treaty 8 in The Romance of the Far Fur Country (1920)



Figure 4: Commodity supply line for white fox fur in *The Heritage of Adventure* (1920)

Courtesy of Hudson's Bay Company Archives, Archives of Manitoba, *The Heritage of Adventure* (F122)



Figure 5: Animal capital in The Romance of the Far Fur Country (1920)



Figure 6: Technological visions of Canadian geology in *The Modern Prospector* (1959) and *Know Your Resources* (1950)



Figure 7: Animating deep time in Riches of the Earth (Revised) (1966)



Figure 8: Parallel editing between two harvests in A Mile Below the Wheat (1949)



Figure 9: Pipelines binding the nation in *Underground East* (1953)

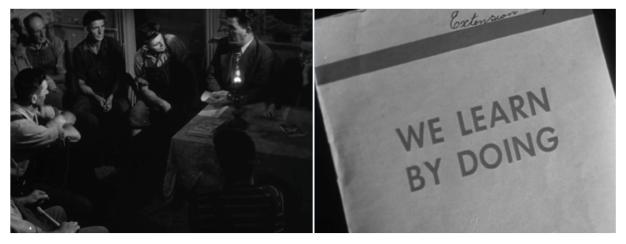


Figure 10: Fishermen's co-operatives in the Maritimes in *The Rising Tide* (1949)



Figure 11: A community of men, fish, and the sea in Trawler Fishermen (1966)



Figure 12: Speculating upon the impacts of offshore oil developments in *Offshore Oil: Are We Ready?* (1981) and *Speculation* (1980)

Courtesy of Digital Archives Initiative, Memorial University Libraries



Figure 13: Onshore ecological threats from offshore oil in Oil Means Trouble (1985)

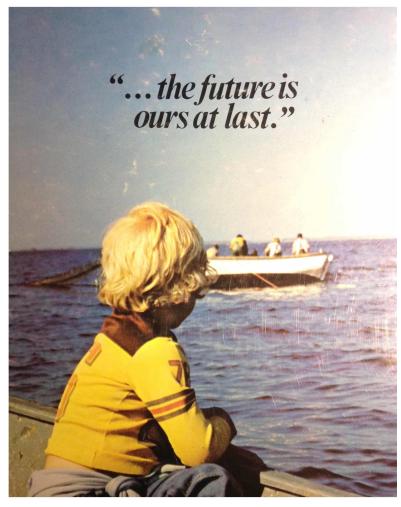


Figure 14: Back cover of *Fish is the Future*Published by the Department of Fisheries (St. John's, 1978)

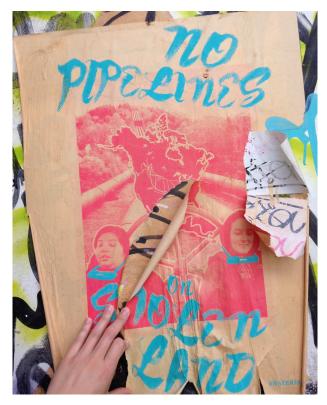


Figure 15: "No Pipelines on Stolen Land" street poster in Toronto Photo by author (September 2017)



Figure 16: "150 Fake News" street poster in Montreal
Photo by author (August 2017)