Carleton University

Transformism in Alberta:
The Environmental Political Economy of the Bituminous Sands

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by

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ABSTRACT

This thesis attempts to help establish environmental political economy as a viable academic field while providing an example of work in the discipline. It offers an analysis of societal processes resulting in the co-optation and/or neutralization of critical environmentalist ideas. Using Alberta's bituminous sands as a case study, and a Gramsci-influenced eco-Marxist theory as a foundation, the thesis argues that the term 'environmental transformism' (inspired by the Gramscian term *trasformismo*) is helpful in describing and framing such processes. Accordingly, the ensuing chapters provide an analysis of why environmental transformism is happening in Alberta, and demonstrate how this mechanism works at protecting the status quo from threatening ideologies, thereby consolidating neoliberal capitalism. A concluding argument discusses the inherent dangers posed to society by the transformism of certain environmental subjectivities. The thesis begins by introducing the contentious social and environmental issues surrounding the development of the bituminous sands.

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LIST OF ABBREVIATIONS

AEC	Alberta Energy Company
AERI	Alberta Energy Research Institute
AIH	Alberta Industrial Heartland
BP	British Petroleum
Bpd	Barrels per day
CAPP	Canadian Association of Petroleum Producers
CBC	Canadian Broadcasting Corporation
CCS	Carbon Capture and Storage
CEAA	Canadian Environmental Assessment Agency
CEMA	Cumulative Environmental Management Association
CERA	Cambridge Energy Research Associates
CERI	Canadian Energy Research Institute
CSS	Cyclic Steam Stimulation
EPE	Environmental Political Economy
ERCB	Energy Resources Conservation Board
G8	Group of Eight
G20	Group of Twenty
GCOS	Great Canadian Oil Sands
GHG	Greenhouse Gas
GPP	Gross Provincial Product
GSC	Geological Survey of Canada
HBC	Hudson's Bay Company
IEA	International Energy Agency
IMF	International Monetary Fund
IPE	International Political Economy
MOC	Multinational Oil Companies
NAFTA	North American Free Trade Agreement
NEB	National Energy Board
NOSTF	National Oil Sands Task Force
OPEC	Organization of Petroleum Exporting Countries
OSDG	Oil Sands Developers Group
PAH	Polycyclic Aromatic Hydrocarbons
PR	Public Relations
RAMP	Regional Aquatics Monitoring Program
SAGD	Steam Assisted Gravity Drainage
SCO	Synthetic Crude Oil
SPP	Security and Prosperity Partnership
THAI	Toe-to-Heel Air Injection
ToP	Treadmill of Production
TRO	Tailings Reduction Operations
WBEA	Wood Buffalo Environmental Association
WTO	World Trade Organization
WWF	World Wildlife Fund

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Figure 1: Map of Alberta's Bituminous Deposits

Reprinted with permission (Energy Resources Conservation Board 2009, 2-1).

PROLOGUE

The Many Sands

These enviro scribblers carefully use the word 'tar' and scornfully demonize it as 'dirty oil,' as if it were some kind of devil's brew and not that sweet golden syrup coming from the Middle East that we lovingly refine and pump into our Priuses.
- Writer Alistair Sweeny (Sweeny 2010a).

Three massive deposits of bitumen have been identified in Northern Alberta. Each of these reserves lies underneath a large swath of land, with one deposit extending beyond the province's Eastern border into Saskatchewan (see Figure 1). While most present-day maps refer to the Bluesky-Gething, Wabiskaw-McMurray, and Clearwater bitumen deposits cumulatively as the 'Alberta oil sands', they have had many other names depending on when the name was provided and by whom. Above, the words of Alistair Sweeny, author of one of the latest apologies of the bituminous developments, exhibit how the terminology has become an increasingly political affair in the last decade. Nowadays, notes historian David Finch on the Canadian Association of Petroleum Producer's 'Oil Sands or Tar Sands?' webpage, one can determine a person's political stance simply based on whether the term 'oil sands' or 'tar sands' is used: "Tar sands sounds more sinister to the ear now. The proponents of the development seem to make it a point to always call them the oil sands" (Finch n.d.).

The recent politicization of the terminology serves as a marker of the ever-shifting beliefs held by Albertans, Canadians and concerned global citizens regarding the bituminous developments. After all, the way we think of that place – its use value for society, its impact on our society's ability to fulfill future livelihoods – relates in dialectical form to the prevailing political economic structures in which

it is situated. Subjectivity towards the bituminous sands frames the way we answer collective questions relating to their material experience: Is bitumen a resource? Should it to be exploited for human benefit? What political and economic rules should guide its development? This prologue serves as a conceptual foundation for the ensuing thesis by briefly historicizing the bituminous sands and demonstrating that their discursive reframing over the centuries has influenced subjectivities, which in turn have impacted and limited material manifestations.

The first naming of the deposits likely took place during the Paleolithic Era by ancestors of the Dene, who settled in the region some 10,000 years ago. The Dene would have seen the bitumen, given that the natural, molasses-like substance oozes out of the banks of the Athabasca River on a hot summer day. The Chipewyan, who consider themselves ‘cousins’ of the Dene and who moved to the Athabasca region in the 1600s, would have had a name for this place, as they are known to have gone there to harvest the bitumen, using it as pitch (or tar) to caulk their canoes.¹ Similarly, the Cree, who arrived in this region in the 17th and 18th Centuries as part of a territorial expansion that resulted from beaver pelt trading with the Hudson’s Bay Company (HBC), also used bitumen for such purposes. The Cree and Dene words for tar, pitch, and gum, as well as phrases for patching items with such substances have been recorded in dictionaries, helping historians decipher the way indigenous peoples referred to this location in pre-colonial times.² Arguably, the

¹ According to Pratt (1976), the bitumen was also used by aboriginal peoples for medicinal purposes, and according to Marsden (2007), it was also used as heating fuel.

² In the *Alberta Elders’ Cree Dictionary* (2002), LeClaire, Cardinal and Waugh provide many Cree translations for tar, pitch and associated terms and phrases. The word ‘tar’ is translated as *kaskitew piko* (in Roman orthography, or b^hP^hU^ho Λd in Cree syllabics); the adjective ‘tarry’ is translated as

way native peoples of the continent thought of this place (as a source of canoe pitch, for example), impacted the material experience of the bituminous sands.

With the incursion of colonialism in this part of what is now Alberta, Canada, new European names for the resource emerged. The Regional Aquatics Monitoring Program notes on its online historical interactive timeline that in 1719 a Cree trapper by the name of Waupisoo carried a sample from the Athabasca region to Hudson's Bay and exchanged it with HBC trader Henry Kelsey, who referred to the sample as 'gum' or 'pitch' (Regional Aquatics Monitoring Program n.d.). By 1778, one of the first white colonists who came to the area, a North West Company fur trader by the name of Peter Pond, wrote in his French diary about the *bitume* that seeped out of the ground along the banks of the river (Innis 1930, 125).³ A decade later Alexander Mackenzie travelled up the Athabasca, reporting on "bitumenous [sic] fountains, into which a pole of twenty feet long may be inserted without the least resistance" (Mackenzie 1801, lxxxvii). By 1848, explorer John Richardson made the first extensive geological assessment of the area: "The whole country for

kîkway kapikewahk (ᑭᑭᑦᑦᑦᑦᑦᑦᑦᑦ); the phrase 'it is patched with tar or spruce pitch' is *pikihkâtew* (ᑭᑭᑦᑦᑦᑦᑦᑦᑦᑦ). Allowing for syntactical errors, perhaps the Cree would have referred to this place as *kîkway kapikewahk yikawiskâhk* (literally, 'tarry, sandy place')? In an email message to the author Susan Walker of the Fort McMurray Historical Society (Walker 2010) explained that contemporary Cree-speaking workers in the bituminous sands refer to the resource as *pimiyaskiy* (meaning 'oily dirt'). The Chipewyan word for 'tar' is *ts'i dzeghé*, while the word for 'sand' is *tthai*. As the Elfords note in their Chipewyan-English dictionary (1981), Chipewyan place names are often based on some characteristic of the location. For example, early settlements at Churchill, Manitoba were called *ttheye* (or 'stone house'), a reference to the English Fort built there in the 1700s. Following this logic, the Chipewyan name for this location may have referred to the presence of *ts'i dzeghé* and *tthai*.

³ It is not entirely clear whether Pond was referring to the Athabasca River or the Peace River (though both rivers travel through bituminous deposits. The original citation went as follows: *Ce qu'il y a certain c'est que le long des bords de cette riviere et du Lac Arabosca on trouve des sources de bitume qui coulent sur la terre.*

many miles is so full of bitumen that it flows readily into a pit dug a few feet below the surface” (Richardson 1851, 126).

By 1875, the relatively young Canadian government in Ottawa began to turn its attention to these peculiar ‘bituminous sands’ as part of a larger effort to scout the Western half of the country for potential areas of settlement, cultivation, and resource extraction. A Geological Survey of Canada (GSC) study of the region by John Macoun (1882) attracted further interest from Ottawa, and by 1888 a GSC report to the Canadian Senate recommended that the area be reserved from sale, given the promise of future wealth from bitumen extraction: “The evidence... points to the existence in the Athabasca and Mackenzie Valleys of the most extensive petroleum field in America if not in the world. The uses of petroleum, and consequently the demand for it by all nations, are increasing at such a rapid ratio that it is probable this great petroleum field will assume an enormous value in the near future, and will rank among the chief assets comprised in the Crown domain of the Dominion” (as published in Nelson 1893, 76-77).

Despite this early reference to ‘petroleum’, the term ‘bituminous sands’ reigned as the dominant way of referring to the location up until the early 20th Century. The latter term not only characterized the geology of the area, it also served to frame (and in part stemmed from) the intended uses of the resource: The word ‘bitumen’, often interchangeable with ‘asphalt’, is the scientific name for the heavy hydrocarbon compound that can be found embedded under the muskeg, mixed amongst sand, sulphur, clay, water, and other minerals. Of all naturally occurring hydrocarbons, bitumen is the heaviest, meaning it has a higher ratio of

Carbon to Hydrogen atoms in its long molecular chain. It is thus highly viscous and exists in a semi-solid state at room temperature, akin to the human-made substance tar. For this reason, the resource was seen as a great potential source for both road paving and roof tarring. Sure enough, in 1915, several tons of bitumen were shipped to Edmonton and used in a variety of road paving trials. By 1922, the International Bitumen Company built an extraction plant 80 kilometers North of Fort McMurray, where it intended to commercially produce bitumen for “paving, laying built-up roofs, processing into roof coatings, plastic gums, lap cement, caulking compounds, waterproofing, marine gum, fence post preserver, boat pitch, belt dressing, mineral rubber, and skin disease medicine” (Pratt 1976, 39-40). Such enterprises continued into the late 1930s. The name ‘bituminous sands’ thus reflected the shifting material experience of the resource from pre-colonial times: Whereas aboriginal inhabitants and early explorers had understood this place as a source of gum or pitch for fixing canoes, settlers in the early 20th Century saw it as a lucrative source of asphalt and tar. The term ‘tar sands’ therefore swiftly replaced the former ‘bituminous sands’ as the dominant colloquial name.

It would only be a matter of time before Canadians began to try to find ways of converting the heavy hydrocarbon into crude oil. In 1893, the Dominion government invested \$7000 to drill three wells in the Athabasca region, naïvely expecting to find sweet crude. While none was found, one of the wells near Pelican Rapids did strike a large deposit of natural gas.⁴ The presence of such large

⁴ In what may be one of Alberta’s first environmental disasters, the well blew out of control, spewing 250,000 cubic meters of gas per day until it was finally capped in 1918.

quantities of gas suggested to observers that hydrocarbons abounded in the area. Further, Southern Alberta was proving to be rich in conventional petroleum, and a fortuitous find of crude oil at Leduc in 1947 put the province on the map as a major potential producer of oil, leading to further exploration in the bituminous region.

As such, it was only a short while after the emergence of the term ‘tar sands’ that ‘oil sands’ followed suit. In part, it was a term that could finally be conceived because the technological process for converting bitumen into Synthetic Crude Oil (SCO) had finally been developed: While famed Alberta chemist Karl Clark’s process of isolating bitumen from sand yielded a product that behaved and looked a lot like tar, the subsequent process of upgrading bitumen yielded a product that behaved and looked a lot like crude oil. In concert with the province’s growing deliverability of conventional crude in the 1940s and 1950s, the Alberta Government pushed for a new term – the ‘oil sands’ (Brown 2009). Perhaps the most important turning point occurred in the fall of 1951 when the Government of Alberta invited international oil companies to take part in the first ‘Oil Sands Conference’. The conference marked an effort to attract investment from Big Oil and clarify what would thereafter be the ultimate goal of bituminous sands development: the production of SCO.⁵

For the latter half of the 20th Century, the terms ‘tar sands’ and ‘oil sands’ were both used interchangeably. The former was used more often and in both colloquial and official settings, while the latter tended to be used by institutional bodies making a point of appealing to Alberta’s growing petroleum sector. There

⁵ In his opening remarks to the conference, one provincial government minister emphasized how Alberta would thereafter be open to foreign investment from multinational oil corporations: “May the words ‘welcome’ and ‘oil sands’ ever be closely associated!” (as quoted in Pratt 1976, 31).

was not (yet) a clear directive within government and corporate circles to use one term over another.

While 'bituminous sands' is rarely used today, it is perhaps the best term available, given that what is found on site are great quantities of sand soaked in bitumen. The term 'bitumen sands' is not as accurate as 'bituminous sands' as it hides the existence of other naturally occurring elements mixed in with the sands (that is, the 'ous' ending makes it an adjective; it tells us the predominant quality of the sand). Nevertheless, both terms are more accurate than 'tar sands', given that tar refers to either the man-made substance by that name or the plant-made substance also known as pitch. And yet 'tar sands' more closely characterizes the resource than 'oil sands'. The latter term denotes the intended derivative of industrial processes, rather than the quality of the actual resource. Nevertheless, the present consensus has tipped in favour of 'oil sands' as the more commonly used term.

In tracking the evolving explanation from the Government of Alberta as to why it believes 'oil sands' is more accurate than 'tar sands', it becomes clear that a concerted effort has been made at the institutional level to encourage a popular consensus regarding terminology. In March of 2008, the government's rationale was explained in a pamphlet on the bituminous sands: "The use of the word tar to describe bitumen deposits is inaccurate. Tar is a man-made substance produced by the destructive distillation of organic material. Bitumen may look like tar, but it is naturally occurring. Oil sands is the correct term for the bitumen deposits of northern Alberta" (Government of Alberta 2008a). While the first part of the rationale is logical, the concluding statement is a baseless claim. Six months later the

Government republished the pamphlet under a slightly altered title, in which a more compelling explanation was given: “Oil sands is a more accurate term because bitumen is a substance that contains oily sand. The resource is composed of three main elements: sand, water and bitumen” (Government of Alberta 2008b). Still, the government was not fully content with a description of bitumen as a type of ‘oil’, and thus it later offered yet another explanation on its official oil sands website: “It makes sense to describe the resource as oil sands because oil is what is finally derived from the bitumen” (Government of Alberta n.d.). These citations exemplify how government and industry have tried to shape subjectivities regarding the bituminous sands. After all, the assertion that oil is what is finally derived from the bitumen is only true if the bituminous sands are intentionally used for the purpose of producing SCO. Contrarily, if the dominant viewpoint was that the resource should be left in its natural state under the muskeg of Northern Alberta, it is unlikely that ‘oil sands’ would be commonly perceived as an accurate term.

As a testament to the power of this concerted effort to propagate a dominant form of subjectivity, one need look no further than the Canadian Broadcasting Corporation (CBC). As explained in a recent radio exposé on Alberta’s great terminological debate, the CBC has recently put forth a directive within its language policy asking reporters to use ‘oil sands’ because the term is “the most neutral and accurate term for our purposes, since it is widely used and it describes the product that is ultimately created” (in Brown 2009). With powerful oil corporations, government bodies, recognized experts and media sources all favouring the use of ‘oil sands’, it is likely that that term will continue to dominate subjective opinions of

Alberta's bituminous sands for the foreseeable future. In turn, new leading subjectivities may impact material manifestations there. The name used for the place in question carries an underlying meaning that relates to intended perceptions of the location. It conjures up beliefs about what is and what ought to be happening in Northern Alberta.

The story of the changing names in Alberta's bituminous deposits therefore raises broad questions that help to introduce the mode of inquiry found within this thesis: How can multiple, different images of one place exist? Why have efforts been made by certain groups in society to adopt the term 'oil sands' over the term 'tar sands', or a more technical term such as 'bituminous sands'? What political and sociological processes work at eliminating one term while favouring another? What are the material economic and environmental repercussions of this discursive exercise taking place within societal spaces? The following thesis delves into more specific research questions with hopes of uncovering some of the environmental, political and economic dimensions of this discursive puzzle.

CHAPTER ONE

Part I: Thesis Introduction

Environmental protection and economic development can happen at the same time. The province has shown leadership through legislation and policies involving land reclamation, water controls, air quality, and human and ecosystem health.

- Pamphlet on the Oil Sands (Government of Alberta 2008a, 4).

This thesis uses Alberta's bituminous sands as a case study to address a fundamental theme in environmental political economy – the interaction between political economic structures, subjective ideas about environmental justice, and the material ecological impacts of industrial development. At the same time, the ensuing chapters serve as a prototypical study in environmental political economy (or EPE) and thereby aim to help establish EPE as a viable academic field.

The Government of Alberta and companies involved in the bituminous sands often boast of their many environmental initiatives. Indeed, the government has enacted an impressive array of environmental policies and regulations affecting the heavy oil industry, and equally, many oil companies have implemented innovative practices designed to limit their respective ecological footprints. The image of the 'oil sands' has thus emerged as a dominant discursive force in Alberta, in large part representing a collection of regulated energy projects that offer unprecedented economic benefits while taking care to protect the environment from excessive damage caused by industrial development.

However, a contradictory image of the bituminous sands – encapsulated by the term 'tar sands' – suggests that their development has been unequivocally unsustainable due to their increasingly detrimental impact upon wildlife populations, the boreal forest, the Athabasca watershed, the atmosphere, and

human populations downstream. Many critics of bituminous sands development have thus adopted the term ‘tar sands’ as a hallmark of their opposition to all forms of ecological damage caused by energy projects in Northern Alberta. The resulting socio-ecological puzzle arising from the conflicting truths presented by these two images can equally be framed as a politico-economic puzzle when the material interests of the provincial government, oil corporations, and other authorities¹ that stand to gain from bituminous sands development are taken into account. Put simply, the image of the tar sands challenges the status quo image of the oil sands – it threatens the megaproject by implicitly calling into question its very right to exist. As a result, the ‘oil sands’ story must be continually sold and re-sold to the public on political, economic and – increasingly – environmental grounds in order to ensure that the massive capital project continues to be developed.

This thesis delves into the sociological processes through which the selling of the bituminous sands – as an idea – takes place. It does so by asking three central guiding research questions:

- Where do the contradictory images of Alberta’s bituminous sands (as represented by the terms ‘oil sands’ and ‘tar sands’) come from?
- How and why has the image of the ‘oil sands’ become dominant in Alberta?
- What are the material repercussions of this particular social, political and economic outcome?

My argument, in brief, goes as follows: In Alberta, the institutional builders of consent (such as the provincial government, energy companies, think tanks,

¹ I use this term ‘authorities’ in multiple contexts in order to refer to individuals or entities which have the power and agency to shape the course of events and influence others (not only through coercive force, but also through persuasion).

organizations, respected experts and intellectuals, media outlets, etc.) have used their 'hegemonic authority' to define and propagate a political economic structure characterized by neoliberalism. 'Hegemonic authority' is a term that I use to refer to the power and agency held by various societal actors to influence the way people commonly think and behave (through a combination of coercive and persuasive tactics).² In turn, the normalization of neoliberal capitalism has profoundly shaped and limited the way that Albertans predominantly think about the environmental impacts of heavy oil development. In particular, the sociological force of 'environmental transformism' serves as one of the most important tools used by hegemonic authorities to co-opt or neutralize those types of environmental beliefs that are inconsistent with a neoliberal capitalist model, thereby propagating a neoliberal development schema in the bituminous sands. As a result, the oil sands narrative discussed above has been more successful in fulfilling popular conceptions of environmental sustainability – it has subsumed a common sense perspective on the environment. However, while ecological concerns have been addressed at a discursive level, the very mechanisms that have caused material damage to the environment have been further enabled.

² This definition is thoroughly developed in Chapter Two. The term is influenced by Antonio Gramsci's writings on the concept of 'dual perspective' – two levels of political action representing force and consent, authority and hegemony, etc.

Scholarly Contribution and Social Value

The concept of environmental transformism, as it is developed in the ensuing chapters, makes a specific theoretical contribution to the academic community of eco-Marxism and a broader contribution to the field of EPE. It does so by bridging together a number of distinct concepts that have already been developed within the eco-Marxist literature into a unified theoretical account regarding the masking of ecological degradation in neoliberal capitalist societies. For example, Albo (2006) has found that a capitalist mentality of 'market ecology' has created limitations to the ways we think about environmental sustainability and natural resources. Similarly, Gould, Pellow and Schnaiberg (2008) have pointed to the ecological and social 'treadmills of production' within capitalist societies that lead to a paradox of expanding economic growth and consumption at the expense of ecological wellbeing; Colin Hay (1994) has advanced a theory of 'ecological displacement' to explain how the capitalist state moves ecological problems to other planes of crisis, while James O'Connor's 'second contradiction thesis' (1988) has offered a structural explanation of how capitalism causes ecological damage. In addition, John Bellamy Foster (2000; 2009) has re-articulated Marx's concept of 'metabolic rift' to explain how "the logic of capital accumulation inexorably creates a rift in the metabolism between society and nature, severing basic processes of natural reproduction" (2009, 49). This thesis, and in particular my advancement of the term 'environmental transformism', brings these eco-Marxist concepts together by demonstrating how the construction of capitalist subjectivities regarding the environment (such as market ecology) is designed as a means of protecting

capitalist structures of political economy at a discursive level, all while the material processes of capital accumulation continue to engender ecological damage. Further, it addresses a gap in the exiting literature by offering a detailed explanation of the process through which common understandings of environmentalism are formed. In other words, it explains why certain ways of thinking on the environment become accepted as part of the status quo, while other types of environmental thought are marginalized and delegitimized.

The concept of environmental transformism is also of value to the field of EPE and to the community at large, because it helps to shed light upon a number of dynamics within our contemporary environmental political economy that are often hidden from popular conception. First, it explains how a neoliberal capitalist model of resource development has continued to thrive within societies that are witnessing the rise of popular environmental beliefs inconsistent with the neoliberal model of capitalist development. Second, the phenomenon helps to explain why various bodies of authority have engaged in transformist tactics (either intentionally or unintentionally) to protect the existing model of capitalist resource development. Third, the concept serves as a warning about the potentially destructive outcomes that could arise from the continued cooptation and neutralization of critical environmentalist thought within neoliberal societies. In Alberta, for example, heavy oil development could continue to wreak havoc on regional and global ecosystems while citizens genuinely believe that environmental problems have been addressed. The idea of environmental transformism suggests that popular conceptions of 'sustainable development', for example, are often

inaccurate and misleading when used by hegemonic authorities whose intention is first and foremost to protect capitalism, not to bring about radical transformations for the sake of environmental justice.

Further, as McCarthy and Prudham have noted, "... relatively little has been said about the manifestation of neoliberalism as environmental governance reform per se, nor have the various parallels and tensions between neoliberalism and environmentalism as ideologies, discourses, and class projects been sufficiently explored. Little scholarship has explicitly theorized connections between neoliberalism and the environment in the most industrialized nations..." (2004, 275). In explaining the relationships between neoliberalism and environmentalism from the scope of EPE, this thesis attempts to help fill this academic void while offering an example of an archetypical study in the field.

Theoretical and Methodological Foundations

As explained above, this thesis is a theoretical and methodological exercise falling under the umbrella of environmental political economy. It develops an eco-Marxist analysis of the Alberta bituminous sands (the latter serving as a case study) specifically influenced by the writings of Antonio Gramsci. Eco-Marxism is just one theory within EPE; Other EPE theories could include, but are not limited to, eco-socialism, political ecology, social ecology, environmental sociology, ecological economics, ecological modernization theory, environmental history, eco-anarchism, and critical environmental International Political Economy (or IPE). These theories are akin to a diverse set of lenses through which scholars may view and interpret the problems intersecting ecology, society, politics and economics.

Eco-Marxists are particularly interested in understanding the political economic roots of ecological problems, or the social forces and processes that both cause environmental degradation and that work to mask it from public conception (Barry 2007, 158). This body of theory holds that ecological problems are a result of the social and structural dynamics of capitalism. Eco-Marxist theory contains both classical elements (drawing from the original works of Marx, for example) as well as modern theoretical advancements as found in contributions by influential Marxist theorists of the Twentieth and Twenty-First Centuries (such as Antonio Gramsci, Jürgen Habermas, James O'Connor, Raymond Williams, David Harvey, and John Bellamy Foster). The framework of analysis herein can thus be said to fit within the field of EPE, using an eco-Marxist theory of capitalism and society especially influenced by the works of Antonio Gramsci.

As claimed above, the methodological approach used in this thesis has also been shaped by a mode of inquiry appropriate to environmental political economy, and thus a brief depiction of what is meant by EPE is in order: Only a few scholars have explicitly referred to the field as 'environmental political economy'. Both Dryzek (1996) and Keller (2005) have named EPE and promoted it as a practicable and much-needed field of study. Yet arguably there are numerous scholars engaged in the broader project of EPE who have not used the exact moniker. For example, in *The Political Economy of the Environment* (2002) James K. Boyce makes the connection between ecological degradation and the distribution of wealth and power across the world and within domestic societies; In *Paths to a Green World: The Political Economy of the Global Environment* (2005), Jennifer Clapp and Peter

Dauvergne map various worldviews traditionally associated with international politics upon new debates regarding global ecological problems. In an older example, the contributing authors of *Is Capitalism Sustainable? Political Economy and the Politics of Ecology* (1994), edited by Martin O'Connor, all confront the intersections between leading economic structures, political forms of governance and social organization, and ecological damage (as well as the political and social dynamics of its repercussions). As the title of Martin O'Connor's edited collection suggests, many EPE scholars have been preoccupied with the core relationship between capitalism and the environment. Often they have been critical of the ability of capitalist modes of production to yield social and ecological justice (however they have defined these contested terms). Whether or not 'EPE' has been officially named, numerous scholars have in some way confronted ecological questions in light of political economic structures, and thus arguably an enormous body of work exists that could be referred to as the field of environmental political economy.

In his seminal article on EPE, Dryzek wrote that "this emerging field covers work concerned with the structure, organisation and operation of political-economic systems (that is, mechanisms for making collective choices) as they confront environmental problems" (1996, 27). That is, he situated the field as a specialized offshoot of modern political economy that was particularly interested in calling ecological puzzles into question. As a branch of modern political economy, the form of inquiry in EPE can be traced to critiques of the classical political economists of the Eighteenth and Nineteenth Centuries (such as Adam Smith, Jean-Baptiste Say, David Ricardo, and John Stuart Mill). Despite founding a discipline

through their explorations of the interactions between basic elements such as land, rent, labour, commodities, production, distribution, and wealth, the classical political economists have been criticized by modern political economists for ultimately concerning themselves with economic management and statecraft with the purpose of maintaining the status quo (Heilbroner 1996; Caporaso & Levine 1992).

Perhaps the first major critic of the classical political economists was Karl Marx, who made his critique explicit in his seminal text, *A Contribution to the Critique of Political Economy*, published in 1859. Within, Marx distinguishes himself from the other political economists of his time in multiple respects. First, unlike the classical political economists who saw the mode of production as fixed, Marx saw it as an impermanent mode of social organization which would ultimately change one day, regardless of whether statesmen wished this or not. Second, Marx claimed to broaden the realm of political economy from a study of interrelated components to a totalistic study of nothing less than the “anatomy of civil society” (Groenewegen 2007, 745). Third, while hitherto the classical political economists appeared to work towards interpreting and consolidating existing relations of production and property, Marx saw such relations as unequivocally unfair and sought normatively better alternatives. Thus while the classical political economists saw statesmen as those whose responsibility it was to help define and sustain an everlasting capitalist mode of production, Marx was beginning to spell out a materialist conception of human history (now known as ‘historical materialism’), in which statesmen and capitalists who owned the means of production were exposed as the culprits of an

attempt to stop the progression of history towards fairer modes of social organization (Evans 1975, 84-86).

This schism in Nineteenth Century political economy is important because a similar dialectic within political economy can be identified during the Twentieth Century in the post War period. The rise of modern political economy as a mode of progressive social inquiry in the 1960s and 1970s – or the “revival of political economy” as it is termed by Pressman and Neill (1999, 853) – can be said to have been partly influenced by Marxist thought, given that it emerged in reaction to the resurgence of neoclassical economics. Modern political economists expressed their discontent with this neoclassical creed, claiming that its conception of humans as rational utility maximizers was narrow and mechanical, and that its market fundamentalism was founded upon avarice. Similar to Marx’s critique in the previous century, modern political economists sought new modes of production that were egalitarian and socially just, by changing the dominant structures of political economy (Pressman & Neill 1999, 854).

Similarly, environmental political economists have sought to confront the dominant structures of political economy and promote alternative forms of social organization that are not only more socially just, but which also recognize, respect and protect the ecological systems of the planet. In this way, EPE scholars (as other political economists) have been unable to escape the problem of normativity - as suggested by the famous adage of critical IPE scholar Robert Cox – that theory is always *for* someone and *for* some purpose (Cox 1986, 207; emphasis in original). This is to say that EPE scholars, whether they admit it or not, are working towards

what they believe is the best outcome of the interaction between humans and nature (though by no means do they all agree).

The field of EPE can therefore be interpreted as an offshoot of modern political economy that, while similar in form, has tended to feature critical analyses of modern political structures with the ultimate intention of yielding a normatively better interaction within and between human structures and the natural world. That is, work in the field of EPE has sought both social justice and environmental justice. Some EPE writers (see, for example, Pepper 1993) have argued that it is futile to consider environmental systems in isolation of human social relations because the root causes of ecological degradation can be found in the form of social organization rather than its mere existence. In this regard, EPE has often, though not always, been self-acknowledgedly anthropocentric. A hallmark of the field has been its interdisciplinary nature – notable writers whose work can be considered to fall within the field (from Paul Hawken to Bill McKibben to John Bellamy Foster) have approached the topic from a variety of angles, lenses, and disciplines. To summarize, EPE has tended to include scholars from a variety of disciplines and backgrounds who appear to share an ontological focus on political, economic and social forces with the purpose of achieving a normatively ‘better’ relationship between ecological and social spheres.

The methodological approach adopted in this thesis is thus adapted to suit the characterization of EPE as laid out above. In carrying out the research for this project, I have explored a wide array of sources – historical pieces that have helped to illuminate changing political economies and subjectivities, analytical tomes that

have enabled me to uncover and contribute to leading theoretical debates in EPE, primary interviews and contemporary public relations materials that signify the popular and critical perspectives on the environment, as well as scientific documents and anecdotal evidence speaking to the material ecological impacts of development in the bituminous sands.

Several interviews were conducted with representatives coming from three societal groups – industry, government, and non-governmental organizations involved in social or environmental policy. Similar questions were asked in all nine interviews in order to facilitate comparison across different societal groups. Subjects were asked to answer from an institutional standpoint, rather than relay their personal views. The questions were divided into seven general categories: the interplay between diverging interests in society such as environmental groups and oil companies; the relationship between the economy and the environment; the definition of sustainable development; environmental regulations and policy; market ecology and green capitalism; and public opinion (see Appendix A: Sample Interview Questions). Once interviews were completed they were transcribed, after which a number of additional documents were compiled by theme. The compiled theme documents were used to help prepare a table in which two leading environmental and political economic narratives – characterized by the terms ‘oil sands’ and ‘tar sands’ – were thoroughly compared (see Table 1 in Chapter Four). Thus, interviews were largely used to aid in unpacking different viewpoints regarding the bituminous sands.

Thesis Organization and Chapter Outline

Throughout the ensuing chapters, the thesis weaves together theoretical analysis, discursive history, and empirical proofs. Having introduced my research puzzle, the problem of subjectivity and materiality, and my theoretical and methodological foundations in EPE within the first part of this chapter, part two goes on to introduce the bituminous sands as a single entity – an energy ‘megaproject’. That is, I offer definition to the bituminous sands and explore some of the cumulative environmental impacts of development that have been discussed by ecologists and other scientists. Chapter Two offers a theoretical background that helps to set-up the ensuing empirical analysis. It explores the dynamics of a Gramsci-influenced eco-Marxist theory in order to frame the rise of market ecology as a common sense environmentalist viewpoint in neoliberal societies, and explains the basic eco-Marxist arguments regarding environmental degradation. In addition, Chapter Two adds further theoretical definition to the concept of environmental transformism, and identifies the dimensions one might expect to find if indeed environmental transformism is taking place. In Chapter Three, an attempt is made to characterize Alberta’s political economy and to historicize the structures that rule the material development of the bituminous sands. An argument is made that in today’s heavy oil industry in Alberta, both subjectivity and materiality continue to be shaped by neoliberal premises. Chapter Four moves into a more detailed examination of common sense environmentalist thought in Alberta. It explains the dominant image of the ‘oil sands’, contrasts it with the opposing ‘tar sands’ narrative, and demonstrates how the former image has been propagated by hegemonic authorities.

The concluding fifth chapter offers an analysis of the processes through which common sense environmentalism is constructed. It argues that the co-optation and neutralization of critical environmental thought takes place through multiple efforts that cumulatively result in the process of environmental transformism. In good EPE form, the concluding remarks are unapologetically proscriptive – this theoretical work is part of an attempt to understand and expose elements of the capitalist system, which in turn is shown to be a fundamental obstacle to environmental justice. I conclude the thesis with a note on the imperative role that the field of EPE must play in working towards a world that is more socially and environmentally just. As Joel Kovel puts it in his book of a similar stripe: “In fighting for an ecologically sane society beyond capital, we are not just struggling to survive, but, more fundamentally, to build a better world and a better life upon it for all creatures” (Kovel 2007, 10).

Figure 2: Location of Surface Mining and In Situ Projects

Reprinted with the permission of Cambridge Energy Research Associates (Alberta Energy 2009a).

PART II: Introducing the Megaproject

The largest industrial project in human history – the tar sands, [is] a
gigaproject of strip mining the earth to send mock oil to the United
States and leave a vast wasteland of poisoned land, human beings and
giant lakes of waste in their wake.
- Activist Macdonald Stainsby (Stainsby 2008).

In order to further explore the environmental political economy of the bituminous sands it is first necessary to clarify what the space entails, as objectively as possible. The following paragraphs briefly discuss the boundaries of the bituminous sands as a ‘megaproject’ – detailing its size, its geological origins, and its place within contemporary geopolitical relations. In addition, this part of the chapter highlights the environmental impacts caused by the processes of bitumen extraction, upgrading, and shipping, as identified by natural scientists and ecologists.

As the map in Figure 2 demonstrates, the three bituminous sands regions combined form an area that is 140,200 square kilometers (an area approximately the size of the state of Florida). This is equivalent to 1.4% of Canada’s entire landmass. Bitumen is not crude oil. Rather, it is a heavy hydrocarbon (the heaviest form of petroleum) that, at room temperature, does not flow freely and is viscous like molasses. The three bitumen deposits are the remains of a former hydrocarbon deposit that was originally much larger – approximately two to three times the volume of today’s resource. For millions of years, bacteria feasted upon the lighter hydrocarbon molecules, leaving behind the present bituminous sands (Petroleum Communication Foundation 2000). These deposits of bitumen are mixed amongst sand, water, and other minerals. A typical sample only contains between 1% and

20% bitumen. Each grain of sand is surrounded by a thin layer of water. In turn, the water is surrounded by a film of bitumen (Alberta Energy 2009b).

In order to convert bitumen into SCO, the resource must first be separated from the other soil materials and then chemically converted in order to change the molecular composition of the hydrocarbon chain, in a process called 'upgrading'. The separation process takes place through two main methods – surface mining (where deposits are shallow enough), and 'in situ' (in place) projects. Figure 2 shows the breakdown and location of mining and in situ projects throughout the three administrative areas of the bituminous sands. Today there are 91 active operations, the vast majority of which are in situ projects using either Cyclic Steam Stimulation (CSS), Steam Assisted Gravity Drainage (SAGD), or Toe-to-Heel Air Injection (THAI) technologies to heat bitumen underground, where it is then pumped up to the surface. By contrast, mining projects collect truckloads of soil, which are then taken to industrial plants where bitumen is separated from the sand using a technique originally developed by Karl Clark in the 1920s. Only 20% of the resource is shallow enough (less than 100 meters deep) to be obtained through surface mining, and these latter deposits are located upon the Athabasca River, north of the town of Fort McMurray (Alberta Energy 2009a). While few companies additionally upgrade bitumen into SCO on site, most operations ship the separated bitumen, either by train or by pipeline, to upgrading facilities in the United States or an area northeast of Edmonton known as the Alberta Industrial Heartland (AIH). The 317 square kilometer AIH can therefore be considered part of the broader megaproject, given that it houses dozens of petrochemical industries directly related

to the bituminous sands; So too can the vast network of pipelines which connect the resource to industrial plants throughout the continent, which upgrade and refine bitumen into useable petrochemical products. Thus, when considered as a monolithic project, the bituminous sands constitute one of the largest operations in the world. As Nikiforuk notes, “investment in the tar sands, including pipelines and upgraders, now totals approximately \$200 billion. The tar sands boom has become the world’s largest energy project, the world’s largest construction project, and the world’s largest capital project” (2008, 2).

Currently, the megaproject produces 1.3 million Bpd (barrels per day) of bitumen. By 2018 this figure is expected to grow to 3 million Bpd. The province of Alberta currently exports 1.51 million Bpd of crude oil (including conventional and synthetic forms) to the United States, which accounts for 15% of that country’s crude oil imports (Alberta Energy 2009a). With the bituminous sands holding a total of 170.4 billion barrels of bitumen, Alberta is now recognized as having the second largest petroleum reserve in the world, second only to Saudi Arabia. With declining global supplies of conventional oil, many countries are turning to the bituminous sands as a supplier of unconventional petroleum.

Environmental Impacts

From an ecological point of view it is important to consider the cumulative environmental impact of the bituminous sands megaproject. That is, the various categories of environmental impacts are closely related and intertwined, fundamentally connected to one another through the core processes of bitumen extraction, separation, upgrading and shipping. Below I consider eight identifiable

categories of environmental problems that together yield a cumulative impact: Land disturbance, greenhouse gas (GHG) emissions, water contamination, fresh water depletion, air pollution, the destruction of wildlife habitat, population health impacts, and the depletion of non-renewable resources.

Land Disturbance

Only a portion of the land within the three bituminous sands administrative areas and the AIH has thus far been disturbed, as much of the territory is not yet under lease. The surface mineable area covers 4,750 square kilometers. Of this area, roughly 602 square kilometers of land have been disturbed by mining (Alberta Energy 2009a). Land disturbance has typically been associated in the popular media with surface mining, as this extraction method requires the clear-cutting of large swaths of boreal forests, followed by the removal of all layers of soil (known as ‘overburden’) that are situated above the deposits. However, in situ developments also disturb the land, though in different ways. Development critic Andrew Nikiforuk explains how “a typical [in situ] project occupies a three-mile by three-mile area and destroys 7 per cent of the land. But the technology’s supporting roads, pipelines, and seismic lines industrialize the forest...” (Nikiforuk 2008, 14). In contrast, the provincial government and industry groups point to stringent regulations that require operators to eventually reclaim all disturbed land to an equivalent capacity (Alberta Energy 2009a). Data on the amount of land disturbed by in situ projects is lacking, as is similar data on pipelines.

The natural ecosystem that can be found throughout most of the bituminous sands areas is boreal forest. The destruction of boreal uplands and wetlands thus

has ecological impacts relating to climate change, fresh water depletion, and habitat destruction (all of which are discussed below). In the process of mining, the boreal soils are typically eroded, changing the balance of salinity, and affecting soil fertility. To yield just one barrel of bitumen from mining, two tons of earth must be removed from the existing landscape with heavy machinery. Healthy soils are integral to thriving ecosystems in the boreal forest, and as a result, the bituminous sands industry has drawn upon (and helped to furnish) an entire body of research focusing on how to reengineer boreal soils disturbed through clear-cutting and mining (Mintz Testa 2010).

Greenhouse Gas (GHG) Emissions

Land disturbance is also closely related to releases of GHG emissions, which in turn contribute to anthropogenic climate change. The boreal forest takes in carbon dioxide and releases oxygen into the atmosphere, operating as a 'carbon sink' by storing tremendous amounts of carbon in forest soils and vegetation. Consequently, industrial development of boreal areas is seen to accelerate the problem of climate change (Walsh 2010, 1). In addition, the large-scale consumption of oil and natural gas used in extraction, upgrading and shipping operations cause additional emissions of GHGs. While the bituminous sands are the largest single contributing source of GHGs in Canada, currently accounting for 5% of the country's net emissions (Woynillowicz 2005, 19), this only amounts to 0.1% of global emissions (Alberta Energy 2009a). Oil companies have decreased their per barrel emissions of GHGs by one third since 1990 (Alberta Energy 2009a). Of course, the end product of operations – SCO – eventually finds itself refined into combustible petroleum

products that further contribute to GHG emissions in Canada and the United States. Given that both countries are among the world's top ten net emitters (International Energy Agency 2009a, 11), and both are relying more heavily upon fuels derived from the bituminous sands, the climatic impacts of bitumen extraction are forecasted to continue expanding.

Air pollution

In addition to GHGs, the industrial plants in the region also emit large quantities of harmful compounds and pollutants into the atmosphere, such as nitrogen oxides, sulphur dioxides, hydrogen sulphide and other volatile organic compounds (Griffiths 2008). Despite monitoring programs, gases sometimes linger in neighbouring communities, and on at least one occasion have caused schoolchildren in Fort Mackay to pass unconscious (CBC News 2006). Emissions of various pollutants have led to the acidification of rain downwind from the bituminous sands. Rainfall in Northern Saskatchewan has been found to have a pH level of 4.93 (three times higher than unpolluted rain), and this is attributed to the "150,000 tonnes of acid-rain-causing gases" released each year by industrial plants in the bituminous sands, 70% of which end up in the neighboring province (Weber 2009b).

Fresh Water Depletion

Bituminous sands operations have also been associated with the depletion of fresh water, both as a result of withdrawals from the Athabasca and Clearwater Rivers and from groundwater sources. A study by the Pembina Institute claims that practically none of the water used by industry is returned to its natural source (Griffiths, Taylor & Woynillowicz 2006, 85), while on the other hand the

government claims that “up to 90% of the water used can be recycled depending on the maturity of the facility and type of extraction” (Alberta Energy 2009a). Depending on the methods used, anywhere between 0.5 and 5 barrels of water are used to produce one barrel of SCO (Nikiforuk 2008, 3; Alberta Energy 2009a). The tapping of saline groundwater sources has been associated with “direct or indirect impacts on surrounding wetlands, lakes, aquifers and other water systems” (Moorhouse, Huot, and Dyer 2010, 46). The megaproject has been found to use more than 550 million cubic meters of water each year, 80% of which is from the Athabasca River (Holroyd & Simieritsch 2009, 15); However, annual water withdrawal permits from the Athabasca River are equivalent to less than 3% of the river’s annual flow (Alberta 2009a). Despite this, ecologists have found that the average annual flow of the Athabasca River steadily declined 29% in volume between 1970 and 2005 (Holroyd & Simieritsch 2009, 22; Schindler, Donahue & Thompson 2007). Boreal wetland ecosystems are particularly impacted by industrial development because they “are often connected to each other by streams, rivers and subsurface flows transporting water over long distances” (Ducks Unlimited Canada 2010). In other words, the impacts of development on fresh water extend beyond the local industrial area.

Water Contamination

Ecologists suggest that the depletion and contamination of fresh water in this area is especially problematic because the water flows North into the Peace-Athabasca and the Mackenzie deltas, which together hold more than one sixth of Canada’s remaining freshwater reserves. Contaminated wastewater from industrial processes

is stored in large tailings ponds, which pose a number of ecological problems. As the famous 'duck incident' of 2008 showed,³ the ponds are a risk for many forms of wildlife due to the presence of toxic substances such as naphthenic acids, polycyclic aromatic hydrocarbons (PAHs), phenolic compounds, ammonia, and mercury (Nix & Martin 1992; MacKinnon & Boerger 1986). The ponds are currently growing in volume and cover a 130 square kilometer area, "as industry pumps enough effluent each day into the lagoons to fill 80 Olympic pools" (Thomson 2010). On a hot summer day, the ponds are said to release benzene into the atmosphere (Henton & Healing 2009).

In addition, there is a potential leakage problem: One study by Environmental Defence found that 11 million litres of contaminated water leak from the tailings ponds every day, while oil companies and governmental agencies unanimously deny that tailings ponds leak (Price 2008). Nevertheless, a study by Doctor Kevin Timoney found that concentrations of arsenic, mercury, and PAHs in the water downstream from the bituminous sands are higher than normal, and rising, leading him to assert that the release of toxic compounds is directly related to upstream development (Timoney 2007). Timoney's findings have been echoed by Canada's pre-eminent water scientist, David Schindler, who says that the PAHs in the river are at toxic levels (Schindler et al. 2009). Some inhabitants of local communities have suggested a relationship between contaminated water and the fish found in Lake Athabasca and the Athabasca River with humpbacks, lesions and

³ In the spring of 2008, a flock of some 1600 migrating ducks died after landing in one of Syncrude's tailings ponds (see CBC News 2010a).

various deformities; Walleye in particular have been found to have toxic levels of mercury (Harkinson 2008). In short, evidence points to the contamination of water as a result of industrial activity in the bituminous sands, though there is debate about whether the contaminated water is adequately contained and managed.

Destruction of Wildlife Habitats

According to the Canadian Boreal Initiative, up to 30% of North America's songbirds, and up to 40% of waterfowl species rely upon boreal forest ecosystems as breeding grounds and are thereby adversely affected by large-scale developments in Alberta (Blancher & Wells 2005). Recently, data released through a Freedom of Information and Protection of Privacy request found that 164 animals have been killed at three bituminous sands operations (run by Syncrude, Suncor, and Shell). These include black bears, foxes, coyotes, deer, moose, muskrats, beavers, voles, martens, wolves, and bats. The animal deaths prompted the provincial government to vow to mitigate future impacts to wildlife (Komarnicki 2010). Concerns have thus been raised regarding the impact of the roads, pipelines and seismic lines (built for in situ operations) upon local wildlife populations. In a study conducted on the threatened woodland caribou herds in the Athabasca area, it was found that the scale of planned in situ projects had "the largest single influence on habitat recovery" (Athabasca Landscape Team 2009, 31). Caribou herd sizes in the region have declined by nearly 50% since 1993 (De Souza 2010b), prompting the Canadian Parks and Wilderness Society to claim that "unless there is a significant change in policy and regulation, there is real danger that the caribou are headed for extinction" (Walsh 2010, 2). Finally, fish habitats have been impacted by

water withdrawals (as discussed above) – in particular walleye, goldeye and long-nose sucker (Griffiths, Taylor & Woynillowicz 2006, 69).

Population Health Impacts

Some observers worry about the health impacts brought upon local and downstream communities as a result of contamination of air, water, flora and fauna in the region. In particular, Fort McKay is an indigenous reserve located between two large areas of development, with the Syncrude and Suncor mines directly to the South, and Shell, CNRL and Total mines to the North. As indicated above, noxious gases sometimes filter into the community, and traditional sources of food and water have become contaminated. Similarly, Fort Chipewyan is a small native community located 300 kilometers downstream from Fort McMurray along the Athabasca River. As the Natural Resources Defense Council notes, residents of Fort Chipewyan “have been diagnosed with a high number of illnesses, including leukemia, lymphomas, lupus, and autoimmune diseases,” and the organization believes that the presence of carcinogens and contaminants in the water is responsible (Bordetsky et al. 2007, 4). Kevin Timoney’s study (as above) has found a correlation between development and the presence of carcinogens. Further, the community’s former doctor made headlines when he went to the media correlating cancer rates with development in the bituminous sands (see Iwerks 2008). Nevertheless, industry and government representatives have vehemently argued that there is no clear evidence of negative health impacts relating to industrial

development, causing heated debate.⁴ A baseline health study conducted by Alberta Health Services (Chen 2009) found that the overall rate of cancer in the Fort Chipewyan was indeed higher than normal, yet no cause was attributed, leaving many groups to conjecture about causation.

Depletion of Non-Renewable Energy Resources

Production of bitumen is expected to more than double within the next decade (Energy Resources Conservation Board 2009). The pace and scale of development is cause for concern to peak oil analysts due to the tremendous amounts of non-renewable sources of energy (such as natural gas) used as inputs in the industrial process. While there is no consensus regarding the size of the remaining global supplies of conventional and non-conventional oil and gas, there is a relative consensus that peak production of conventional hydrocarbons will be reached within the next two decades, if indeed it has not already been reached (International Energy Agency 2009b).⁵ Such bleak assessments have caused some observers to decry the amount of energy used in the production of bitumen (see, for example, Kenney 2008). As the NRDC notes, “the tar sands industry consumes enough natural gas every day to heat roughly 4 million American homes” (Bordetsky et al. 2007, 5). Nevertheless, Alberta Energy does not see the depletion of hydrocarbons as an environmental problem at present because of promising new technologies in exploiting the province’s enormous unconventional gas reserves.

⁴ This debate is discussed further in Chapter Four and Chapter Five.

⁵ The IEA, known for its conservative forecasts and energy supply outlooks, believes that conventional oil production will not peak until 2030.

Conclusion

The bituminous sands, when considered as a monolithic project, refers to the present conglomeration of mining, in situ, upgrading and pipeline enterprises aiming to extract bitumen from Northern Alberta, convert it into SCO, and then ship it to prime markets in the United States (and increasingly, Europe and Asia). The cumulative environmental impact of developing the bituminous sands has been identified in many ecological assessments, and the information forms the basis of a growing anti-‘tar sands’ movement. Nevertheless, pro-development actors in civil society and political society are equally aware of impacts, and yet continue to seek the production of bitumen and SCO in light of efforts to mitigate the extent of degradation. Thus far, these actors have succeeded in securing a business-as-usual approach, despite criticism. In particular, they have succeeded in selling the bituminous sands as an idea by building a particular brand of popular environmentalism that consents to the megaproject as a whole. This thesis is an attempt to understand the processes involved in the formation of that particular type of environmentalist thought.

CHAPTER TWO

Theoretical Interventions in Environmental Political Economy

Even society as a whole, a nation, or all existing societies put together,
are not owners of the Earth. They are merely its occupants, its users;
and like good caretakers, they must hand it down improved to
subsequent generations.
- Karl Marx (Marx 1990).

As explained in the introductory chapter, environmental political economy is an interdisciplinary field that covers a variety of theories spanning the social sciences. What brings the diverse pool of EPE theorists together – however much their predispositions may differ – is an underlying environmentalist purpose and a normative *modus operandi*. That is, EPE research aims to achieve a just relationship between the human and natural worlds, often through the reconfiguration of societal structures.

Drawing from classical and modern elements of eco-Marxism, this chapter offers a definition of ‘neoliberalism’ as an intensified form of capitalism containing spatial specificities according to location. It also explains how material neoliberal political economic structures are maintained by the propagation of neoliberal subjectivities. Finally, it points to an eco-Marxist literature that offers an explanation of how neoliberal capitalism foments environmental degradation (in part by masking said degradation from public conception) and explains the concept of environmental transformism.

A Gramsci-Influenced Eco-Marxism

The central research puzzle in this thesis revolves around the emergence of two contradictory images of the same space: the ‘tar sands’ and the ‘oil sands’. These two images thrive at the same time, despite suggesting two very different material

realities – the former conjuring up images of a dying landscape while the latter speaks of a productive, regenerating one. Given that there can only be one material truth, a complete analysis of the bituminous sands must also focus on the subjective side of this conundrum – an analysis of the competing subjective truths that highlight how Albertans (and Canadians, more broadly) understand and construct this space. Arguably, the way people think of the bituminous sands at a cultural level stems from (and in turn, shapes) the material impacts of development of Alberta's resources.

The relationship between materiality and subjectivity has long been a point of interest for Marxist thinkers. Many theoretical debates have stemmed from Marx's preface to *A Contribution to the Critique of Political Economy*. What exactly did he mean when he claimed that "the mode of production of material life conditions the general process of social, political and intellectual life" (Marx 1859)? Was he being economically determinist by suggesting one-way causality between economic structures and cultural/ideational outcomes? 'Structural Marxists' (in the tradition of French thinker Louis Althusser) are often accused of 'reductionism' for interpreting Marx in this way. In contrast, 'Marxist Humanists' (such as the so-called 'Western Marxists' György Lukács and Antonio Gramsci, and Frankfurt School theorists such as Max Horkheimer, Theodore Adorno, and Herbert Marcuse) have avoided the charge of reductionism by adopting a more dialectical version of historical materialism, one that suggests a reciprocal relationship between society's material and ideational structures. As one influential Gramscian theorist has explained, this vision of historical materialism is an alternative to economic

determinism: “Gramsci contrasted historical materialism, which recognizes the efficacy of ethical and cultural sources of political action (though always relating them with the economic sphere), with what he called historical economism or the reduction of everything to technological and material interests” (Cox 1986, 216).

This thesis draws from and builds upon eco-Marxist and Gramscian traditions to create a novel historical materialist analysis of capitalist environmental degradation that is as much concerned with the ideational reproduction of a polluting society as the material causes of ecological damage. The Gramscian influence is necessary in highlighting the role of environmental thought in contributing to ecological damage. While focusing on material production processes is absolutely crucial (because it is indeed within the realm of production where the seeds of ecological damage are sewn), what is sometimes lacking from the eco-Marxist camp is an explanation of how ideas on ecological sustainability can in fact have a negative impact on the environment by influencing production relations. Polluting corporations, governing bodies, and individuals can genuinely believe they are working towards ecological sustainability – they may even alter production processes with the specific goal of decreasing their environmental footprint – while they in fact continue to produce more environmental devastation when the cycle of production and consumption is viewed as a totality. This thesis aims to fill this gap by providing a more subjective eco-Marxist social theory of the environment. As Randall Germain has explained, this model must include a combined emphasis on the ideal and the material in order to interrogate how it is that we think what we think: “Idealism,” he explains, “is an integral component of all material structures,

not simply as an instrumental means of advancing particular interests but as a crucial determinant of how individuals imbibe and rework collective myths and images about their place within a changing world” (Germain 2007, 129). Thus I bring the neo-Gramscian emphasis on the ideational sphere to an eco-Marxist historical materialism.

Similarly, I bring eco-Marxism’s analysis of the social-ecological nexus to the Gramscian tradition. While a Gramscian mode of analysis has been used by a wide variety of scholars within a range of disciplines, my definition and application of the concepts of ‘environmental transformism’, ‘common sense environmentalism’ and ‘good sense environmentalism’ serves as a contribution to the theoretical tradition as these particular Gramscian concepts (‘transformism’, ‘common sense’, and ‘good sense’) have not yet been specifically associated with environmentalism. While many neo-Gramscians have applied their mode of analysis to environmental politics (see Paterson 1996; Levy & Newell 2005; Andrée 2007; and Ekers, Loftus, & Mann 2009), their analyses predominantly focus on Gramsci’s concept of hegemony operating at the level of global environmental governance. While such a method is beneficial in that it “provides a basis for a more critical approach to corporate political strategy that emphasizes the interaction of material and discursive practices, structures, and stratagems in sustaining corporate dominance and legitimacy in the face of environmental challenges” (Levy & Newell 2005, 58), it does so at a global level, which in turn tends to de-emphasize the interactions between and within state and civil society – a relationship with which Gramsci was very concerned. That is, the processes involved in ideological (re)production, in the

construction of ‘common sense’, and in the acquisition of consent are all processes that are much more concrete and visible at a scale where the interaction between state and civil society is more tangible. Given that environmental beliefs and regulations vary so much from place to place, and from sector to sector, a case can be made for downscaling Gramsci when contemplating EPE. A national or sub-national Gramscian analysis – such as that provided by Stuart Hall in his discussions of racism in Britain (in Morley & Chen 1996), or the rise of Thatcherism there (Hall 1988) – is one that can more easily isolate dominant ideological beliefs and cultural practices and locate the spaces where such ideas are disseminated and reproduced, as well as the forms they take. In effect, this allows for the variable of specificity; it aims at producing a contextual analysis of how specific forces and relations in various localities combine to produce distinct outcomes.

Gramsci’s writings in particular have been instrumental in framing a mode of Marxist analysis that explores both the material and subjective structures of society. As a theorist, he is perhaps best known for his reconceptualization of the notion of hegemony. While hegemony had been traditionally defined as domination through raw material capabilities and coercive power, for Gramsci “hegemony is a relation, not of domination by means of force, but of consent by means of political and ideological leadership” (Simon 1982, 22). In a slightly more nuanced interpretation, Raymond Williams notes that hegemony constitutes a lived experience, a dynamic process that “does not just passively exist as a form of dominance [but rather...] has to be continually renewed, recreated, defended, and modified. It is also continually resisted, limited, altered, and challenged by pressures not at all its own” (1977,

112). As an avid Marxist, Gramsci saw behind capitalist society a contested relationship between the fundamental classes of capital and labour, wherein the former owns not only the means of material production, but the means of ideological production as well. Whereas Marx saw social relations vividly taking place in the workplace, Gramsci saw civil society as the space where social relations between and within these classes took place on a superstructural level. As Roger Simon explains, Gramsci posited that “social relations [are] embodied in a great variety of organizations and institutions including churches, political parties, trade unions, the mass media, cultural and voluntary associations” (Simon 1982, 27). In other words, it is within the sphere of civil society that the dominant social group attempts to build hegemony by acquiring the consent of the polity. When the concept of hegemony is understood this way it can be used as a tool for changing society by those who confront the leading ideas of the day.

Given the importance of ideas and ideologies in the construction and dismantling of hegemony, the concept of ‘common sense’ was one that Gramsci found equally important. Common sense is defined by Gramsci as “the traditional popular conception of the world” or “the spontaneous philosophy of the multitude” (in Hoare and Smith 1971, 199, 421). If civil society is the place where hegemony is built, then common sense is a representative map of the hegemonic ideology. For Gramsci, common sense is “a product of history,” a “folklore of philosophy” that “is continually transforming itself, enriching itself with scientific ideas and with philosophical opinions which have entered ordinary life” (in Hoare and Smith 1971, 325-326). As Chris Harman writes, the combination of “different conception[s] are

what make up 'common sense' – views that are taken for granted without more thought and which cause 'people to 'think', without having a critical awareness, in a disjointed and episodic way'" (Harman 2007).

This gives rise to Gramsci's use of the term 'good sense' as an antidote to common sense. He often uses the words "criticism" and "consciousness" in reference to good sense. Good sense, according to Gramsci, could be achieved by critically engaging the leading ideas and ideologies of the day, or by becoming conscious of one's self – by "work[ing] out consciously and critically one's own conception of the world and thus... choos[ing] one's sphere of activity, tak[ing] an active part in the creation of the history of the world, be[ing] one's own guide, refusing to accept passively and supinely from outside the moulding of one's personality" (in Hoare and Smith 1971, 323-324). The task of progressive thought, according to Gramscian theory, is to "disarticulate the reactionary elements of common sense from the positive strands within it" and thereby advocate a turn to good sense (Jones 2006, 54). David Harvey also offers an explanation on the relationship between these two concepts: "Common sense is constructed out of long-standing practices of cultural socialization often rooted deep in regional or national traditions. It is not the same as the 'good sense' that can be constructed out of critical engagement with the issues of the day. Common sense can, therefore, be profoundly misleading, obfuscating or disguising real problems under cultural prejudices" (2005, 39).

From a Gramscian perspective the capitalist mode of production is upheld by traditional and common ideological beliefs put forth by the capital class with the consent of the working class. The revolutionary strategy, for Gramsci, was therefore

a ‘counter-hegemonic’ struggle that would need to be waged at the level of ideology and within the sphere of civil society, to bring about consciousness amongst subaltern individuals and groups, and criticism of dominant philosophies.

In a Gramscian and Marxist perspective of society, the ruling creed of the day is sourced from the same groups or individuals who benefit most from it. In other words, the wealthiest, most powerful actors in the system who have considerable control over the way information is disseminated (in the media, in schools and in everyday institutions) thereby have an easier time convincing others to follow their line of thinking. While Marx referred to these powerful agents as the ‘capital class’, or the ‘owners of the means of production’, and Gramsci used the term ‘intellectuals’, I refer to dominant individuals, groups, and institutions as ‘hegemonic authorities’.¹ My terminology is closely tied to Gramsci’s conception of ‘intellectuals’, however it refers to a broader array of agents involved in the construction and maintenance of common sense ways of thinking. For Gramsci, ideologies are not spontaneous entities but constructed, cross-cultural ways of thinking that find their dissemination in specific agents, places and times. In his discussion of the dissemination of Catholicism as a hegemonic ideology in Italy, for example, Gramsci identifies agency not only in the church, but also within a host of cultural, educational and other religious institutions, as well as individual family units, voluntary associations and political parties. In his interpretation of Gramsci, Stuart Hall explains that “the principal agents” of the dissemination of cultural thought in a

¹ Different hegemonic authorities might have different ‘interests’: A politician may seek to get re-elected; a corporation may seek higher profit margins; a political party may seek to consolidate power in a jurisdiction; a newspaper columnist may seek to get promoted by pleasing the owners of the publication, etc.

society “are intellectuals who have a specialized responsibility for the circulation and development of culture and ideology and who either align themselves with the existing dispositions of social and intellectual forces (‘traditional’ intellectuals) or align themselves with the emerging popular forces and seek to elaborate new currents of ideas (‘organic’ intellectuals)” (Hall 1986, 21-22). Yet in our present day and age, it is arguable that the organizing and directing function of intellectuals within society is fulfilled by a diverse group of actors that goes beyond individuals and includes government agencies, public relations and advertising firms, multinational corporations, global organizations, local think tanks, media networks, etc. Thus I have used the term “hegemonic authorities” to refer to any individual, group or institution that plays a role in forming and propagating common sense.

In subsequent chapters of this thesis, I interrogate whether common sense can incorporate certain beliefs regarding the relationship between humans and nature, and consider whether this type of ‘common sense environmentalism’ is typically shaped by the same ideologies and agents that influence political and economic structures. In other words, Gramsci saw various societal processes (such as transformism) working to consolidate common sense ways of thinking through the co-optation or liquidation of critical ideas; Thus, I attempt to uncover whether similar processes are occurring at the level of common sense environmentalist thought in Alberta. If so, the term environmental transformism would thus characterize one of the key processes through which common sense is consolidated and protected. Before discussing the theoretical concept of environmental

transformism, however, it is first necessary to explore the theoretical dimensions of the neoliberal hegemony.

The Neoliberal Hegemony

How does one go about characterizing the political economy of a province? What are the indications that neoliberalism has become 'hegemonic' in a particular jurisdiction? Because of the historical development of neoliberalism over the last few decades, an important starting scale of analysis is the international political arena. In *A Brief History of Neoliberalism* (2005), Harvey dedicates a chapter to explaining how neoliberalism has become globally hegemonic. This came about, he explains, through complex and multifaceted efforts around the world which had the goal of dismantling embedded liberal institutions of the Keynesian era and replacing them with neoliberal institutions and projects like unregulated markets, trade liberalization and privatization. Harvey defines neoliberalism as an iteration of neo-classical economic thought: It is "a theory of political economic practices that proposes that human well-being can best be advanced... within an institutional framework characterized by strong private property rights, free markets, and free trade" (2005, 2). In their edited collection *Neoliberal Environments* (2007), Heynen, McCarthy, Prudham and Robbins build upon this definition:

Neoliberalism *is* capitalism, although a particular historical variant of capitalism. It is the most recent form of capitalism, one similar to, but also distinct from, classical liberalism and the *laissez-faire* liberalism discussed by Polanyi.... The point here is that neoliberalism has sometimes been discussed, incorrectly in our view, as a single, monolithic and undifferentiated process that is somehow distinct from capitalism, rather than as a diverse and interlinked set of practices that reflect a heightened, evolved and more destructive form of capitalism (2007, 287, emphasis in original).

In powerful and influential countries such as Great Britain and the United States, the imposition of neoliberal policies by Margaret Thatcher and Ronald Reagan, respectively, reconfigured those domestic political economies. Then, through the global reach of British and American-dominated institutions such as the World Bank, International Monetary Fund (IMF), World Trade Organization (WTO), Group of Eight (G8), the North Atlantic Treaty Organization (NATO), the United Nations' Security Council, and the U.S. military, etc., neoliberal ideas quickly became rooted in other parts of the world, sometimes through coercive pressure. As Harvey argues,

the channels through which this was done were diverse. Powerful ideological influences circulated through the corporations, the media, and the numerous institutions that constitute civil society – such as the universities, schools, churches, and professional associations. The 'long march' of neoliberal ideas through these institutions..., the organization of think-tanks (with corporate backing and funding), the capture of certain segments of the media, and the conversion of many intellectuals to neoliberal ways of thinking, created a climate of opinion in support of neoliberalism as the exclusive guarantor of freedom. These movements were later consolidated through the capture of political parties and, ultimately, state power (2005, 40).

In this sense, neoliberalism has been a hegemonic force for nearly three decades on a global level. The term 'Washington Consensus' – now almost entirely synonymous with 'neoliberalism' – suggests that this particular brand of capitalism has acquired the consent of many, if not most, of the other pivotal states and actors in the geopolitical arena. The term also suggests that neoliberalism has a 'home base', as it were, in the world's most powerful country, the United States (see Chomsky 2003; Panitch & Gindin 2004).

While others have questioned the extent of neoliberal dominance by pointing to the existence of widespread opposition to globalization (see McCarthy &

Prudham 2004), there is a general agreement that since the end of the Keynesian era neoliberalism has been “the most powerful ideological and political project in global governance” (McCarthy & Prudham 2004, 275). In the Gramscian sense of the word, hegemony certainly allows for a measure of opposition. As a result, suggesting that neoliberalism is ‘hegemonic’ within a given jurisdiction does not mean that everyone in the polity wholeheartedly espouses the ideology. Rather, it suggests that the prevailing popular beliefs, the dominant philosophical mode of thought, the general status quo – common sense, in short – is marked by consent for the ideology. Consent, in turn, need not translate into unflagging ‘support’. The determining factor of Gramscian hegemony has to do with the way that political approval and disapproval is manifest, and whether or not the status quo is significantly altered by dissent. While there is no shortage of criticism to the neoliberal model, and while alternative models abound throughout the world, the point is that the status quo has been particularly framed by neoliberalism.

Despite facing a crisis of legitimacy with the global financial crisis and credit crunch of 2008, American-based neoliberalism appears to have weathered the storm, as demonstrated in the Group of 20’s November 2008 *Declaration of the Summit on Financial Markets and the World Economy*. In a section entitled “Commitment to an Open Global Economy”, the declaration states, “we recognize that reforms will only be successful if grounded in a commitment to free market principles..., respect for private property, open trade and investment, competitive markets, and efficient, effectively regulated financial systems” (Group of 20 2008). In the fallout of the global financial crisis, some observers (for example, Wade 2008)

suggested that the incoming U.S. president Barack Obama would dismantle the neoliberal paradigm and introduce an interventionist style of embedded liberalism similar to the Keynesian era. However, all actions thus far from the Obama administration appear to reassert the neoliberal mantra. Notably, the administration appointed two influential neoliberal economists – Paul Volcker and Austan Goolsbee – to head the Economic Recovery Advisory Board and Council of Economic Advisers.² Yet it was the new president himself who in his days of campaigning made his commitment to free markets clear: “Look, I am a pro-growth, free-market guy. I love the market” (as quoted in CBS News 2008). That the world’s most powerful individual acquiesces to overwhelming pressure to demonstrate that he ‘loves’ the neoliberal ideal is demonstrative of the incredible power of common sense thinking. The global neoliberal hegemony is arguably alive and well.

In many parts of the world the neoliberal ideology has transcended the global/local divide, becoming a pervasive style of political economic organization in places and spaces as diverse as Beijing, China and Bogotá, Colombia. Yet as critical geographers have suggested, it is important to consider each neoliberal space within its own context: “The neoliberal project is shown to be *constitutively differentiated* at some level – and ... this differentiation might make a difference to how we understand and evaluate those things the grand abstraction ‘neoliberalism’ inadequately signifies” (Castree 2007, 282, emphasis in original).

² Volcker is one of the key intellectuals that helped bring neoliberalism to fruition in the United States, when he served as the US Federal Reserve chairman under Ronald Reagan (Harvey 2005, 1); Goolsbee is an economist at the most influential neoliberal academic institution – the University of Chicago – and is well known for his advocacy of free markets, free trade and privatization.

In Chapter Three I examine whether the movement of neoliberal ideas into Canada has been facilitated due to the spatial and cultural proximity to the world's centre of power and wealth. Neoliberal entrenchment may have been unavoidable with such massive quantities of trade between the USA and Canada, upon which both countries are reliant. In Alberta specifically, I explore whether the presence of one of the most valuable of global commodities – petroleum – for which America has an insatiable desire, has facilitated the entrenchment of neoliberalism there in a particular form. It is therefore important to offer a brief theoretical explanation of the indicators one might expect to find if indeed Canada, Alberta and the bituminous sands were indeed neoliberal.

The full neoliberalization of the bituminous sands would require the commitment of both the province and the federal state. In contrast to previous forms of capitalist accumulation (such as nationally-oriented welfare state capitalism which characterized the development of the bituminous sands during the Trudeau years), the process of neoliberalization would see an intensified regime of private property rights and the hyper-liberalization of trade and of incoming flows of capital; In a neoliberal bituminous sands, both the federal government and the province would be expected to attract both private and foreign investment by maintaining a relatively low corporate and property tax regime and (in the case of the Bank of Canada) by trying to manipulate the exchange rate of the Canadian dollar. While the province would ensure that bitumen is commoditized and treated like private property to be exchanged through market mechanisms, the national state would negotiate trade deals to minimize tariffs and trade barriers imposed by

importing nations. In addition, the province, the federal government, and the corporations involved in the oil sector could be expected to protect the prevailing development philosophy from counter-philosophies which may threaten business-as-usual, using whatever means required (though opting for consensual methods before coercive ones). In Chapter Three I explore whether or not these indicators have indeed come to fruition, to assess whether Canada, Alberta and the space called the bituminous sands are indeed defined by a neoliberal political economy.

Market Ecology

Alongside the entrenchment of neoliberal ideology the world has played witness to new forms of environmentalist thought. As McCarthy and Prudham argue, “neoliberalism may be understood as a set of coherent ideologies, discourses, and material practices,” that constitutes a “distinctly environmental project”; and further, that “neoliberalism and modern environmentalism have together emerged as the most serious political and ideological foundations of post-Fordist social regulation,” (2004, 276, 275). In this regard, environmentalism – defined by Gregory Barton as “the advocacy of a proper balance between humans and the natural world” (2002, 9) – has recently joined neoliberalism as an important element within the global battleground of ideas. Arguably, the way that people think about the environment has been shaped by the dominance of neoliberal ideology. In turn, the term ‘market ecology’ characterizes the particular brand of environmentalism associated with neoliberal ideas. As Gregory Albo explains, market ecology is in fact a descendant of neoliberalism, given the latter’s claim that the self-regulating market is the best mechanism through which to allocate

resources (Albo 2006). Market ecologists lay blame for environmental degradation on state intervention in capitalism. In turn, they suggest that in commoditizing those natural elements that humans dearly cherish and demand, market-pricing mechanisms will naturally force individuals and firms to adjust to the problems of scarcity and thereby act in an ecologically responsible manner. This particular brand of environmentalism has become a common thread in neoliberal societies, as noted in the ever-ubiquitous 'greenwashed' advertisement which boasts of some environmentally-friendly product,³ as well as the growing amount of 'green' policy and legislation that attempts to address environmental problems through market mechanisms (a recent example being the proposal to introduce carbon trading markets as a means of reducing global greenhouse gas emissions). The theoretical result of mediated market ecology is thus a 'green' capitalism that would have markets reoriented to ensure that 'environmentally friendly' production and consumption be made profitable. This is the argument put forth by many market ecologists, perhaps most notably by Paul Hawken in *The Ecology of Commerce: A Declaration of Sustainability* (1993). Thus, market ecology seeks a normatively better interaction between nature and society and asserts that this can be achieved within the existing structure of neoliberal capitalism. In Chapter Four, I attempt to determine the extent to which market ecologist ideas have (or have not) been accepted as a common sense environmentalist viewpoint in Alberta.

³ As *Greenpeace's* website on corporate greenwashing notes, consumers are "bombarded with advertising about environmentally friendly goods and services" on a daily basis (see Greenpeace, n.d.).

Neoliberal Capitalism and Ecological Destruction

Eco-Marxists suggest that there exists a fundamental contradiction within the structure of capitalism that almost guarantees ecological degradation. Thus they claim that market ecology is flawed, if not dishonest. Such theorists have asserted that a materialist conception of history offers a framework for theorizing the causal link between the neoliberal mode of production and ecological destruction. John Bellamy Foster and Brett Clark, for example, note how Marx, trained as a soil chemist, interpreted the advent of capitalist agriculture after enclosure (particularly through the growth of large export-oriented mono-crops) as having arrived at the expense of the reproductive quality of the land. The resulting ‘metabolic rift’ (as Marx called it), marked by the failure to return nutrients back to the soil in the way it had been done since the advent of sedentary life, was a signal of the declining sustainability of agricultural production under the capitalistic organization of society (Bellamy Foster & Clark 2003).

Early eco-Marxist accounts such as that by James O’Connor (1988), have built upon the writings of Karl Polanyi, whose 1944 book *The Great Transformation* is a polemical critique of market liberalism.⁴ Polanyi notes that when nature is treated as a commodity, which he defined as an “object produced for sale on the market” (2001, 75), it can only be thereafter accessed through purchasing power; and yet, human society relies upon natural elements such as land, air and water for subsistence, nutrition and health. This commoditization of what is not really a

⁴ While there is some debate as to whether Polanyi can be considered a ‘Marxist’ thinker, the case is persuasively made by Rhoda Halperin (1988) as well as Tim Strohane (1997). In an essay on this matter Strohane notes that “Polanyi appears to have adopted and elaborated many of Marx’s insights into society and economy,” having studied Marx and Lukacs’ writings at length (1997, 96).

commodity (because nature is not produced by humans for sale on the market) ultimately brings about its exploitation and decomposition as it is reconfigured for profitable sale. Under a system of market liberalism, notes Polanyi, “nature would be reduced to its elements, neighborhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed” (2001, 76). Thus the capitalist mechanism of ecological destruction was found in the mistreatment of land (and by extension, nature) as a ‘fictitious commodity’ by making it possible to buy and sell it on the free market. Subsequent eco-Marxists have borrowed heavily from Polanyi’s ideas, using his analysis of the ‘fictitious commodity’ as a starting point for their own interpretations.

O’Connor attempted to dig further for a more precise explanation of how capitalist mechanisms led to ecological destruction. Although Polanyi’s interpretation was considered to be accurate, it did not account for those moments when short-term profitability appeared to be compatible with environmental goals (through, for example, conservationist efforts that lower firms’ operating costs, such as using energy more efficiently). That is, there are instances in which so-called ‘greener’ production processes are more profitable than conventional methods of production. Eco-Marxists attempted to explore this conundrum further and explain how new ‘green’ technologies often have hidden environmental costs, and why, in the long run, the capitalist mode of production seemed to bring about ecological destruction, regardless of ‘green’ policies or ‘green’ market transactions implemented in the short run.

The term “Ecological Marxism” (eco-Marxism for short) appears to have been coined by Ben Agger in *Western Marxism* (1979), in which it is described as a theory of how the problem of over-consumption (and ecological degradation) has become the pre-eminent problem of capitalism in Western societies. In contrast, O’Connor’s thesis on the ‘second contradiction of capitalism’, originally put forth in the inaugural issue of *Capitalism, Nature, Socialism* (1988) is a critical response to Agger’s argument, in which he espouses a *production*-based theory of eco-Marxism that closely mirrors traditional Marxist analysis. O’Connor’s article has been influential, and many subsequent eco-Marxists have either adopted, reworked or criticized eco-Marxist theory largely based on his seminal thesis.

Traditional Marxist theory claims that periodic economic crises arise from capitalist forces and relations of production. Within this theory, the process of labour exploitation is seen as endemic to capitalism. The way for capitalists to accrue profits (to accumulate capital) is to exchange commodities produced by labour at a value that is higher than the value infused upon said commodities by the labour and associated costs required to produce it. Traditional Marxist theory thereby makes a normative call for the rise of the labour movement and revolutionary change towards socialism (a mode of social organization where human labour is not exploited). O’Connor used traditional Marxism as a foundation upon which to model his ecological theory of economic crisis. This theory reasserts that capitalism is founded upon labour exploitation, but it also argues that

additional conditions of production⁵ are equally exploited through modern production relations. In turn this theory gives rise to a normative call for the emergence of new social movements based on both worker and ecological justice and thus revolutionary change towards ecological socialism (or eco-socialism). Thus, eco-Marxism is founded upon Marxist understandings of economic crises. It is a normative theory that calls for revolutionary changes to the capitalist mode of production, which it sees as both socially and ecologically unjust.

As O'Connor notes, "the point of departure of the traditional Marxist theory of economic crisis and the transition to socialism is the contradiction between capitalist productive forces and production relations" (O'Connor 1996, 200). As Walden Bello clarifies, this 'crisis of overproduction' (also known as the 'problem of overaccumulation', or 'overcapacity'), refers to "the tendency for capitalism to build up tremendous productive capacity that outruns the population's capacity to consume owing to social inequalities that limit popular purchasing power, thus eroding profitability" (Bello 2008). Overaccumulation arises from the tendency of capitalists to increase the capital-labour ratio in production. That is, due to technological advancements and the need to be competitive in a given sector, workers tend to be displaced over time with labour-saving methods of production or with machinery. This causes the rate of profit to fall in a given sector over the long run. Patrick Bond explains how overaccumulation is interpreted as an

⁵ By "conditions of production" eco-Marxists refer to three facets of the production process: External conditions such as environmental or nonhuman elements of production (or 'natural capital'); personal conditions such as human labour power and reproductive labour; and communal general conditions such as production infrastructure and space (Barry 2007, 165-66).

‘economic crisis’ (defined as a situation in which capital’s ability to profit is threatened):

Here arises the central contradiction [of capitalism]: with automation, the labour input becomes an ever-smaller component of the total inputs into production. And as the labour content diminishes, so too do the opportunities for exploitation, for surplus value extraction and for profits. Given intensifying intercapitalist competition for profits... this situation exacerbates what becomes a self-perpetuating vicious spiral. Workers (as a whole) are increasingly unable to buy the results of their increased production. In turn this results in a still greater need for individual capitalists to cut costs (Bond 2010).

O’Connor referred to this central Marxist contradiction (which results in a problem of overproduction) as the first contradiction of capitalism, which he juxtaposed with what he saw as capitalism’s second contradiction. Similar to the former, the second contradiction is based on economic crisis, but of a different form. The first form of economic crisis arises from the contradiction between the production and realization of value; O’Connor’s second contradiction gives rise to what he called a ‘liquidity crisis’. While a realization crisis arises from the problem of overproduction, or overaccumulation, a liquidity crisis arises from the problem of underproduction, or underaccumulation (as interpreted by the owners of production, who see their ability to profit threatened by an inability to produce commodities due to high capital costs).

O’Connor arrived at this thesis by exploring the work of Marx and finding that “he never considered the possibility that ecologically destructive methods of agriculture [for example] might raise the costs of the elements of capital, which, in turn, might threaten economic crisis of a particular type, namely, underproduction of capital” (O’Connor 1996, 199). In short, O’Connor is effectively referring to the

long-term negative effects on the ability of capital to profit caused by damaged ecological inputs (the damaged conditions of production). For example, on the short run the owners of a mine may make tremendous profits through production processes that happen to contaminate local fresh watersheds on the side. As the theory goes, in the long run the contaminated water will likely bring about high costs of their own in some form, and said accumulated costs will work at increasing the future costs of production. Thus over the long term the ability to produce goods will suffer because natural capital inputs such as water, soil, air, minerals, timber, etc., will be too costly after years of overuse, degradation, depletion, and exploitation. These high costs of natural capital can cause a situation in which the very process of production is threatened – potentially yielding a ‘crisis’ situation where profits cannot be attained because there is no process of commodity production and exchange.

In effect, O'Connor was referring to the secondary, tertiary, quaternary (and so on) levels of environmental externalities caused by production, which often go unnoticed. Richard Hawkins has recently confirmed that environmental costs operate within a multi-dimensional plane, where most dimensions are invisible to the masses. It is a false assumption, he claims, that new technologies help to reduce the environmental footprints of individuals, corporations, and institutions. In fact, new technologies often give rise to new forms of environmental degradation: “Most of the negative environmental impacts occur in the form of completely unintended second and third order effects,” which “may not be mitigated by inventing greener products and may be intensified by such changes” (as quoted in Ladurantaye

2009).⁶ Similarly, the work of O'Connor two decades previous can be interpreted as an attempt to expose these types of externalities and more importantly – to suggest that they would have the long term effect of increasing the cost of natural capital, thereby explaining why there are periodic crises of underproduction.

In addition to the works of Marx and Polanyi, O'Connor's theory was also heavily influenced by Allan Schnaiberg's (1980) environmental sociology theory on the treadmill of production (or ToP), which suggests that economic growth feeds a cyclical system of production and consumption that relies upon increasing natural inputs and technological advancements that destroy the conditions of production:

According to the ToP model, advances in technology, primarily induced by owners of the means of production seeking to increase profits, drive the expansion of production and consumption synergistically. This process leads to a cycle of production necessitating more production, because all sectors of society (the state, organized labor, and private capital) depend on continued economic growth to solve problems, such as unemployment generated by mechanization, which are created by growth itself. ToP theorists argue that environmental problems cannot be solved in such a system, since growth puts ever-increasing demands on the environment by extracting natural resources and generating pollution (York 2006).

For treadmill theorists and eco-Marxists, the ability to achieve a genuine form of environmental justice thereby rests upon transcending capitalism: "Environmental justice... is fundamentally incompatible with the logic of capitalism," and "conversely, environmental *in*justice is a normal consequence of the way

⁶ One example he offers is the incredible growth of cell phone production and use. While *some* individuals understand the environmental costs associated with producing the cell phone, keeping the cell phone charged throughout its lifetime and ultimately the impact of discarding the cell phone in a landfill, the vast *majority* do not recognize that cell phones have been associated with (and have facilitated) exponential growth in travel and mobility in a world where travel and mobility rests upon the burning of fossil fuels.

capitalist/market economies function” (Gould, Pellow & Schnaiberg 2008, 73, emphasis in original).

Importantly, Schnaiberg’s ToP theory also had in it a political and subjective dimension wherein the treadmill is reproduced, serving as a point of entry for eco-Marxists to discuss the social processes through which environmental degradation is masked from common perception. Because ecological damage takes the form of economic crisis, or market failure, the modern capitalist state plays a role in perpetuating the problem by distracting attention away from the roots of ecological demise: “In managing the ecological crisis the capitalist state takes it upon itself to administer the collective and long-term interest of capital in cheap and available conditions of production” (Barry 2007, 160). Hence the rise of environmental legislation and the creation of environmental agencies to protect natural resources can be interpreted as an effort to politicize ecological crises; it is the state’s way of displacing the problem to other spheres.

The concept of ‘crisis displacement’ stems from Jürgen Habermas’ assertion that the capitalist state is responsible for securing the conditions for continued capitalist accumulation when those conditions are under threat. As Dryzek (1994) elaborates, without capitalist accumulation there is no economic growth, investment declines and the problems of distribution, unemployment and political instability emerge, and thus capitalist states see the achievement of economic growth as a matter of ‘survival’. According to eco-Marxist theory, crises in the realm of economy and ecology threaten the very legitimacy of capitalism, thus prompting the state to respond by rationalizing such crises along political lines. The state

presents such crises as occurring *within* capitalism, rather than crises *of* capitalism. Thus through the process of displacement new regulations are often proposed as solutions while discussion on the root structural causes of crisis is avoided. As many eco-Marxists have explained (see for example, Hay 1994; Dryzek 1994; and Barry 1999), the logics of displacement applies to environment-based problems as well – wherein decision-making processes regarding the use of natural inputs and allowable degradation are played out in the spheres of state and civil society. Herein lies the value of Gramsci's analysis of capitalist society, as the problem of environmental degradation enters the ideational sphere.

Environmental Transformism

The preceding paragraphs have offered an eco-Marxist account of environmental degradation, which locates causes within the *material* structures of political economy. Within the following paragraphs I use a Gramsci-influenced eco-Marxist account to explore theoretically how degradation might be further propagated by *subjective* components of the capitalist structure. The realm of subjectivity is important because it is here that ecological damage could be masked from popular conception and where capitalist principles can be consolidated in the form of ideology. In large part, the process of environmental transformism builds upon the 'logics of displacement' as discussed above, wherein the capitalist state is presented as playing a role in protecting dominant structures from system-threatening movements responding to economic and ecological crises.

Gramsci's concept of transformism refers to "the neutralization of some elements in an ideological formation and their absorption and passive appropriation

into a new political configuration" (Hall 1988, 49). By extension, environmental transformism is a sociological force that works at co-opting some aspects of environmental thought while neutralizing other components of environmentalism that are inconsistent with the dominant political economic ethos of the day. Transformism can thus be interpreted as a tool used by the ruling groups to maintain the status quo. In contrast to coercive tools used for the same purposes (which tend to marginalize subaltern groups and often leads to dissent or unrest), transformism is an instrument that, when used effectively, tends to yield a more passive acquiescence. Like many terms, 'transformism' is one that Gramsci reconfigured to fit within his own revolutionary lexicon. Originally the term *trasformismo* came to use in Italy in the 1880s in reference to the move by the leftist Prime Minister Agostino Depretis in appointing cabinet ministers from all political parties so as to silence opposition. Gramsci saw this process (and the weakening of oppositional voices) continually at work after Depretis' rule, and thus he applied the term to the entire period of Italian history thereafter until the rise of fascism (Hoare and Smith 1971, 58). Gramsci often uses the words 'absorb', 'incorporate', 'liquidate', and 'molecular' in describing transformism, as he saw it as a process that absorbed oppositional thought, thereby liquidating it or fragmenting it into molecules through partial incorporation. As Robert Cox notes, "*trasformismo* can serve as a strategy of assimilating and domesticating potentially dangerous ideas by adjusting them to the policies of the dominant coalition," and in this way it can "obstruct the formation of ... organized opposition to established social and political

power” (Cox 1993, 55).⁷ Gramsci found the concept useful in explaining how Italian leftists reconciled with the irreconcilable in the early 20th Century; it explained how his contemporaries and other “leftist radicals became supporters first of imperialism and subsequently of Italian intervention in the First World War” (Jones 2006, 15). I use term below in a similar fashion, though I apply it specifically to the ideological co-optation or neutralization of particular environmentalist ideas in our present-day society.

My theoretical contention in this thesis is that environmental transformism may help us to explain and dissect the implementation of environmental programming, legislation and market ecologist principles in Alberta’s bituminous sands. If it can be ascertained that environmental transformism is taking place, then various elements within common sense environmentalism can be exposed as a façade. Recall that the capitalist state is understood to have the responsibility of protecting capital’s rights of accumulation from challenges brought forth by any potentially destabilizing force (be it an economic crisis of overproduction or underproduction, the environmental movement, the labour movement, etc.). States attempt to distract attention away from the problem by displacing it to another realm. The irony of displacement of ecological crises, however, is that the very capitalist processes which yielded degradation in the first place are renewed. As

⁷ It is important to note that environmental transformism refers to the partial incorporation and the partial liquidation of environmental *ideas* and *ways of thinking*. In the original context this occurred through the literal incorporation of actual people. However, plenty of other transformist strategies exist which may not require individuals to be co-opted; rather broader ideas are partly incorporated, and others are neutralized. As the caveat suggests, we need not look for examples of environmental transformism in the actual incorporation of environmental activists, so much as the incorporation or liquidation of critical environmental concepts.

John Barry explains, “in its attempts to incorporate ecological externalities, pollution, loss of biodiversity and global climate change, all of which it has produced, by ‘displacing’ rather than solving these problems, this restructuring process comes up against both absolute ecological limits and increasing social and ethical resistance” (Barry 1999, 262). Barry goes on to explain that ecological displacement operates at multiple levels: It works at desegregating the ecological crisis into numerous resource problems; it moves ecological problems to other places or to the future; it blames environmental problems on others; and it “systematically prevent[s] the full elaboration of the democratic and planning imperatives that are implicit within its responses at the domestic level” (Barry 1999, 269). In these ways environmental assessments that are critical of dominant structures can be deflected, neutralized, or even silenced through partial co-optation. As such, ecological displacement is entirely characteristic of environmental transformism. However, hegemonic authorities may adopt additional transformist strategies that serve to weaken oppositional ecological perspectives. In short, the term environmental transformism characterizes the process in which multiple strategies are employed by hegemonic authorities which have the effect of absorbing some critical environmentalist ideas while liquidating its more threatening components. If environmental transformism is employed successfully, various authorities such as the state and firms earn a widespread, common reputation as genuine environmentalists, while critical anti-hegemonic environmentalism is ostracized as too radical or too impractical. Chapter Five delves into empirical sources to assess whether transformism is taking place in Alberta.

CHAPTER THREE

Neoliberalism in Alberta

The next Alberta will continue to rely on the economic and fiscal policies that have served the province so well: no deficits, no debt, low taxes, economic stability, and the constant elimination of red tape and regulation, which together have attracted tremendous private sector investment... a new image of Alberta has emerged.
- Former Alberta Premier Ralph Klein (in Byrne 2005, 173).

This chapter argues that Alberta's present political economy is best characterized by the term 'neoliberalism'. As I demonstrate below, within the last two decades a combination of provincial and federal policies have served to entrench the neoliberal ideology in the province. In fact, neoliberalism has become 'hegemonic' by successfully acquiring the polity's consent and concurrently influencing popular beliefs, including common interpretations regarding the environment. By offering a multi-scalar historical account and by examining the impact of the province's hegemonic authorities, I demonstrate that Alberta's bituminous sands themselves have become an idealized neoliberal space where both material experiences and subjective beliefs are largely shaped by neoliberal premises. Thus, the ensuing analysis departs from the monolithic theory of neoliberalism (as outlined in the previous chapter) and addresses the specific expression of neoliberalism in Alberta. Throughout, I emphasize how the form of neoliberalism in the province is tied to developments in the bituminous sands.

The Historical Development of Capitalism and Oil in Alberta

For almost its entire history as a province, Alberta's political arena has been characterized by long periods of rule by a single political party facing relatively ineffective opposition. Only four political parties have held power since the province

was created in 1905: the Liberal Party (1905 to 1921); the United Farmers of Alberta (1921 to 1935); the Social Credit Party (1935 to 1971); and the Progressive Conservative Party (1971 to present). These political dynasties have often carried a large majority of seats in the provincial legislature, and have tended to “dominate Alberta political life” (Finkel 1989, xi). However, this does not mean that governments in Alberta have always received widespread popular support or even an overwhelming majority of votes. In fact, Alberta’s particular political culture combined with its inherited form of electoral democracy have made it possible for governments to hold tremendous power in the legislature despite receiving as little as 20% of the eligible vote in an election. Despite the history of party dynasty, different governments have expressed varying values, and the polity has reacted in diverse ways.

Since the early 1940s, Alberta’s political economy has been firmly capitalist. The focus in this chapter is on the development of a particularly intensified form of capitalism – neoliberalism – which emerged in its fullest expression in the province in the early 1990s. Alberta’s political economy has largely been shaped by the political leadership in both the provincial capital (Edmonton), the federal capital (Ottawa), and by other internal and external dynamics (such as the global crude oil market). From the mid-1940s through to roughly 1970, a contradictory form of ‘social credit capitalism’ was dominant in Alberta, marked by an espousal of free enterprise on the one hand and conspiratorial beliefs regarding finance capital on the other. During the premiership of Peter Lougheed (1971 to 1985) and subsequent government of Don Getty (1985 to 1992), the province’s political

economy is best characterized by ‘welfare state capitalism’, marked by the prevailing belief at the time that the state was an important mediating force between private interests and the public good. Finally, coinciding with the coming to power of Progressive Conservative Premier Ralph Klein in 1993, the province’s political economy underwent a reactionary shift towards ‘neoliberal capitalism’, which continues to dominate to this day. In the ensuing paragraphs I briefly discuss the distinct political economic periods in Alberta and highlight how the bituminous sands were influenced as a result.

Social Credit Capitalism and Stalled Bituminous Development (mid 1940s to 1970)

The emergence of liberal capitalist ideas can be traced to the final years of Social Credit Premier William Aberhart’s rule and more importantly to his successor, Ernest Manning (in power from 1943 to 1968). Social Credit had originally been a reformist party that emerged from Depression-era discontent with big banks and profiteering corporations. The political economic theory underpinning social credit, first developed by British engineer Major C.H. Douglas, was in part founded upon a perceived threat to Christianity posed by various scapegoats (in particular Jews, financiers, and later, socialists).¹ Using Douglas’ philosophy, the popular evangelist William Aberhart originally campaigned to increase the purchasing power of the ‘average’ citizen in order to enable the middle class to consume goods in the same manner as upper classes. Social credit was thus “an escape mechanism that allowed the middle class to criticize capitalism without confronting class conflict” (Hesketh

¹ One of Douglas’ major theoretical influences was *The Protocols of the Learned Elders of Zion* (1919).

1997, 5). However, by 1944 a dramatic transformation had taken place, as Social Credit underwent a shift “from a reformist party opposed to the bankers to a conservative party opposed to socialists” (Finkel 1989, 86). The new Manning government of the mid 1940s took on a vivid Cold War mentality, prompting an attack on bureaucratic centralization and a province-wide adoption of free enterprise principles.² Somewhat contradictorily, while the government espoused laissez-faire beliefs regarding state spending and entrepreneurship, it held firm opinions against the freedom of finance capital and market pricing mechanisms. It therefore called for some level of government intervention in the realm of finance and pricing in order to ensure that Albertans were ‘free’ to amass income and spend it as they wished (without limitations imposed by finance). As Hesketh clarifies, despite its belief in ‘free enterprise’, the party “still called for dividends based on the cultural heritage, price discounts, reduced taxation, a just price reflecting the costs of production, a commission on turnover, and scientific price regulation to balance production and consumption... [and] the establishment of a national finance commission which would set policy for banks through the Bank of Canada” (Hesketh 1997, 212).

In part, the Social Credit party’s shift from reformism to conservatism during the 1940s was mirrored by two other social shifts in the province at the time: urbanization and a growing economic dependence on energy resource exploitation.

² Manning genuinely believed that the post-War rise of Keynesianism and the global coordination of finance capital were manifestations of an evil international socialist and authoritarian conspiracy. As a result, the government reduced its own involvement in the economic sphere by eliminating taxes and abandoning all forms of social *insurance* (unemployment insurance, health insurance, pension plans, etc.).

Rural population (as a percentage of the provincial total) peaked in the 1930s, at two-thirds of the provincial total, and continued to decline thereafter.³ In light of the urbanization trend, agriculture's central position in the economy was quickly eroding, and soon energy resources would become the province's primary economic focus. This shift was aided by the discovery of tremendous quantities of conventional oil at Leduc in 1947, as well as the continued technological advancements made in terms of the extraction and upgrading of bitumen.

The Social Credit party's fear of intervening in the relations of production is best reflected in its decision to seek the widespread private development of energy resources by appealing to the spirit of free enterprise. Hence, the 1951 'Oil Sands Conference', at which Manning promised that his government would no longer involve itself in energy development. Rather, multinational oil companies were invited to purchase oil sands prospecting permits and leases of 50,000 acres on a 'first-come, first-served basis'.⁴ As Pratt notes, the 1951 policy placed "the vast bituminous sands under the monopoly control of the globe's biggest resource extraction companies and [turned] forty-odd years of publicly financed research and technical know-how over to their profitable advantage" (1976, 31).

Despite the existence of a semi-liberal capitalist political economic structure in the province of Alberta throughout the 1950s and 1960s, and despite the provincial government's hopes that free enterprise would spawn massive energy

³ Today over 80% of the province's population lives in urban areas.

⁴ Leases were sold for an incremental fee beginning at five cents per acre. Once the permit holding company displayed evidence of oil exploration, it would have exclusive rights to extraction on the property for a period of twenty-one years, at a cost of one-dollar per acre per year (see Pratt 1976, 32).

projects in the bituminous sands, a number of factors would prevent their development until 1967, when the first large-scale mine and upgrading facility was finally opened by Great Canadian Oil Sands, or GCOS (financed almost entirely by the American multinational Sun Oil). Such external factors included the low international price for oil, high capital and start-up costs, a high degree of investment risk caused by the uncertainty of the unconventional resource, and the sheer remoteness of the resource. Yet the most critical factor in preventing the development of the resource in the 1950s and 1960s, explains Pratt, was the tremendous amount of stalling pressure exercised by big oil and the governments of Canada and the United States. After all, this was an era marked by tremendous new discoveries of petroleum reserves throughout the world, and thus a period of over-production of conventional oil supplies. As a result, the potential American market for Alberta's unconventional SCO was closed due to market 'oversaturation'. Further, while a market for SCO could potentially be found in Eastern Canada, the federal government's National Oil Policy of 1961 prevented Western energy supplies from crossing into Eastern Canada. According to Mito (1998), Prime Minister John Diefenbaker's new National Energy Board (NEB) was heavily lobbied and influenced by American Multinational Oil Companies (MOCs) with the intention of preventing refineries in Eastern Canada from accessing Alberta's oil supplies (and Diefenbaker acquiesced). In Alberta, the Manning government also faced pressure from the oil lobby, which had asked for bituminous sands developments to be limited so as to ensure that existing conventional developments were not threatened with competition from new sources (Chastko 2004, 109-112). Thus,

during the social credit era hegemonic authorities influenced both the provincial and federal governments to postpone the development of the bituminous sands. Instead, Pratt bluntly explains, they “were held in reserve for the day when the United States would need them” (1976, 45).

Welfare State Capitalism and Government-Sponsored Development (1971 to 1992)

Alberta’s political economy would experience significant alterations with the coming to power of Liberal Prime Ministers Lester Pearson (1963 to 1968) and Pierre Trudeau (1968 to 1979, and 1980 to 1984) at the federal level, and later with the election of Premier Peter Lougheed (1971 to 1985) at the provincial level. Both Pearson and Trudeau were social democrats who would help usher in an era of welfare state capitalism throughout the country. Pearson’s legacy includes the creation of the Canada Pension Plan and universal medicare, and amongst Trudeau’s many legacies are attempts at government centralization, expansion of the public service and public spending, and widespread government intervention in economic policy (in particular pricing mechanisms and the formation of Crown corporations). While Trudeau would eventually quarrel with Lougheed over the appropriate role of federal intervention in provincial affairs, Lougheed himself adopted similar progressive policies in Alberta that would further entrench the spirit of welfare state capitalism in the province.

This transformation in the province’s political economy is again shadowed by the material experience of the bituminous sands. According to Patricia Finlay (2010), Lougheed’s first act as premier was to increase royalties on oil revenues. Balancing progressive social policy with conservative values, Lougheed sought a

‘tame’ level of development of natural resources for the overarching purpose of increasing public coffers. Here, the scaled development of the bituminous sands was seen as beneficial to both multinational oil companies as well as the people of Alberta – who, thanks to Constitutional amendments in 1930, were the rightful owners of the resource.⁵ At the time it was understood that if the development of energy resources was managed appropriately by government, revenues could be used for the public good.⁶ Thus in 1976 Lougheed opened the Alberta Heritage Savings Trust Fund, sourced entirely by oil and gas revenues.

Given the forces of welfare state capitalism emanating from both Edmonton and Ottawa at the time, Alberta’s petroleum industry would experience a degree of government intervention with the goal of using energy development as a means to increase public revenue and jobs (and this is one of the main distinguishing factors between the welfare state capitalist era and the present neoliberal one). At the federal level, this framework was steeped in a nationalist approach to resource governance, characterized by Trudeau’s hard-hitting attempts to put a Canadian bent on the oil and gas industry.⁷ In response to global oil price shocks in the 1970s, the federal government introduced the Petroleum Administration Act, which allowed it to unilaterally determine ‘made-in-Canada’ oil and gas reference prices

⁵ In 1930 Alberta acquired ownership of its mineral resources through a transfer of rights from the federal jurisdiction to the three central provinces. Thus up to today, the bituminous sands are rightfully “owned” by the province of Alberta (and by extension, the citizens of Alberta). The province is thus allowed to grant oil and gas leases and ask for royalties from companies to which it has sold the rights of extraction.

⁶ Indeed, Lougheed’s government is remembered for its impressive amounts of social spending, in particular in the areas of health care, medical research and public recreation.

⁷ Trudeau’s nationalist policies sparked a considerable amount of opposition from Alberta, which felt that the federal government was unconstitutionally interfering with its resources.

and impose federal taxes on Alberta's energy resources. Further attempts at 'Canadianizing' the oil sector were made through the National Energy Program (NEP) of 1980. Polls conducted at the time showed that more than 75% of Canadians wanted the government to intervene to increase national control over the oil industry, and this informed the three goals of the NEP: First, Trudeau wanted to increase energy security on a national level by increasing federal control over oil and gas resources and by acquiring independence from the world oil market; Second, he intended to refocus investment on a national-scale, to rid the oil sector of its tremendous American influence;⁸ Third, the Trudeau Liberals wanted to intervene in the market to establish a "petroleum pricing and revenue-sharing regime that recognized the requirement of fairness to all Canadians no matter where they lived" (Chastko 2004, 180).

The welfare-state capitalist model that prevailed at the time is also reflected in attempts to build a semi-public oil development project in the bituminous sands. Despite intense lobbying from the Canadian Petroleum Association "to remove all restrictions on oil sands development" (Chastko 2004, 145), the provincial and federal governments continued to intervene in bituminous sands projects and markets. In September of 1973 Premier Lougheed announced that a multilateral deal had been reached between the Syncrude consortium (four American based oil companies – Imperial Oil, Gulf Oil, Atlantic Richfield, and Cities Service) and the provincial and federal governments. Rather than merely collecting royalties, the

⁸ The Liberals estimated that between 70% and 80% of the Canadian petroleum firms operating in Alberta were owned by American interests. However, the Fraser Institute at the time claimed the figure was only 40% (see Chastko 2004, 180).

provincial government would be a partner in the project and would additionally acquire *half* the profits; the oil companies were asked to use Alberta technology in building their bitumen extraction and separation plants and were implored to hire Canadian directors of operations. Most notably, a publicly owned corporation, the Alberta Energy Company (AEC), was founded “to act as a vehicle for public participation in the project” (Pratt 1976, 20). Further, the federal government would tax crude exports to the United States to the benefit of all Canadians, and in 1973 it created its own national oil company – Petro-Canada – which would eventually find itself immersed in its own projects in the bituminous sands, backed by \$40 million in federal funding for research and development into in situ production. It is clear that during the welfare-state capitalist era both governments were heavily involved in managing and developing the bituminous sands, and interpreted government to have a mediating role between the interests of capital and the general public.

Ironically, despite Lougheed’s attempts to usher in an era of development, and Trudeau’s earnest attempts to build an economically viable Canadian energy program, the outcome was opposite to what both intended. When the Alberta government angrily responded to Trudeau’s NEP (by temporarily halting production of oil in order to cut off Eastern Canada’s short term supply), the overall effect was the complete disintegration of investor confidence in Canada’s energy sector, causing market crashes in Toronto and roughly \$1.2 billion in capital flight from the country each month. After the NEP, conventional oil production slowed considerably and unconventional oil production in the bituminous sands almost

stopped entirely. To this day the NEP still conjures up feelings of animosity in Alberta (Chastko 2004). Thus, throughout the 1980s and even into the 1990s, the bituminous sands would continue to linger in the background. At the time, the global price of oil was depreciated, ranging between \$20 and \$30 per barrel, meaning that most investments in bitumen extraction were uneconomic unless completed on a massive scale. As such, during Alberta's welfare-state capitalist period bituminous sands development was limited largely to the gigantic operations at GCOS and Syncrude.

It is within this era that we begin to see some level of environmental awareness from both critics and regulatory bodies. By 1976, after only eight years of operation, the GCOS plant was criticized by Pratt for being "an ecological disaster – acres of black, scarred earth, hills of heaped soils, deep open pit mines, sulphurous stench – a kind of northern Appalachia, a biologically barren landscape" (Pratt 1976, 16). Pratt argues that despite the provincial government's attempts to get a fair deal from oil producers, the former was in fact continually manipulated by the 'hard ball' style of MOCs which had the primary goal of profit, not the wellbeing of Canadians. As an example, Pratt notes how major concessions were made by the Department of Environment to Syncrude's benefit: It handed the company permits to emit pollution under the Clean Air and Clean Water Act; it promised not to implement any new environmental legislation without fully discussing proposed regulations with the oil company; and it offered 5-year development licenses with conditions that would overrule any new environmental or labour rules (Pratt 1976, 131). This

type of regulation as development facilitation would be exacerbated in the ensuing decade.

Neoliberal Capitalism and Deregulated Development (1993 to present)

During the 1980s the seeds of neoliberalism were being sown in Ottawa. In turn, Alberta (and the oil sector in particular) was influenced by two key policies of Brian Mulroney's Progressive Conservative Party: the Canada Petroleum Resources Act of 1985 and, later, the bilateral Free Trade Agreement with the United States. The 1985 Act was designed to dismantle the NEP and overturn Trudeau's 'made-in-Canada' price for SCO. This had the effect of increasing investment prospects as the profit margin for pioneering bituminous sands companies like Syncrude and Suncor (formerly GCOS) grew substantially, since the international market price at the time was significantly higher than the federally mandated price. However, the bituminous sands resurgence was short lived, as the international price of oil plummeted in 1986 to under \$10 per barrel. Meanwhile, Mulroney attempted to repair Canada's relationship with foreign investors and American-based oil companies, claiming on one trip to the United States, "Canada is open for business again" (as quoted in Chastko 2004, 200). Further, Mulroney dismantled the Foreign Investment Review Agency and replaced it with Investment Canada, whose goal was to specifically seek out overseas investors. These actions initiated the neoliberal trend on a federal level by thoroughly uprooting Trudeau's nationalist approach to the extraction, production and distribution of the country's energy resources.

The expression of neoliberalism has continued unabated at the federal level to the present. All governments since the late 1980s have towed the neoliberal line –

including subsequent Liberal governments led by Jean Chrétien (in power from 1993 to 2003) and Paul Martin (2003 to 2006), and the minority conservative government of Stephen Harper (2006 to present). Chrétien and Martin served as Canada's foremost neoliberal hegemonic authorities, having both played key roles in negotiating and instituting the North American Free Trade Agreement (NAFTA) and the 'proportional energy sharing' clause within it, which is specifically designed to "prevent the Canadian government from implementing policies that interfere with the normal functioning of energy markets in North America" (Holden 2006). The clause legally prevents federal and even provincial governments from enacting legislation that contravenes the neoliberalization of energy markets. In short, Canada's approach to the oil sector dramatically shifted in the mid 1980s, bringing forth a wave of neoliberal policies in favor of free trade and open borders (open specifically to capital and foreign investment) that would later be adopted as a centerpiece of NAFTA (Laxer & Dillon 2008).

Due to these external pressures, Alberta was well on its way towards neoliberalism by the time Ralph Klein became Premier in 1993. At the provincial level, the most important neoliberal force was Klein himself. This neoliberal visionary was elected to provincial office five consecutive times (four of these times as the leader of the ruling Conservative Party). His career in provincial government (1989 to 2006) followed three consecutive terms as the mayor of Calgary (Alberta's biggest city) between 1980 and 1989. Having thus spent 26 years in office with the backing of majority governments and widespread popularity among ordinary

Albertans,⁹ Klein succeeded in reshaping Alberta's business climate according to neoliberal principles. His first target was the province's social spending budget. As an indication, while spending on public programs had peaked in the province by the mid 1980s under Lougheed's administration, it would reach the lowest levels nationwide by the end of 1996 after just four years of Klein in office. At that time, Kevin Taft (former leader of the Alberta Liberal opposition) wrote a polemic titled *Shredding the Public Interest: Ralph Klein and 25 Years of One-Party Government* (1997), concluding that the combination of subsidies to the private sector and cuts to social spending had cost the public dearly: "People have paid with their jobs, their health, their public services, and in some cases with their lives" (2).¹⁰ Despite the evident problems faced by Albertans as a result of cuts to social spending, Klein managed to construct an aura of invincibility over the years, acquiring the consent of the masses and becoming colloquially known as 'King Ralph' (New Internationalist 2002).

Klein used his dynastic influence to introduce neoliberal monetarism. As David Harvey has written, neoliberal fiscal policy is more than a means to cut back on so-called 'irresponsible' and 'out of control spending', it is also representative of the subjugation of full employment as a political priority in favour of protecting the rights of capital to profit (2005, 23). In Alberta, limiting spending wasn't merely about tackling the province's debt, it was in fact designed to free up budgetary space for tax cuts. Klein's tax reforms occurred at the levels of income taxes, corporate

⁹ Klein was always associated with the common people. He was not born into the elite class, but rather worked his way into it throughout his career as a spokesperson for their interests.

¹⁰ In referring to lost lives, Taft suggests that multiple deaths at hospitals in Alberta would have been avoided had there not been excessive cuts to hospital funding.

taxes, and province-wide sales taxes. Alberta is now the only province in Canada with no provincial sales tax, and corporate taxes were cut to the extent that after Klein's first term in office they accounted for less than 2% of the treasury's total expenditures. Arguably, the only way the Alberta government managed to sustain such extreme fiscal austerity was due to the sheer wealth found in the province's non-renewable energy resources. In this sense, the presence of what is considered the world's second largest reserve of oil has allowed Alberta to partly counteract one of the most common effects of neoliberal fiscal policy and monetarism – the rise of unemployment.¹¹

Nevertheless, the growing government coffers from oil have exposed a major contradiction in Klein's (and now Premier Ed Stelmach's) fiscal policy: Many Albertans have become irritated as they "see their personal expenditures go up and access to public services decline," (Harrison 2005, 10). This discontent continues to grow, as the present government in Alberta has signaled its intention to make new cuts to public spending in 2010 in order to cover an annual deficit. As a recent editorial in *The Edmonton Journal* explained, Stelmach's monetarist policy is founded upon "the same ideological response that Albertans were presented with during the Klein regime, where it was repeated often that government was too large, taxes needed to be low and public services were unsustainable" (Flanagan 2010). Relative to its Gross Provincial Product (GPP), Alberta spends less on public services

¹¹ However, as a result of the 2008 financial crisis and subsequent depreciation in the international price of oil, many bituminous sands projects were postponed, put on hold, or even downscaled, and many jobs were lost. Two years ago, at the height of the boom, Alberta had the lowest unemployment rate in the country. Today, however, it has the *third* lowest unemployment rate of Canadian provinces, after Saskatchewan and Manitoba.

than any other province.¹² New research has found that Albertans currently pay the highest 'out-of-pocket' expenses for health care in Canada, the second highest for education and home utilities, and third highest for child-care (Gibson 2010).

Klein's neoliberalization effort was designed in large part to construct an open business climate free of restrictions and state interference, or, as one analyst put it – "a neo-liberal programme of economic deregulation, privatization, fiscal austerity, and democratic downsizing" (Soron 2005, 66). A recent collection of essays compiled by Trevor W. Harrison (2005) details a relentless imposition of neoliberal projects, including attempts to privatize health care, the tourism industry, public radio, and liquor stores; the deregulation of electricity and natural gas sectors; the protection of private companies when in conflict with citizens' advocacy groups (such as its backing of the auto insurance sector over public advocacy groups); the marketization of water resources; an attack on organized labour; the use of civic funds to construct a public relations body for the Progressive Conservative Party; and the adoption of extreme fiscal austerity (mentioned above). In short, Alberta has become what the New Internationalist refers to as a "capitalist paradise" (Harrison 2005; New Internationalist 2002).

The neoliberal effort would also filter into the bituminous sands, as Klein engaged in a project to rebuild the province's heavy oil industry that had dwindled in the 1980s. Klein joined the private sector in giving "sustained attention to three areas... the regulatory environment, technological developments, and the search for markets" (Chastko 2004, 197). In order to encourage development, business

¹² It spends 12% of its GPP on public services while the rest of the provinces average 22.5%.

regulations for developers were stripped bare, and markets were proactively sought in the United States. In his first year as Premier, Klein teamed up with the federal government and industry representatives to launch the National Oil Sands Task Force (NOSTF). The NOSTF published *The Oil Sands: A New Energy Vision for Canada*, which put forth a plan to entice private investment in the oil sands by enacting changes to the financial regulations at the provincial and federal levels. Among the report's eight "levers of development" were the creation of a "market-driven" system of production, the introduction of "competitive and fixed royalty and taxation regimes", an effort to acquire a "diverse, internationally based capital finance formation"; and "aggressive national and international marketing for bitumen and oil sands products" (Chastko 2004, 216). The report anticipated that such neoliberal rules would "attract capital from a wide range of sources, including banks, insurance, mutual funds, and the equity markets" (Chastko 2004, 218).

As the NOSTF's recommendations were implemented, the bituminous sands became in themselves an idealized neoliberal space. Low royalty rates and a competitive tax regime were seen as important tools to entice private and foreign investment. While assuring Albertans that they were getting their fair share of the economic value of the massive resource, Alberta's ambassador to the United States, Murray Smith, was trying to sell the bituminous sands to American investors by appealing to the practically non-existent tax and royalty structure: "The royalty structure for oil sands is we 'give it away' at a one per cent" (as quoted in Nikiforuk 2008, 141). As a result of its low tax rate, the province earns less from corporate taxes on bitumen projects than does the federal government, despite theoretically

owning the resource on a constitutional level.¹³ Thanks to these neoliberal policies, the province was largely successful at bringing in massive amounts of investment, and to this day it continues to advertise itself as a business-friendly regime with profitable, low risk opportunities to invest in energy resources: “Alberta is blessed with an abundance of natural advantages that form the foundation of its thriving economy. The Alberta government has built on this foundation by fostering a positive business climate based on low taxation that attracts investment, creates diversity, and encourages Alberta businesses to compete successfully around the globe” (Alberta Finance and Enterprise 2008).

Whereas in the 1970s and 1980s the business model in the bituminous sands called for large mega-projects partly financed by government loans and controlled domestically, by the early 1990s the federal and provincial governments largely withdrew funding from the oil industry, causing corporations to turn solely to private investors. As Chastko puts it, “no longer would the Province of Alberta be involved directly in oil sands projects. Instead, Edmonton would strive to create a favourable investment climate for the private sector” (2004, 198). The neoliberal era had arrived in Alberta in full force.

¹³ Within a span of 20 years (between 2000 to 2020), Nikiforuk notes that the federal government will earn \$51 billion from taxing the bituminous sands while the province will earn just \$44 billion. And yet EnCana – just one of dozens of corporations involved in the bituminous sands – recorded \$6.4 billion in annual profits in just one year (2007) *after* paying royalties and taxes and recovering capital costs. Extrapolating over a twenty-year period, this one corporation will earn \$128 billion, much more than even the provincial and federal governments combined will make from taxing *all* bituminous sands companies over a period of two decades (Nikiforuk 2008, 140, 145).

The Bitumen Boom and the Neoliberal Hegemony in Alberta

Alberta's neoliberal policies, when combined with the neoliberal policies of the federal government and the growing international market price of oil, created a political economic structure so favourable to private and foreign capital that it led to a major boom in SCO production by the mid-1990s. In the last two decades, production of SCO has quadrupled. The intensity of bitumen production now makes the bituminous sands the largest energy project in the world, and still, output of SCO is scheduled to double over the next decade, reaching approximately 563 million barrels in 2018 (Energy Resources Conservation Board 2009, 3).¹⁴ Major growth in bituminous sands operations in the last fifteen years has thus seen the expansion of a continental network of pipelines and bitumen upgrading facilities, the arrival of 700,000 workers from all over the world, and large-scale infrastructural growth in industry-based communities such as Fort McMurray (Nikiforuk 2008).

At present, both the province and the federal government agree that the neoliberal framework serves as the 'best' way to govern Alberta bitumen. For the last four years, Prime Minister Harper has worked in concert with Premier Stelmach to continue to feed the expansion of Alberta's heavy oil industry. After he was elected, Harper launched a global campaign to promote Canada as an 'energy superpower'; Not only was Canada the only non-OPEC country "with growing oil deliverability", he explained, it was also a "stable, reliable producer in a volatile, unpredictable world" (as quoted in Nikiforuk 2008, 11). The Stelmach government

¹⁴ This figure is expected to account for solely 61% of the bitumen produced in Alberta in 2018. In other words, 39% of the Alberta bitumen extracted in 2018 will be exported *without* upgrading into SCO. This means that by 2018, Alberta expects to produce enough bitumen to yield 923 million barrels of oil.

has also gone to great lengths to attract private and foreign investment, exemplified in a recent provincial decision to go against the recommendations of an expert panel on royalties by granting a 'royalty holiday' to attract new drilling in the bituminous sands (CBC 2008d). Both Stelmach and Harper continue to receive support from hegemonic authorities (such as oil companies and investment banks) that relish today's intensified capitalist relations, which are expected to bring \$99 billion in bituminous sands investments between 2009-2018 (Energy Resources Conservation Board 2009). Alberta's and Canada's business elites are content with the historic role of the Stelmach (and previously, Klein) administration in pushing through political economic rules that have facilitated capital accumulation. This explains why the Fraser Institute, a neoliberal think tank, awarded Ralph Klein with their first ever 'International Fiscal Performance Award' in 1995, and why, in 1994, the International Young Entrepreneurs Organization awarded Klein with the 'Man of the Year' award. The continuing laissez-faire character of governance over the development of the bituminous sands was recently captured in an interview with the province's energy minister, who referred to the government's present regulatory schema as "our policy of come-one, come-all" (as quoted in Jones 2010a).

Neoliberal Consequences

While the bitumen boom has indeed brought in billions of dollars in the form of private investment, not everyone has been pleased with the way that neoliberal economic growth has unfolded. In fact, Premier Stelmach's popularity has recently plummeted to unprecedented levels, reaching a dismal 14% approval rating (D'Aliesio 2009). However, while there exists a diverse set of oppositional

narratives which challenge the government's vision of political economy – from environmental organizations, the labor movement, opposition parties, farmers associations, public interest and social advocacy groups, population health experts, and First Nations communities – for the most part Albertans 'accept' the dominant narrative, says Dennis Soron: "[Albertans] acquiesce, however grudgingly and grumpily, with the status quo, while expressing their various frustrations and discontents in politically unproductive ways" (Soron 2005, 67). Soron goes on to suggest that this qualified support for the government's neoliberal narrative is best understood through Gramsci's concept of consent.

It remains to be seen whether consent for neoliberalism will continue in Alberta for a prolonged period of time, or whether it will slowly erode to the point that the prevailing mode of social organization can no longer be sustained without repression. Popular dissent (as distinct from popular disapproval) may arise from the seeming democratic disjuncture that is emerging in the province. As explained by Steve Patten (2005), only 21% of eligible voters cast a ballot for the Progressive Conservative Party in the 2005 election. Using the same equation, the figure is only 21.6% in the more recent 2008 election. In other words, less than a quarter of voters actually supported the leading party at the polls. Yet as noted above, relatively little appears to be done about it. For example, a study by the Canada West Foundation found that while Albertans prioritized "goals such as improving health care and education, reducing poverty, and protecting the environment" – all of which ranked ahead of tax cuts, the government's agenda has been to deliver the

latter while avoiding the former, all while continuing to hold 86% of the seats in the provincial legislature (Soron 2005, 66-73).

In summary, the rise of neoliberalism in Alberta in the mid 1990s brought about a shift towards an economy that is highly dependent on the international oil market, the commoditization of public goods, the privatization of social services, cuts to public spending, and an effort to attract private and foreign investment to the bituminous sands. These transformations erased many of the political economic structures put in place by preceding welfare-state capitalist policies, and have been shadowed by the reconstitution of power and wealth in the hands of corporate interests. This material reality has been upheld by ideological consent for neoliberalism. As Harvey reminds us, the construction of consent for neoliberalism is made easier once neoliberals have come to power and imposed neoliberal policies. It can then “use its powers of persuasion, co-optation, bribery, and threat to maintain the climate of consent necessary to perpetuate its power” (Harvey 2005, 40). While the processes through which consent is maintained are explored in the subsequent two chapters, it is first important to characterize the status quo, or the dominant political economic interpretation in the province. As I have attempted to argue above, in today’s Alberta that hegemonic ideology guiding political economy is thoroughly neoliberal.

CHAPTER FOUR

Common Sense Environmentalism and the Bituminous Sands

The response of some has been to demand that we "touch the brake".
That approach has been rejected by my government. It's my
belief that when government attempts to manipulate
the free market — bad things happen.
- Alberta Premier Ed Stelmach (Stelmach 2007).

In the previous chapter, I explained how a neoliberal brand of capitalism defines Alberta's political economy. More specifically, I demonstrated how the bituminous sands themselves constitute a neoliberal megaproject. In this chapter, I argue that this same neoliberal structure has given rise to a particular type of environmentalist thought. That is, the way people commonly think about the environmental impacts of development in the bituminous sands is shaped and influenced by the hegemony of neoliberal capitalism in Alberta, in Canada, and more broadly, in North America. This 'common sense environmentalism' has been the result of a complex societal battle of ideas, wherein the 'tar sands' and 'oil sands' narratives are continually in contest, competing for the common sense title. Below I explain how the oil sands perspective is presently winning that battle. In short, I demonstrate how a common sense environmentalist image of the bituminous sands (presently synonymous with what can be referred to as the 'oil sands' perspective) has been largely constructed by hegemonic authorities whose main purpose it is to ensure the continued development of Alberta's bituminous sands. They have done so by presenting a particular understanding of environmental justice that supports a business-as-usual development framework.

‘Tar Sands’ and ‘Oil Sands’: The Propagation of Different Narratives

Both ‘tar sands’ and ‘oil sands’ are characteristic terms; they are not clear-cut snapshots so much as broad depictions of two narratives. An individual or group may commonly use one of the terms in reference to the bituminous sands while their political economic disposition situates them within the opposite narrative. These two narratives are ultimately divided by the following fundamental difference: the ‘oil sands’ narrative allows for a business-as-usual development scheme *within* its understanding of environmental justice, whereas the ‘tar sands’ narrative does not. Because of this discrepancy, the oil sands and tar sands narratives are irreconcilable. When we dig deep into their core assumptions we find that they maintain antinomical perspectives on the place of neoliberal capitalism in a socially and environmentally just world, even though neither perspective has clearly articulated a stance on the relationship between neoliberalism and environmental justice. Table 1 (Two Sandy Images) further characterizes the narratives conjured up by these contested terms. Within the table I have synthesized stereotypical answers (in italics) to questions regarding environmentalism and the development of the resource – answers that one might expect to hear from individuals or groups associated with each narrative.¹ I have done so using interviews, PR materials, reports and publications, and other sources denoting public opinion. Key quotes are also offered to further characterize each perspective. As the table demonstrates, subjectivity towards the bituminous sands is

¹ Again, I caution the reader that these are generalizations pertaining to the two central images of the bituminous sands – and that not all individuals or groups using each term would completely agree with each aspect of the narrative as I have relayed it below.

divided into different versions of reality. Within the oil sands narrative, environmental impacts of development tend to be considered as minimal and manageable, and emphasis tends to be placed on the ability of technology to help address environmental problems. Technological development is often portrayed as an outcome of continued economic growth, which in turn is interpreted as an outcome of Alberta's present neoliberal political economic set-up. In contrast, the tar sands narrative is often framed as a response to the dominant, more established oil sands viewpoint. Underlying the image of the tar sands is the belief that this development causes environmental degradation on a massive scale, and that no amount of technological advance can change the unsustainable nature of the project.

Table 1: Two Sandy Images

'Oil Sands' Narrative	'Tar Sands' Narrative
What is 'sustainable development' (in regards to the bituminous sands)?	
<p><i>Sustainable development in the oil sands means extracting bitumen with a minimized environmental footprint while contributing to economic growth.</i></p> <p>Key Quote: "Sustainable development means developing the oil sands in an environmentally responsible manner. It means developing the resource and creating wealth and contributing to the economy on behalf of Albertans, the local communities, and Canadians" (Industry Subject B 2009).</p>	<p><i>Sustainable development refers to development that does not compromise future societies' ability to live in a healthy productive ecosystem. The production of oil from tar sands is not sustainable.</i></p> <p>Key Quote: "Our current model of economic development is not sustainable. Again, it's based on the idea that cheap oil will continue to fuel exponential growth and consumption of all kinds of stuff from all over the world" (Expert Subject A 2010).</p>

Can the bituminous sands be developed in a sustainable fashion?

Although there are some environmental impacts, thanks to reclamation projects, efficiency measures, stakeholder consultations, and other technologies, the oil sands can be developed in an environmentally sustainable manner.

Key Quote:

"The oil sands are going to be developed, they're going to be developed for a long-time and they're going to be developed in an environmentally responsible way" - Lloyd Snelgrove, Oil Sands Sustainable Development Secretariat (as quoted in Wells 2009).

No, the tar sands are fundamentally unsustainable. There is no way to develop the resource in a sustainable fashion.

Key Quotes:

"Fundamentally the tar sands aren't sustainable" (Social Policy Organization Subject C 2010)

"That's an abuse of language to call it sustainable. It can never be sustainable. You cannot exploit a finite resource that requires the destruction of forests, waterways and the pollution of the air, as sustainable. It's just nonsense to call it that" (Expert Subject A 2010).

What is the relationship between economic growth and sustainability?

Economic growth directly correlates with new and improved technologies that facilitate environmental sustainability. It is profitable to be ecologically friendly.

Key Quote:

"When you have growth, it allows you to employ new technologies that have come on since you started your operation... Growth and economic growth is a good thing because it helps you bring in new technologies and enables better environmental performance" (Industry Subject B 2009).

Our present economic system is unsustainable. The profit and growth driven system does not understand the true value of a healthy environment.

Key Quote:

"There needs to be limits on growth. We need an economic model that operates within the ecological limits of our planet. I don't think that endless growth is possible under a planet with a finite amount of resources" (Environmental Organization Subject A 2009).

What is the role of technology in 'greening' bituminous sands development?

Technological research and development enables the oil sands to be developed in an environmentally responsible manner.

Key Quote:

"We are firm believers that technological advances can and will solve an awful lot of the environmental hurdles that we face" (Government Agency Subject A 2009).

While new technologies can decrease the 'intensity' of various ecological impacts, overall the megaproject is unsustainable, regardless of the technology used.

Key Quote:

"We have to understand the limits of technological innovation... You can't make this project sustainable by tinkering with the technology" (Expert Subject A 2010).

Does the free market help or hinder society's ability to deal with the ecological impacts of development?

Free market capitalism generates economic growth, which in turn enables us to fund the development of green technologies that can deal with impacts of development.

Key Quotes:

"The [political economic] environment that we have in Alberta, and how we're regulated, enables us to address environmental impacts" (Industry Subject A 2009).

As a profit driven system, free market capitalism hinders society's ability to deal with ecological impacts of development.

Key Quotes:

"[The free market] very much hinders it... What we need is much more regulation on the free market" (Social Policy Organization Subject B 2009).

Do current regulations adequately address environmental problems?

The current regulations stringently enforce environmental responsibility while ensuring that all stakeholders get their fair share of the benefits of resource development.

Key Quotes:

"Numerous regulations are in place to ensure that oil and gas development occurs in ways that protect the environment and ensure public safety and the wise use of resources" (Government of Alberta 2010, 16).

"We're always also looking to see if we can reduce the regulatory burden... 'cause of course there's always a cost to that regulatory burden, so if we can reduce that cost we're helping the industry and we're helping the economy in general" (Governmental Agency Subject A 2009).

All of the rules and regulations pertaining to the tar sands are designed to favor oil companies by allowing them to monitor themselves, and facilitate continued development. New regulations are needed to put real limits on production and to enforce environmental management practices.

Key Quotes:

"It's basically up to industry to monitor and enforce itself" (Environmental Organization Subject A 2009).

"The reliance on monitoring as a substitute for regulation must end. Science-based limits must be placed by the Canadian government on all environmental aspects of Tar Sands operations – air, land and water – and aggressive enforcement actions taken by government in case of violations of these limits" (Hatch & Price 2008, 23).

How are all bituminous sands stakeholders' views taken into account?

All oil sands stakeholders' views are taken into account through open consultations and discussions with impacted 'synergy groups'.

Key Quote:

"When we rewrite regulations we always look at who are the stakeholders. So obviously industry is always a stakeholder. Depending on what it is you can't ask the public as the public per se – you just can't go out and consult with three and a half million Albertans, so we normally take people who have vested interests if there's a synergy group in the area" (Governmental Agency Subject A 2009).

Not all tar sands stakeholders' views are taken into account. Usually critical perspectives are ignored. Only the voice of industry is truly listened to.

Key Quotes:

"So are we being heard by the government? Probably not. Are aboriginals? Probably not. There is no evidence that anyone's being heard – except the market!" (Social Policy Organization Subject A 2009).

"We've made presentations before government committees, but that's just part of their public relations job anyway. I don't think they listen to all stakeholders – they listen almost entirely to the transnational oil companies and that's it" (Social Policy Organization Subject B 2009).

How could popular opinion towards the bituminous sands be characterized?

Most people don't understand all of the good green initiatives being taken in the oil sands. The false image of 'dirty oil' has become popularized because of hype in the media. Overall, Albertans and Canadians want the oil sands to be developed in a sustainable manner.

Key Quotes:

"I think... the majority of Albertans and Canadians think this is quote 'dirty oil'... But right now I think that people don't [understand] – they see the negative part of it – they don't understand the other aspects of it" (Governmental Agency Subject A 2009).

"Most Albertans and Canadians feel that it can be done in an environmentally sustainable manner but they want to know how we're doing it and how we're addressing those issues" (Industry Subject B 2009).

Most Albertans and Canadians think that the tar sands should only be developed if it can be done sustainably. They are told in the media that it will create jobs and help our economy to grow, but most do not realize the extent of environmental degradation that results from development.

Key Quote:

"Most Albertans want to protect the environment and want the tar sands to be developed at the same time and it's wishful thinking they hope they can reconcile... They are not willing to bite the bullet and realize that there are absolute tradeoffs where the tar sands necessarily has to hurt the environment" (Social Policy Organization Subject B 2009).

What should be the communications strategy of industry and government regarding the bituminous sands?

PR campaigns are needed to do a better job of getting the true story out regarding the environmental initiatives being implemented in the oil sands.

Key Quotes:

"It's industry's job to promote the good, sustainable actions that industry takes, and industry does a terrible job at it. They suck. Industry needs to get their heads out of their asses and put together \$20-50 million, annually, and start telling people their side of the story" (Government Agency Subject A 2009).

"We haven't done a good job of providing information to Albertans and Canadians about what measures we are taking to make sure that [environmental management] happens" (Industry Subject B 2009).

Industry and government collude to put forward a false 'green' image of the tar sands. They should stop putting funds into such greenwashing projects and use the money for renewable energy projects.

Key Quotes:

"Both the industry and government, if you actually look at their public pronouncements on oil sands development... they've obviously spent time conferring on developing a sort of communications message playbook on these issues" (Environmental Organization Subject B 2009).

"You have a government that is putting a lot of public dollars towards spin, but not anything really towards action" (Environmental Organization Subject A 2009).

How significant is the bituminous sands contribution to climate change?

The contribution of the oil sands to climate change on a global scale is minimal, at less than one tenth of one percent of total emissions. Oil from oil sands is nearly as efficient as oil from conventional sources.

Key Quotes:

"Oil sands make up about five percent of Canada's overall greenhouse gas emissions and less than one-tenth of one percent of the world's emissions" (Alberta Energy 2009a).

"When the entire carbon footprint of oil is considered, crude from the oil sands stacks up very closely with other sources" (Government of Alberta 2008d, 9).

The contribution is significant, given that the tar sands are the largest growing source of Canadian emissions. The carbon footprint of tar sands-derived oil is much higher than that of conventional crude.

Key Quote:

"The oil sands operations are the largest source of projected new greenhouse gas pollution in Canada. They are the number one reason Alberta and Canada's emissions are rising instead of falling... Whether you compare greenhouse gas emissions on a full life cycle basis or on production values, oil sands development consistently produces higher greenhouse gas emissions than conventional oil production" (Grant, Dyer & Woynillowicz 2009, 2-5).

How much land is disturbed by the development of the bituminous sands?	
<p><i>The amount of land disturbed by oil sands mining is relatively small – an area roughly the size of Edmonton. It only covers 1% of the province’s forested area, and all of the disturbed land will be reclaimed.</i></p> <p>Key Quotes: “The total footprint for mines themselves, which look so drastic, is actually small – 1% of Alberta’s forested area” – Alberta Environment Spokesperson (in Government of Alberta n.d.).</p> <p>“To date there are 530 square kilometres (205 square miles) of land that has been disturbed by oil sands mining activity — which is less than the area of the City of Edmonton” (Government of Alberta 2008d, 5).</p>	<p><i>The tar sands administrative zones make up an enormous area the size of Florida. Up to 79,000 square kilometers will be developed in a business-as-usual approach.</i></p> <p>Key Quote: “Alberta’s oil sands underlie one-fifth of the province, and development is already planned for more than 79,000 square kilometres... Oil sands underlie 21% of Alberta, and projected development will greatly exceed the current impacts. An area larger than the province of New Brunswick has already been leased to in situ oil sands companies for development” (Grant, Dyer & Woynillowicz 2009, 20).</p>

What are the ecological impacts of tailings ponds?	
<p><i>Protective measures are taken to ensure that tailings ponds do not harm wildlife. The ponds will eventually be remediated and reclaimed. The ponds do not leak significantly.</i></p> <p>Key Quotes: “As the tailings consolidate, they become an almost impermeable layer of very fine clay. So the seepage rates decline over time” (Government of Alberta n.d.).</p> <p>“... water quality in the pit lakes will be acceptable for release and will support a viable, maintenance-free aquatic ecosystem ...” (Imperial Oil 2006, 20)</p>	<p><i>The tailings ponds are toxic and pose extreme danger to wildlife and local communities. They leak quantities of water and thereby contaminate the environment.</i></p> <p>Key Quote: “Virtually everyone close to the tar sands industry knows that all tar sands tailings ponds leak – even the new ones – and that while steps are taken to recapture the leakage, a significant portion of contaminated water still escapes into the environment... Already, the ponds are leaking over 11 million litres a day of contaminated water into the environment...” (Price 2008, 2).</p>

What are the industry's impacts on the Athabasca watershed	
<p><i>The industry returns or recycles most of the water it withdraws. There is no evidence of any unnatural contamination of the Athabasca watershed.</i></p> <p>Key Quote: "New technologies continue to reduce the footprint of oil sands development... Up to 90 percent of the water used is recycled, depending on the maturity of the facility and type of extraction" (Government of Alberta 2009a).</p>	<p><i>Industry is slowly depleting the flow of the Athabasca River and groundwater resources. The Athabasca watershed is being contaminated by development.</i></p> <p>Key Quote: "Approximately 12 barrels of water are required to produce each barrel of oil from bitumen. Up to 70 percent of this water is reused, but that still means two to four barrels of water are used to produce each barrel of oil" (Grant, Dyer & Woynillowicz 2009, 11).</p>

Is there a relationship between the development of the bituminous sands and cancers found in downstream communities?	
<p><i>There is no direct correlation between production in the oil sands and cancers found in downstream communities. Elevated cancer rates need to be studied more thoroughly to uncover causation.</i></p> <p>Key Quotes: "The overall findings show there's no cause for alarm, but they do warrant further investigation" - Dr. Tony Fields of Alberta Health Services (as quoted in Liebrecht 2009).</p> <p>"We need to work with the community to make sure there may be other factors such as lifestyle and those sorts of things that probably aren't helping matters any" - Alberta Health Minister Ron Liepert (as quoted in McAnally 2009)</p>	<p><i>There is a direct relationship between tar sands development and cancers downstream. Studies have documented the contamination of the water, air and wildlife that sustain downstream communities with carcinogens.</i></p> <p>Key Quote: "We believe the extraction of oil from Canada's tar sands is having a devastating impact on our indigenous people. This year, a study confirms that there are elevated levels of rare and other cancers among indigenous residents who live directly downstream from the tar sands activity, and that the contamination of our waters, snow, vegetation, wildlife and fish has grown exponentially in the past five years" (Poitras 2009).</p>

What are the impacts of the bituminous sands on wildlife habitats?

There is some impact to wildlife habitats caused by development. This impact is being managed by innovative ecological land use practices.

Key Quote:

"I don't want to minimize the impacts that can occur from vast networks of pipelines. There is an impact from that, particularly to wildlife. You have to manage those. What limitations do you need to put on the amount of linear disturbance and roads so that you can have a minimized impact on those sensitive species such as caribou?"
- Alberta Environment spokesperson (in Government of Alberta n.d.).

Many species are adversely impacted by the degradation and destruction of habitats. For some endangered species such as woodland caribou the tar sands could lead to extinction.

Key Quote:

"The forest is home to many species such as caribou, which require connected areas of intact forest that have sufficient buffers from [land] disturbance. At present there is no maximum density of activity that is applied to prevent cumulative impacts that destroy habitat" (Leaton 2008, 24).

Do the bituminous sands pollute the air with toxic compounds?

Air quality in the region is monitored to ensure that emissions of noxious compounds remain at safe levels of exposure.

Key Quote:

"The Wood Buffalo region enjoys air quality that is considered good most of the time. This can be readily confirmed in WBEA annual reports on air quality in the region. At times, a combination of factors and natural events (e.g., forest fires) can create conditions that lead to poor air quality. However, occurrence of these conditions is infrequent compared to times in which air quality is good" (Wood Buffalo Environmental Association 2006, 4).

The tar sands emit many hazardous pollutants into the air that negatively impact communities downwind and which cause acid rain.

Key Quote:

"It is well known that Alberta is polluting itself, but what is less well known is that Alberta is increasingly polluting other provinces too... 70% of the sulphur entering Alberta's airshed is transported into Saskatchewan... The current rates of acid forming pollution from the Tar Sands are 158,000 tonnes per year for sulphur oxides and 76,000 tonnes per year for nitrous oxides" (Hatch & Price 2008, 11).

What are the economic impacts of bituminous sands development?

Energy development accounts for nearly a third of Alberta's Gross Domestic Product. The oil sands contribute billions of dollars to Alberta's economy every year, and create tens of thousands of jobs.

Key Quotes:

"In the fiscal year 2008/09, the Alberta government collected \$3 billion in royalties from oil sands projects. In 2008, estimated oil sands investment reached a record-high \$19.2 billion" (Alberta Energy 2009a).

"Oil sands activities increasingly contribute to economic activity in Canada. Significant investments in the oil sands have repercussions not only in western Canada but also throughout the country in the form of spin-off benefits to related industries such as business services, manufacturing, retail, finance and insurance" (Richardson 2007, 17).

Taxes and royalty rates for oil corporations are so low that they do not help the average citizen and revenues have brought dependence on the energy sector. The boom has led to inflation and rising pressure on the Canadian dollar, having a negative impact on Canada's manufacturing sector.

Key Quotes:

"The laissez-faire approach of the Alberta government – the near-zero royalties and taxes and the hands-off approach to managing the pace of oil development – have accelerated the distorting, unproductive, gold-rush development boom" – Economist Jim Stanford (as quoted in Foster 2008).

"[Alberta] residents are seeing very little benefit from the resource exploitation through royalty rates." (Polaris Institute n.d.).

What should be the future plan for the bituminous sands?

The government should continue to apply a regime of low taxes and low royalties to encourage development of the oil sands, which in turn will help the economy grow, bringing jobs to Canadians and revenue to government coffers, and enable us to develop new environmental technologies.

Key Quote:

"Alberta's oil sands are an enormous economic and strategic advantage for this country. We have only begun to tap into this vast resource. As a global energy leader, Canada has a responsibility to find even better ways to maximize the value of this resource while minimizing the social and environmental costs of oil sands activities" (Richardson 2007, 2).

The government should immediately apply a moratorium on new approvals, and begin to downgrade projects until our society has fully made the shift to a self-sustaining green energy economy, or shut down the gigaproject altogether.

Key Quote:

"The immediate solution to the runaway pace and environmental problems related to tar sands oil development is a moratorium on new project approvals. This will allow a rigorous, full-cost analysis to be completed that considers the significant environmental and social costs of existing and planned tar sands development" (Bordetsky et al. 2007, 9).

The Construction of Common Sense Environmentalism

As Table 1 demonstrates, the environmental, political and economic viewpoints on the bituminous sands can be partitioned into two leading narratives. As these two narratives tell contradicting stories, the agents that espouse each perspective compete, in a sense, to convince the general public that *their* interpretation is right. Thus the opposing narratives filter into civil society through a variety of channels of persuasion – government policies and pronouncements, news and opinion venues in various media networks, policy analysis reports from non governmental organizations and think tanks, press releases, Public Relations (PR) communications from a host of private and public entities, advertisements, lectures and speaking events, personal websites, blogs, political commentary, and word of mouth. Yet in further analyzing the agency, wealth and power held by different groups along this complex societal nexus, it is possible to see how the oil sands narrative has been more successful in convincing people to ‘buy in’ to its views on development and some of the market ecologist tenets associated with it. Recent polling has showed that 70% of Albertans and 57% of Canadians support the development of the bituminous sands, seeing the benefits outweighing drawbacks (Bennett 2009).

As discussed in Chapter Two, agents that play a role in shaping the way people commonly think about various issues can be referred to as hegemonic authorities. In considering the type of respondents found in support of each image in Table 1 above, various patterns emerge: The oil sands narrative tends to be primarily espoused by oil industry representatives and government agencies, while the tar sands narrative is typically championed by environmental organizations and

some social policy organizations. This is not a hard and fast rule, but rather a characterization of how different groups and societal actors tend to propagate different narratives. Due to the discrepancy in the political and financial power between the various types of groups associated with different narratives, it is not surprising that those associated with the oil sands perspective have a higher capacity to influence popular opinion and shape societal conceptions of development, or common sense environmentalism.² In relation to the bituminous sands, a generic form of thought has emerged which contains implicit assumptions about environmental justice. Today, as a result of the historical unfolding of complex societal forces, the common sense environmentalist viewpoint towards the bituminous sands is characterized by a belief that the present political economic set-up will facilitate economic growth by enabling the continued development of the bituminous sands, which in turn will foster technological advances allowing oil companies to eliminate the environmental damage caused by development.

While common sense thought is ‘uncoordinated’, it nevertheless comes from multiple nodes of dissemination. Thus in the following pages I offer a series of tables and explanatory paragraphs that showcase the complex breakdown of various proponents of different narratives across civil and political society.³ Tables 2 through 11 list all of the major actors that play a key role in shaping common conceptions of the bituminous sands. The actors have been divided into different

² Again, Gramsci refers to common sense as “the diffuse, uncoordinated... generic form of thought common to a particular period and a particular popular environment” (in Hoare and Smith 1971, 330f).

³ I use Gramsci’s definition of civil society as “the ensemble of organisms commonly called private” while ‘political society’ he interpreted as “the state” (in Hoare and Smith 1971, 12).

categories (including recognized experts, journalists, environmental and social policy organizations, oil companies, lobby groups, banks and financial institutions, First Nations, unions, think tanks, and political agencies) and further subdivided by being placed under the bituminous ‘image’ with which they seem to be most closely associated through their public pronouncements. Those actors who have espoused a middle ground perspective have been placed under the central heading of ‘bituminous sands’. Nevertheless, the three bituminous images used below – ‘tar sands’, ‘oil sands’, and ‘bituminous sands’ – should not be seen as fixed labels. Rather, because each term speaks to broad characterizations, the labels should be interpreted in some cases as flexible and fluid. While this mode of analysis is limited in that it cannot offer definitive truths about each category, it does offer a means of rethinking the roles that different agents play in propagating various narratives and influencing popular conceptions in Alberta.

Major Oil Companies

Oil companies play a key role in articulating a particular version of market ecology. ‘Greenwashed’ advertisements tout the latest environmental innovation, yet the purpose of such ads is not merely to brand products and processes as ‘green’, but to contribute to an entire way of thinking that sees capitalist relations of production as a means to achieve environmental justice. Much is at stake for such oil companies. Because of all this oil companies have a deep-seeded interest in ensuring that the polity interprets capitalism as a potential harbinger of sustainability. In Table 2, all of the major players in the oil industry are listed, and it should be no surprise that they attempt to propagate the ‘oil sands’ narrative.

Table 2: Major Oil Companies

'Oil Sands'
Albian Sands Energy Inc.
British Petroleum (BP Plc)
Canadian Natural Resources Limited
Chevron Canada Resources
ConocoPhillips Canada
Connacher Oil and Gas Limited
Devon Canada Corporation
Enbridge
EnCana Corporation
Exxon Mobil Corp.
Husky Energy Inc.
Imperial Oil Resources Limited
Japan Canada Oil Sands Limited
Marathon Oil Canada Corporation
MEG Energy
Murphy Oil Company Ltd.
Nexen Inc.
OilSands Quest Inc.
OPTI Canada Inc.
Petrobank Energy and Resources Ltd.
Petro-Canada
PetroChina
Shell Canada Limited
Sinopec
Statoil-Hydro
Suncor Energy Inc.
Syncrude Canada Ltd.
Synenco Energy, Inc.
Total E&P Canada Ltd.
UTS Energy Corporation
Western OilSands Inc.

Table 3: Environmental Non-Governmental Organizations

'Oil Sands'	'Tar Sands'
<p>Cumulative Environmental Management Association (CEMA) <i>An industry led group.</i></p> <p>Regional Aquatics Management Program (RAMP) <i>An industry led group focusing on water ecology.</i></p> <p>Wood Buffalo Environmental Association (WBEA) <i>An industry led group focusing on air pollution.</i></p>	<p>Boreal Songbird Initiative</p> <p>Canadian Parks and Wilderness Society</p> <p>David Suzuki Foundation</p> <p>EcoJustice</p> <p>Environmental Defence</p> <p>ForestEthics</p> <p>Fort McMurray Environmental Association</p> <p>Greenpeace</p> <p>Indigenous Environmental Network</p> <p>Int'l Boreal Conservation Campaign</p> <p>Keepers of the Athabasca Watershed</p> <p>Natural Resources Defence Council</p> <p>Pembina Institute</p> <p>Polaris Institute</p> <p>Rainforest Action Network</p> <p>Saskatchewan Environmental Society</p> <p>Sierra Club</p> <p>Toxics Watch Society of Alberta</p> <p>World Wildlife Fund</p>

Environmental Non-Governmental Organizations (ENGOS)

Environmental non-governmental organizations also play a crucial role – albeit a complex one – in framing common sense environmentalism. As Rex Murphy has argued:

Environmentalists are very good at what they do. They play the news media better than Glenn Gould doing a Bach prelude. They know how to sell their point of view, how to build a villain, how to shortcut an argument. Big Green – and there is a Big Green as much as there is a Big Oil – knows the game.... The oil sands, despite the hundreds or thousands of less scrupulous and governed energy projects all over the world, despite China's spectacular use of coal, or the accelerated

developments all over the Third World, will be the emblem of choice for the eco-warriors. The media-smart apostles of Al Gore, the Sierra Club and hundreds of other NGOs and eco-lobbies will turn the oil sands into the blight of our time (Murphy 2010).

Despite Murphy's assessment, there are nuances to the roles of environmental organizations in constructing subjectivities. Some have contributed to today's common sense narrative while others have attempted to counteract common sense environmentalism by constructing critical alternative viewpoints. In contrast to Murphy's take, Gregory Albo argues that because of the global proliferation of neoliberalism, market ecologist views have "spread from ecological skeptics to virtually all the leading environmental NGOs, from Friends of the Earth, to Greenpeace to the Sierra Club, including market ecology measures in their policy campaigns" (Albo 2006, 342). In this way, some environmental organizations have at times put forward solutions that fail to address the root structural causes of ecological degradation. Al Gore's organization ClimateCrisis, for example, suggests that in order to 'take action' on climate change, individuals can turn down their thermostats a few degrees, replace incandescent lightbulbs, use a clothesline instead of a dryer, plant a tree, eat less meat, etc. (ClimateCrisis n.d.). These may all be environmentally virtuous actions in themselves, but ultimately inadequate in genuinely confronting the global environmental problems brought on by the capitalist mode of production. In Alberta, most ENGOS have not explicitly articulated a stance on the relationship between capitalism and environmental justice. However, many have made implicit pronouncements on the issue by joining the call for a moratorium on new developments (an important discrepancy that I discuss in more detail in Chapter Five).

It is important to note how oil companies have been instrumental in setting up environmental NGOs as a way to lend their operations credibility. The three main environmental agencies operating in the area of the bituminous sands – the Wood Buffalo Environmental Association (WBEA), which monitors air quality; the Cumulative Environmental Management Association (CEMA), which largely focuses on land use planning; and the Regional Aquatics Monitoring Program (RAMP), which monitors water quality in the Athabasca River – have been created by the Alberta government and industry. According to Marsden, these environmental organizations are entirely funded by industry, and in turn, “industry members make up either the majority or the largest single-interest bloc on their membership boards” (2007, 164). Nevertheless, the appearance of three well-funded ENGOs gives the public the impression that the sector is regulated, and that projects are monitored for their environmental impacts. In this way, industry contributes to popular beliefs about environmental management practices by funding key environmental agencies, which in turn support the market ecologist mantra which facilitates continued production of SCO.

Aside from the three industry-led environmental organizations operating within the bituminous sands region, all other ENGOs appear to push the ‘tar sands’ narrative forward, though in different capacities. Some organizations such as the Pembina Institute and the David Suzuki Foundation have tried to affect change within the system, by engaging the oil industry and government through legal channels, while more radical organizations such as Greenpeace and the Rainforest Action Network have adopted strategies aimed at focusing the world’s attention on

the issue. It is difficult to assess how effective each ENGO is in capturing the minds of the average citizen. Some Albertans may be put off by the activist strategies of Greenpeace, while others may be inspired to join the cause. It is in this capacity that ENGOs play a complicated role in contributing to common sense narratives on the one hand, while planting the seeds of critical good sense environmentalism on the other. The process of environmental transformism (characterized later in Chapter Five) helps to shed light on this complicated role played by ENGOs in the construction of subjectivities.

Table 4: Banks and Financial Institutions

'Oil Sands'	'Tar Sands'
Bank of America (U.S.) Barclays (U.K.) BMO (Canada) BNP Paribas (France) Canadian Oil Sands Trust (Canada) CIBC (Canada) Citigroup (U.S.) HSBC (U.K.) ING Group (Holland) JP Morgan Chase (U.S.) Peters & Co. Limited (Canada) RBC (Canada) Royal Bank of Scotland (U.K.) Scotiabank (Canada) TD Bank (Canada)	The Co-operative Group (U.K). <i>A UK investment group that is financing a Beaver Lake Cree lawsuit against tar sands operations.</i>

Banks and Financial Institutions

While banks and financial institutions do not often play a direct role in propagating a particular environmentalist viewpoint in the bituminous sands, they do play a

direct role in facilitating development by financing oil companies that carry out such projects. As the underwriters of the megaproject, banks thereby have a material interest in ensuring that there are no impediments to development. Many bituminous sands operations have been financed and underwritten by some of the largest banks in the world.⁴ Canadian, American, and British banks in particular have been singled-out by environmental groups as the financiers of Alberta's 'dirty oil'. As Bill Barclay writes:

Canada's five biggest banks have provided direct corporate loans and underwriting to 23 major tar sands companies. With additional tar sands expansion projects seeking an unprecedented \$110 billion in new capital through 2011 – more than double the amount of capital invested in tar sands projects during the previous ten years – analysts believe that investment in tar sands infrastructure now surpasses that of manufacturing across all of Canada (Barclay 2008, 5).

Again, with the growing importance of the bituminous sands to the bottom line of some of the world's richest entities, financial institutions do what is necessary to ensure that the popular conception of development is not 'negatively' influenced by critical environmental views. In this way, financial institutions help finance the construction of a common sense environmentalist viewpoint. While the list of financial underwriters for bituminous projects is large (see Rainforest Action Network 2010), Table 6 only includes those banks and financial institutions that have been specifically and publicly identified as key financial supporters or detractors of bituminous sands projects. The Co-operative Group has been the exception to the general rule of financial institutions towing the 'oil sands' narrative.

⁴ *Forbes* notes that of the top 20 wealthiest corporations in the world, 8 are banking companies. Again, all of these are heavily invested in the bituminous sands: Citigroup, 1st; Bank of America, 2nd; HSBC, 3rd; JP Morgan Chase, 5th; ING, 10th; Royal Bank of Scotland, 13th; BNP Paribas, 14th; and Barclay's, 18th (see *Forbes* 2007; and Rainforest Action Network 2010).

The 'ethical investment' bank has come out strongly against the development, financing environmental reports by the World Wildlife Fund (WWF) and a lawsuit against development by the Beaver Lake Cree of Alberta, thereby playing a role in defying the current common sense narrative on development.

Table 5: Lobbyists and Lobby Groups

'Oil Sands'
American petroleum Institute (API)
Canadian American Business Council
Canadian Association of Petroleum Producers
Center for North American Energy Security (CNAES)
Consumer Energy Alliance
Gary Mar <i>Albertan envoy to Washington.</i>
Gordon Giffin <i>Former U.S. ambassador to Canada.</i>
HBW Resources <i>Prominent lobby firm in Washington D.C.</i>
James Blanchard <i>Former U.S. ambassador to Canada and director of Enbridge; Alberta lobbyist.</i>
Murray Smith <i>Former energy minister, Alberta ambassador in Washington.</i>
National Oil Sands Task Force
Oil Sands Developers Group
Paul Fraser <i>Former Canadian diplomat and current Alberta lobbyist in the U.S.</i>

Lobbyists and Lobby Groups

Table 5 lists individuals and organizations whose primary function is to lobby governments or engage in PR campaigns on behalf of a specific interest. It should be noted that numerous ENGOs engage in lobbying and PR initiatives in favour of the

'tar sands' perspective (listed in Table 3 above). However, the groups and individuals listed here in Table 5 are primarily lobbyists, whereas lobbying is often a secondary strategy or complementary tactic of ENGOs. Politicians can be swayed to espouse a certain perspective as a result of heavy and persuasive lobbying. New public statistics on lobbying of federal politicians shows that the Big Oil lobby makes significant use of time and money appealing to Canada's political elite. Interestingly, in 2009 federal environment minister Jim Prentice recorded more contacts with lobby groups than any other minister, having met 136 times with lobbyists. The ministers in charge of industry and natural resources (Tony Clement and Lisa Raitt, respectively) were the second and third most sought politicians by lobbyists in 2009, granting 135 and 134 private visits each. Through these meetings between lobbyists and high-ranking federal politicians, oil industry lobbyists had multiple opportunities to convince, cajole, and persuade those with political power to act on its behalf. As Glen McGregor (2010) notes regarding meetings with Jim Prentice: "The majority – 81 of 136 – were with lobbyists representing oil, gas or other energy companies, including EnCana, Suncor, Shell Canada and ConocoPhillips. Prentice met to discuss energy issues with Imperial Oil on 14 occasions, more than any other company or organization. In the same period, he took just two meetings with environmental group the David Suzuki Foundation and another two with the Pembina Institute" (McGregor 2010). It is telling that Canada's environment minister spends more time being solicited by energy companies than by environmental organizations.

In addition to corporate lobbying efforts, the Alberta and federal governments have hired their own lobbyists and placed them in Washington D.C., California, and Europe, to lobby foreign governments against implementing environmental legislation that would curtail imports of Alberta bitumen. As Susan Casey-Lefkowitz writes: "Over the last year, Canada has written to the European Commission asking that tar sands be treated like any other oil – grossly downplaying the significant lifecycle greenhouse gas emissions of tar sands. Canada did the same thing in California, writing to the Governor and openly threatening trade repercussions should the California low carbon fuel standard acknowledge the higher lifecycle greenhouse gas emissions of fuels such as tar sands" (Casey-Lefkowitz 2010). One lobbyist in Washington D.C., Michael Whatley, working on behalf of the Alberta government to sell oil, was particularly frank in explaining some of the techniques employed to push his client's perspective: "We work with the Administration, with Congress, outside the beltway with other trade organizations and groups, and we try and build strong allies. We work with the truckers, the manufactures and the chambers, and make sure that people are echoing what we say when we go and meet with policy makers" (as quoted in Cattaneo 2009). With such resourceful lobby groups working to convince those with political power to act a certain way, the 'oil sands' narrative is easily adopted into common sense views on the environment.

Table 6: Public Policy Organizations, Think Tanks & Research Institutes

'Oil Sands'	'Bituminous Sands'	'Tar Sands'
Cambridge Energy Research Associates Canadian Energy Research Institute CanadaWest Foundation C.D. Howe Institute Conference Board of Canada Fraser Institute	Royal Society of Canada <i>Formed an expert panel to 'objectively' review environmental impacts of development.</i>	Parkland Institute Public Interest Alberta Council of Canadians KAIROS

Public Policy Organizations, Think Tanks, & Research Institutes

Similar to lobby groups, the work of research institutes and think tanks can sway conceptualizations of various issues. However, rather than targeting politicians, think tanks often try to sway popular opinion, and are often successful at acquiring buy-in from large segments of the public. Those institutions in favour of the 'oil sands' narrative tend to focus primarily in the area of neoclassical economics, and ideologically support capitalism, whereas organizations such as the Council of Canadians and the Parkland Institute have worked from a 'tar sands' viewpoint in prioritizing social and ecological indicators of progress rather than economic growth. The Fraser Institute, for example, reveals its support of free market capitalism and distrust of governmental intervention on its website: "[Our] policy recommendations focus on the impact of competitive markets and government interventions on individuals and society" (Fraser Institute n.d.). Such think tanks and research institutes therefore have an explicit interest in putting forward a version of environmentalism that works with a business-as-usual approach in the

bituminous sands. Like the lobby groups listed in Table 9, they seek to discredit versions of environmentalism that may pose a threat to capitalist relations of production. For example, the American Petroleum Institute recently hired communications specialist Dan Gunderson with the express purpose of travelling across the US Midwest “to address and reject claims by Greenpeace and others, who say the extraction of oil from the Canadian oil sands and the usage of the product itself will do more harm than good” (Kaus 2009). As the example shows, many think tanks are compelled to put forward an ‘oil sands’ perspective as a common sense environmentalist viewpoint when neoliberal capitalism is threatened by critical environmentalist assertions.

Table 7: First Nations

‘Oil Sands’	‘Tar Sands’
<p>Fort McKay First Nation <i>First Nation located in the heart of the surface mineable area that has become involved in developments (despite opposition from some outspoken members of the community).</i></p> <p>Fort McMurray No. 468 First Nation <i>This First Nation reached an agreement with an oil sands developer, acquiring a 25% stake in one project (despite opposition from some members of the nation).</i></p>	<p>Athabasca Chipewyan First Nation (Athabasca Dene) <i>This First Nation intervened at the United Nations calling for a moratorium on development.</i></p> <p>Beaver Lake Cree First Nation <i>The First Nation has launched a lawsuit against tar sands operations.</i></p> <p>Chipewyan Prairie First Nation <i>This First Nation filed a lawsuit against the Alberta government in 2008 regarding tar sands projects.</i></p> <p>Lubicon Cree First Nation <i>The First Nation has come out publicly against developments on claimed land.</i></p> <p>Mikisew Cree First Nation <i>Small First Nation near Fort Chipewyan that has come out publicly against development.</i></p>

First Nations

Many First Nations have been affected by the bituminous developments. Because each nation has its own governing leadership, or Band Council, most affected nations have come out with an official stance on development. Of course, this does not mean that all members of the nation agree with the stance taken by the leadership. The Fort McKay First Nation is an example, wherein outspoken members of the community have helped to put forward a 'tar sands' narrative, while the political leadership in the community has become fully complicit in the megaproject (see Oja Jay 2007). Other First Nations such as the Beaver Lake Cree have launched lawsuits against the provincial and federal governments, claiming that enabling the megaproject has led to the violation of signed treaty agreements (Todd 2009). Depending on how such cases unfold, public opinion may sway for or against the 'tar sands' narrative that is propagated by the lawyers pointing to the ecological and social impacts of development. Interestingly, Canadian native activists have been particularly effective at building an anti-tar sands movement in the United Kingdom; Indigenous activists such as Heather Milton-Lightening, Eriel Tchekwie Deranger, Melina Laboucan-Massimo, George Poitras, and Clayton Thomas-Muller, have been on speaking tours in Great Britain or participated in large events such as Climate Camp, raising their concerns about the way ecological impacts have impacted their respective communities (CBC News 2009; Libin 2009).

Table 8: Labour Organizations and Unions

'Bituminous Sands'	'Tar Sands'
Alberta Federation of Labour	Canadian Auto Workers Canadian Labour Congress Communications, Energy and Paperworkers Union

Labour Organizations and Unions

Some labour organizations have also taken a stance on the bituminous sands, as the megaproject has major implications for labour and employment issues in Canada. However, most jobs in the bituminous sands have been non-unionized, and as such organized labour has tended to put forward a 'tar sands' perspective, calling for the eventual shutdown of the bituminous sands and its replacement with a new green economy based on unionized green jobs in the area of renewable energy (see Levine 2009). The Alberta Federation of Labour (AFL) has expressed a contradictory stance, however. On the one hand, it supports the mandate of sister labour organizations such as the Canadian Labour Congress (CLC) in problematizing development. On the other hand, it has proposed a policy framework calling for more bitumen to be upgraded within the province of Alberta (see Alberta Federation of Labour 2008). With large memberships, labour organizations have the potential to influence many workers, provided their messaging is widespread and compelling. Nevertheless, an anti-union attitude tends to prevail in neoliberal Alberta (see Harrison 2005), and as a result the perspective of labour organizations tends to be less persuasive than in other jurisdictions.

Table 9: Media Journalists, Columnists, and Reporters⁵

'Oil Sands'	'Bituminous Sands'	'Tar Sands'
Carol Christian <i>Fort McMurray Today reporter.</i>	Dan Healing <i>Writer for the Calgary Herald.</i>	Emmanuel Raoul <i>Journalist with Le Monde Diplomatique.</i>
Claudia Cattaneo <i>Financial Post journalist.</i>	Darcy Henton <i>Reporter for the Edmonton Journal.</i>	George Monbiot <i>Guardian columnist against the tar sands.</i>
Deborah Yedlin <i>Calgary Herald columnist.</i>	Dave Cooper <i>Journalist for the Edmonton Journal reports both sides.</i>	Mike De Souza <i>CanWest journalist who tends to write 'tar sands' perspective.</i>
Don Martin <i>National Post columnist.</i>	Jeffrey Jones <i>Journalist at Reuters who often reports both sides.</i>	
Kerry Diottte <i>Edmonton Sun columnist.</i>	Kelly Cryderman <i>Environmental journalist for the Calgary Herald often portraying both perspectives.</i>	
Rex Murphy <i>Globe and Mail columnist who often writes favourably of oil sands.</i>	Nathan Vanderklippe <i>Globe and Mail reporter.</i>	
Sheldon Alberts <i>CanWest reporter writes of development favourably.</i>	Allan Woods <i>Toronto Star journalist.</i>	

Media Journalists, Columnists, and Reporters

Table 9 provides listings of journalists who have discussed the bituminous sands at length within news stories or columns, and have therefore played a role in shaping subjectivity towards the megaproject. Rather than associate various publications with a particular image, enough difference exists (although it is at times subtle) between various reporters within publications to list them separately. Interestingly, some journalists, cognizant of the political nature of the bituminous sands, have notably tried to remain 'objective' by reporting both sides of the debate (see, for example, news stories by Dan Healing, Nathan Vanderklippe, Kelly Cryderman and Allan Woods). On the other hand, columnists such as Deborah Yedlin and Don

⁵ Where applicable, references to works by these journalists are listed in the bibliography.

Martin have tended to be unapologetic in their support for the megaproject, while other journalists such as George Monbiot and Emmanuel Raoul express an anti-development stance in their work. Journalists play a key role in constructing common sense, as citizens are persuaded one way or another based on the information they receive in the media. Readers of the *National Post* will have greater exposure to the 'oil sands' narrative, for example, while those who read the *Toronto Star* are likely to encounter work that includes both narratives.

Table 10: Recognized Analysts, Experts, and Intellectuals

'Oil Sands'	'Bituminous Sands'	'Tar Sands'
<p>Alastair Sweeny <i>Author of a pro-oil sands book.</i></p> <p>Bishop John Clarke <i>Anglican Bishop of Athabasca has come out in favor of development.</i></p> <p>Joseph Doucet <i>Business and Energy Expert at the University of Alberta.</i></p> <p>Michael A. Levi <i>Wrote a book favouring continued development of the oil sands.</i></p> <p>Paul Chastko <i>Historian at the University of Calgary who has written a pro-oil sands book.</i></p> <p>Satya Das <i>Has written a book about 'green' oil sands.</i></p>	<p>Clement Bowman <i>Energy expert concerned about environmental problems.</i></p> <p>Peter Lougheed <i>Former Premier who has come out against current pace of development.</i></p>	<p>Al Gore <i>Former American politician and climate activist.</i></p> <p>Andrew Nikiforuk <i>Has written a polemic against the 'tar sands'.</i></p> <p>Bishop Luc Bouchard <i>Roman Catholic Bishop of St. Paul has come out against development.</i></p> <p>David Schindler <i>Professor at the University of Alberta who has written about water problems.</i></p> <p>Doctor John O'Connor <i>Physician whistleblower regarding potential links between tar sands and cancer.</i></p> <p>Kevin Timoney <i>Independent Ecologist who has written studies about tar sands and contamination.</i></p> <p>Larry Pratt <i>Author of book critical of tar sands development.</i></p> <p>William Marsden <i>Wrote a book against tar sands development.</i></p>

Recognized Analysts, Experts, and Intellectuals

Table 10 identifies a number of recognized analysts and intellectuals who have come to prominence for their expertise on the bituminous sands. In this category I refer to individuals who have demonstrated expertise on the topic and who have the ability to influence public opinion.⁶ The table shows how there are analysts who have spoken about the bituminous sands as a tremendous opportunity that should not be passed up, glorifying the technological achievements made in Alberta's heavy oil industry and questioning whether environmental impacts have really been as bad as reported by critics (see, for example, Sweeny 2010b and Levi 2009). These authors tell the story of the 'oil sands', while critics such as Andrew Nikiforuk (2008) and William Marsden (2007) have come out vehemently against the megaproject and put forward a 'tar sands' viewpoint. To complicate matters, there are experts who have tried to relay an objective stance while tacitly supporting continued development (see, for example, Chastko 2004), others who have questioned the pace and scale of development without calling for a complete and immediate shut-down, such as Al Gore and Bishop Luc Bouchard of St. Paul, and others still, such as Peter Loughheed, who were once major proponents of development but have since called for government intervention and regulations to mitigate some of the negative impacts of development. It is important to note the relative balance in the distribution of recognized experts between the various images. It is a reminder that amongst this category of societal actors, there

⁶ In order to avoid repetition, I have not listed experts who speak on behalf of institutions included in subsequent categories below.

continues to be contestation between different perspectives on the environmental impacts of the bituminous sands.

Table 11: Political Society

'Oil Sands'	'Tar Sands'
Alberta Energy Alberta Research Council Alberta Energy Research Institute Alberta Environment Alberta Finance and Enterprise Alberta Health and Wellness Alberta Sustainable Resource Development Canadian Environmental Assessment Agency Energy Resources Conservation Board Environment Canada Health Canada House of Commons Standing Committee on Environment and Sustainable Development <i>The committee has come out in a pro-oil sands perspective despite opposition of some members.</i> House of Commons Standing Committee on Natural Resources Michael Ignatieff <i>Leader of the federal opposition</i> National Energy Board Natural Resources Canada Prime Minister Stephen Harper Progressive Conservative Party of Alberta	Brian Mason <i>MLA for Edmonton Highlands-Norwood</i> Lynda Duncan <i>MP for Edmonton-Strathcona, and environmental lawyer.</i> Rachel Notley <i>MLA for Edmonton Strathcona.</i>

Political Society (Governmental Organizations, Agencies, Ministries & Politicians)

Politicians and political agencies play a crucial role in propagating the oil sands perspective. In Alberta, the Progressive Conservative political dynasty has become

dependent on revenues from the oil and gas sector (see Davidson & MacKendrick 2004). Such revenues have enabled successive governments to fund public projects and provide a basic level of governmental services without having to adopt unpopular measures such as increasing taxes. As one news article has explained, “the development of Alberta oil... helped the provincial government set income tax at a flat rate of 10 per cent, eliminate a \$22.7-billion debt in less than a decade and post a projected \$7 billion surplus in 2007” (CBC News 2007b). This has kept Alberta residents, for the most part, either content or indifferent with the governing party. Overall, the formula has translated into enough popularity to secure just enough votes to continue the PC dynasty. In this way, many politicians rely not only the success of existing bituminous projects, but also the megaproject’s continual growth. As such, it is in their interest to promote a particular way of viewing development as unthreatening to sacred goods such as the environment.

It is telling, for example, that one of the most powerful agencies within the Alberta Government is the province’s energy ministry. One of Alberta Energy’s primary objectives is to foster investment in the bituminous sands – and it is quite open about its reasoning: “Energy revenues account for almost a third of the revenue allocated under Alberta’s provincial budget and just over half of the value of our province’s total exports” (Alberta Energy 2010). As such, political agencies like Alberta Energy, and politicians like Ron Liepert (the province’s new Energy Minister), have a direct interest in popularizing a type of environmentalism that allows for a business-as-usual approach in the bituminous sands. At times, politicians may target the alternative tar sands viewpoint and attempt to sow fear

amongst the public or denigrate critical perspectives. For example, at a recent conference on the bituminous sands Liepert claimed that Alberta environmentalists had a hidden agenda – instating protectionism: “There's another agenda at work here. It's around trade barriers. ... This is another way to, behind the camouflage of environmental collectedness, to reestablish trade barriers” (as quoted in McGurty 2010). It is thus not surprising that the government has invested tremendous financial resources to popularize its perspective. In fact, the Alberta government allocated \$25 million in 2008 towards a public relations campaign designed to inform critics and American consumers alike about all of the ‘green’ initiatives that are taking place in the tar sands (Woynillowicz & Dyer 2008), thereby fulfilling its role as a constructor of common sense environmentalism.

Conclusion

The above tables show how subjectivities toward the bituminous sands tend to vary depending on the type of societal actor in question. Oil companies clearly have it in their best interest to espouse the oil sands perspective, journalists trying to maintain an objective stance are interested in portraying both sides of the debate, and environmental organizations tend to portray the tar sands narrative. However, when we look closer at these players we see discrepancies. Some types of players (such as agents within political society, finance, and industry) have more resources at their disposal. Other societal actors (such as those in the media, well-known experts and institutions) may have broader social reach with their messaging. Most importantly, some players in the oil sands (in particular financial institutions, lobbyists, think tanks, political agencies and oil companies) have vested interests in

seeing the megaproject continue. Through this complex societal interplay, one finds that the dissemination of the 'oil sands' image thereby stems from hegemonic authorities who aim to protect those interests, and do so by putting forward and popularizing the idea that neoliberal capitalism can help societies achieve a healthy balance between ecology and society. The 'oil sands' narrative thus gets absorbed into the larger concept of common sense environmentalism, because the hegemonic ideology in the province posits that it is indeed possible to develop the resource in a sustainable fashion while maintaining a regime of private resource rights and maximizing the freedom of capital. It should not come as a surprise that this market ecological viewpoint works in concert with the political economic rules that guide the development of Alberta's resources. In short, the province's present neoliberal political economic structure *requires* a common sense understanding of ecology that allows for the continued development of the resource in a neoliberal fashion.

CHAPTER FIVE

Part I: Environmental Transformism in Alberta

Today those who speak the truth are discredited and banished. Openly criticize and your job will disappear. Write a story and your services will no longer be needed. Publicize a health threat and you will be run out of the province. Try to enact a Climate Law and the Minister of Environment will go to the far reaches of the continent to make sure it does not pass. The Giant Machine just rolls along as million dollar PR campaigns are trotted out at the first sign of dissent...
- Adam Albright in "Tar Sand Dreams" (Albright 2010)

In the previous chapter I pointed to the assumptions that underlie the 'oil sands' and 'tar sands' narratives, and showed that the former narrative has been more successful in winning a society-wide battle of ideas, thereby spreading a particular understanding of ecology and development as a common sense viewpoint. I also demonstrated why certain types of hegemonic authorities have increased agency, which in turn enables them to play a role in constructing common sense environmentalism. This final chapter is divided into two parts. The first part argues that the transformism of critical ecological subjectivities is indeed taking place in Alberta. Using a number of examples, I show how hegemonic authorities have constructed common sense environmentalism by co-opting some critical environmental ideas while neutralizing others. The second part of the chapter goes on to conclude the thesis by discussing the repercussions of environmental transformism and exposing the dangers it poses to contemporary societies.

The central argument in this thesis is that hegemonic authorities have adopted a number of practices to weaken oppositional narratives, in particular practices that result in the co-optation or neutralization of critical environmentalist ideas towards the bituminous sands. On one hand this has helped found and

consolidate a common sense narrative of development, while on the other it has served to stymie the development of good sense environmentalism (which I discuss below in Part II of this chapter). This process can be referred to as environmental transformism, for which multiple examples in Alberta exist.

Cases of Environmental Transformism

Various categories of hegemonic authorities – such as oil companies, government agencies, and in some cases media commentators, research institutes, think tanks, and recognized topical experts – have done their part to construct a common sense environmentalist viewpoint while blocking the development of good sense environmentalism in a wide variety of ways. In their study of environmental rhetoric in Alberta, Davidson and MacKendrick found that “several discursive strategies... have been employed by the Alberta government to maintain [environmental] credibility while pursuing a mandate of expanded development and regulatory minimization” (2004, 48). Such ecological posturing at a discursive level has enabled the government to avoid adopting genuine environmental reforms that might curtail development. The authors argue that throughout the 1970s and 1980s the province became dependent upon a development regime that was environmentally unsustainable. Then, as ecological modernist policies became the norm throughout the developed world in the 1990s, Alberta was faced with a crisis of legitimacy. Yet rather than introduce regulations, the government attempted to construct new ecological subjectivities: “Historically derived political arrangements that were defined by close relations between natural resource industrial interests and the Alberta administration, combined with Alberta’s neoliberal political

ideology, limited opportunities for significant environmental reform. The province consequently opted for a process of discursive reframing, rather than institutional restructuring" (Davidson & MacKendrick 2004, 62). In researching societal relations in Alberta as pertaining to the bituminous sands over the last two years, I have found multiple examples of 'discursive reframing', falling into at least 9 categories, employed not only by agencies of the provincial government, but by other agents with the ability to shape subjectivity. Highlighting discursive tactics is important because by shaping subjectivities, hegemonic authorities have legitimized material actions.¹ In the following paragraphs I identify many categories of transformist practices that hegemonic authorities have carried out in Alberta. Each one has had the affect of either co-opting a particular critical environmental sentiment, or alternatively has worked to neutralize a critical environmentalist viewpoint. I begin each example by referring to the types of hegemonic authorities involved:

1) The Governments of Alberta and Canada and the oil industry have co-opted the language of sustainability and frequently couch the development of the bituminous sands within this discourse. For example, in 2009 the Alberta Treasury published *Responsible Actions: A Plan for Alberta's Oil Sands*, which it touted as a plan for the sustainable development of the bituminous sands. At the time of its release, NDP Leader Brian Mason jested in the provincial legislature that "the real title should be *Look Busy: Obama is Coming and We're in Trouble...* Why don't you admit this so-called plan is just window dressing to placate world opinion?" (as

¹ This line of reasoning reflects one of the key Gramscian contributions to Marxist analyses in 'Western', 'liberal democratic' capitalist societies. In such societies, Gramsci noted how class domination by capital was achieved not so much through coercive practices, but more so by building support for hegemonic ideologies through practices that built consent and shaped subjectivity.

quoted in Cryderman 2010). Similarly, in 2007 the Canadian House Standing Committee on Natural Resources published *The Oil Sands: Towards Sustainable Development*, within which they consistently refer to the project as a sustainable enterprise in order to offer a veil of legitimacy to the megaproject. However, the language of sustainability has only recently been employed in the bituminous sands. As one industry representative told me, up until the 21st Century, communications specialists involved in the bituminous sands adopted PR strategies with the main purpose of convincing shareholders and financiers that bitumen could be the foundation of a viable petroleum industry. However, with the rise of critical environmental viewpoints in recent years, the purpose of PR in Alberta's oil patch was transformed: "Now it's shifted... Now it's convincing them that we can do it responsibly" (Industry Subject A 2009). Thus governments and corporations have spent millions of public tax dollars on PR campaigns aiming to 'sell' the development of the bituminous sands to the world on social, economic, and environmental grounds. In 2008 the Alberta Government put \$25 million into a three-year marketing project aiming "to improve Alberta's flagging environmental image and counter its growing reputation as a producer of 'dirty oil'" (Woynillowicz & Dyer 2008). This has led many critics to suspect ulterior motives behind the government's environmental policies. As one activist explained to me: "What we're seeing from the Alberta government is more PR than it is actual balance. The fact that the Albertan government spent four billion dollars² in Public Relations on the

² This is likely a reference to the \$4 billion that the Government has invested in Carbon Capture and Sequestration, which many environmentalists believe is a technology destined to fail. As such,

tar sands – essentially selling the image of the tar sands (as responsible, an economic driver, potentially green) – the fact that that kind of money went to a PR firm speaks to me (and to our organization) as an example of how this balance is more talk than it is action” (Social Policy Organization Subject C 2010).

It is important to recognize this exercise in ‘greenwashing’ the bituminous sands as a transformist tactic; its goal is to placate environmental criticism by acquiring the consent of the public in using the language of environmental groups. The Government of Alberta has chosen to engage in a marketing campaign because it feels a need to change perceptions about the environmental impacts of development in order to legitimize its market fundamentalist policy in the oil sector. In order to convince the world that the bituminous sands could be produced sustainably, various hegemonic authorities have co-opted a key message regarding the need to care for the ecological capacity of future generations. However, references to the bituminous sands as a sustainable project have facilitated and legitimized existing relations of production, not altered them in any genuine material sense. They give the impression that government and industry are paying close attention to protecting regional ecosystems, when in fact they are merely trying to make existing production relations *seem* less destructive.

2) Alberta government agencies and oil companies claim to employ a ‘cumulative environmental approach’, while in practice have not done so. Again, the idea of adopting a cumulative approach is one that has been co-opted from critical

critics view the expense as part of a PR effort rather than a genuine expense in the realm of environmental programming.

environmentalists who have pointed to the need to view environmental degradation holistically. By setting up industry-led organizations such as the Cumulative Environmental Management Agency (CEMA), oil companies and government agencies have successfully co-opted this important environmental idea.

Yet while claiming to adopt a cumulative approach, industry often puts out missives that solely focus on one area of ecological damage. In turn, this tactic tends to sideline the discussion of impacts in other areas. For example, Chair of the Board of Directors for Syncrude, Marcel Coutu, recently embarked on a cross-country speaking tour aiming to prove that the bituminous sands only make a minimal contribution to climate change. Offering evidence of new efficiency measures to reduce GHG emissions, Coutu argued that Canadians are “not proud enough” of the bituminous sands and they “have been taking a harsh – possibly exaggerated – view of the environmental impacts of the Alberta tar sands” (Morrissey 2010). As such, Coutu’s effort relays to the public that climate change is *the* environmental problem associated with the bituminous sands, and that oil companies are doing their part to confront it. There is no mention of the myriad other impacts, from water contamination to effects on population health, and so on. As one expert told me, claims about employing a cumulative approach have been dishonest: “We’ve done a really poor job of dealing with cumulative environmental effects. A preferable [form of decision-making rhetoric] would be that ‘there are significant environmental effects but the economic benefits outweigh those significant environmental effects’”. At least that is a decision made based on the facts, but it almost seems like the attempt is to brush these impacts under the surface” (Environmental Organization

Subject B 2009). Accordingly, a more genuine approach would see industry and government come clean about their prioritization of economic gains over ecological concerns, as well as adopting a cumulative approach rather than merely claiming to do so.

Underlying the cumulative impact is the scale of present operations and planned expansions. Thus, the critical environmentalist idea of a moratorium on new projects has been put forward as a basic step in dealing with cumulative impacts. For years, those within the environmental movement have been calling for such a moratorium. In a clear attempt to co-opt the idea of a moratorium, Canada's environment Minister Jim Prentice argued in the wake of the 2008 financial crisis that "there has been a *de facto* moratorium on oilsands developments because of the nature of the economy" (as quoted in Canadian Press 2009b). The statement shows that the government views markets as a natural regulator of industrial projects. And yet, in adopting a market ecologist approach, cumulative environmental assessments are sidelined in favour of economic guidance. Ironically, Don Thompson of the OSDG responded to Prentice's comments by pointing out that the Minister's claim was entirely baseless: "There isn't *de facto* moratorium. In fact, the oilsands is continuing to invest significant amounts of dollars in growth" (as quoted in Christian 2009a). In this light, Prentice's claim of a moratorium appears to be an attempt to appease environmental groups, an attempt to co-opt the very idea without actually doing anything to regulate the real pace and scale of development. In order to genuinely adopt a cumulative approach to environmental management, operations in the bituminous sands would have to be scaled down. The talk of

adopting a cumulative approach has been an effort in co-opting the critical environmentalist idea of viewing ecological damage holistically and systemically as opposed to segmented unrelated impacts.

3) The Government of Alberta, oil companies, financial institutions, think tanks, and the media have neutralized critical environmentalist calls for government intervention in the bituminous sands. They have done so by suggesting that any intervention in market processes will curtail industrial activity in the bituminous sands and result in economic decline, job losses, and capital flight. As Stelmach himself has explained, detractors of Alberta's market ecologist policy have repeatedly called for the government to "touch the brake", a policy with which the Premier disagrees (Stelmach 2007). The critical environmentalist idea of government intervention in the market is one that is considered too radical by hegemonic authorities, and thus they have attempted to neutralize that threat by inciting fears amongst the public.

While the government has wholeheartedly encouraged private and foreign investment and shows no signs of regulating the production of bitumen, hegemonic authorities are nevertheless wont to remind the public that any form of intervention will not be tolerated by the oil industry. For example, earlier this year when Ron Liepert was promoted as energy minister and suggested that the government might possibly review its 'come-one, come-all policy', industry and financial spokespersons wasted no time in chastising him for his 'mistake'. As one financial analyst, Chris Feltin, warned, "any suggestion that the government will start putting the brakes on development of the largest oil source outside the Middle East will

further erode industry and investor support for the Conservative government of Premier Ed Stelmach” (as quoted in Jones 2010a). In other words, the industry threatened to pull financial campaign contributions from Stelmach’s Progressive Conservative party if the government intervened in market processes. This response prompted the government to publicly retract earlier statements and clarify that it was “not talking about any interventionist policies to physically try and slow down industry’s growth” (Jones 2010a).

A similar case is found in well-known political commentator Rex Murphy, who has called environmentalists “reckless” for asking governments to intervene: “If there are taxes on oil development, if we introduce carbon penalties on industry, if there is a deliberate brake put on the oil sands, or an effort to shut them down altogether – this latter not an unthinkable proposition in certain quarters – whatever is done will, sooner or later, take revenues and jobs, take enterprise, out of Alberta in particular” (Murphy 2009). Such claims sow fear in the populace about the idea of government intervention. Indeed, the very idea of intervention has become a social taboo in neoliberal Alberta and Canada. As these arguments are played out in civil society, many people are convinced that intervening in market processes will only work at interrupting the supply of petroleum, that their own consumption demands will thereby not be satiated, and that costs will increase. They are told that if the pace and scale of development in the bituminous sands slows, their jobs may be at risk, and that they will suffer from a downturn in the economy. These subjectivities consistently work at neutralizing critical environmentalist calls for government intervention in the bituminous sands.

4) The Government of Alberta, oil companies and various expert commentators frequently allude to new technologies as a complete solution to environmental degradation in the bituminous sands. While technologies do reduce the material intensity of degradation, the entire discourse of technology as an ecological solution is largely a discursive tactic aiming to neutralize the voices of critical environmentalists who have pointed to the need to confront ecological damage. For example, ecologists have long pointed to the need to curtail the industry's GHG emissions, to avoid producing tailings, and to refrain from clear-cutting and open-pit mining. In an attempt to transform these environmentalist sentiments, industry has implemented technologies such as Carbon Capture and Storage (CCS), Tailings Reduction Operations (TRO), and land reclamation engineering. These technologies in fact allow industry to continue to emit GHGs, emit tailings, and continue open-pit mining while creating the impression that environmental viewpoints have been heard, and that these specific ecological problems have been addressed.

Industry PR material, government reports, and media articles frequently speak of technology as having solved the ecological devastation associated with development. For example, in an article titled "Canadian oil sands may get cleaner", reporter Joe Carroll suggests that "the world's biggest energy companies are rolling out technology intended to *eliminate the environmental disadvantage* of Canadian oil sands" (Carroll 2009, emphasis added). Looking closer, the technology in question – high temperature froth treatment – merely reduces the amount of energy required in some bitumen isolation plants, thereby decreasing those plant's carbon footprints

by 10% to 15% and potentially putting them on par with other forms of oil production; it does not *solve* the plethora of environmental problems associated with development, as the article's title and opening sentence allude. In a similar case, the federal report of the Standing Committee on Natural Resources asserts that "development and commercialization of new technologies will undoubtedly play an important role in helping the industry develop the oil sands in a more sustainable manner" (Richardson 2007, 2). Claims about technology making the megaproject sustainable are not only misleading, as new technologies will not alleviate environmental impacts, but they can also be exposed as efforts to mask the true extent of degradation to allow continued development. Analysts know that new technologies may decrease the per barrel impact, or the intensity of ecological damage, but will certainly not make the industry sustainable. As one commentator explained to me in reference to the billions of dollars that the Government of Alberta invested in CCS technology, the discussion of technological fixes "appears to be much more of a bait and distract tactic than it does to be an actual solution" (Social Policy Organization Subject C 2010); or as the Member of the Alberta's Legislative Assembly for Edmonton-Strathcona, Rachel Notley, has explained, "[CCS] is really an exceptionally overpriced public relations stunt to greenwash the oilsands for the sake of the U.S." (as quoted in Cryderman 2009b). Again, the purpose behind technological innovations is to enable the continued extraction of bitumen. As such, references to technological fixes absorb environmentalists' concerns regarding the variety of different types of ecological damage, by purporting to have 'solved' them.

5) Government representatives have tarnished the reputation of public figures who have voiced negative views on the impacts of development. In trying to publicly discredit whistleblowers, they have neutralized the concerns made by environmental critics about the health impacts associated with the production of bitumen and SCO. Some health agencies have gone as far as revoking medical licenses of physicians who have spoken out about the long term community health impacts of development. As Andrew Nikiforuk has noted, he and Doctor John O'Connor (both of whom have spoken publicly about concerns regarding development) were "badly tarred" by Conservative MPs when interviewed by the House standing committee on Environment and Sustainable Development: "We assumed that all committee members would be interested in rigorous dialogue regardless of political affiliation. But that's not what Ottawa delivered. Instead, several Tory MPs subjected us to abusive Republican tactics geared to dismiss, discredit and dishonour" (Nikiforuk 2009). The attempts at tarnishing the reputation of Doctor O'Connor followed an incident some years earlier in which the doctor's medical license was revoked by Health Canada, after he had raised concerns about potential correlations between bituminous developments and cancer downstream, on a CBC radio show. Health Canada accused him of causing undue alarm, hiding medical information and overbilling patients, charges which were dropped years later (Loyie 2009).

Astoundingly, the firing of physicians for raising concerns about the production of bitumen has precedent. Doctor David Swann, former medical officer of health for the Palliser Health Authority in southeastern Alberta, was fired in 2002

for making public statements in favor of supporting the Kyoto Protocol. Health board chair Len Mitzel explained at the time that the board disagreed with Swann because the Kyoto Protocol would ultimately hurt Alberta's economy due to the latter's reliance on the fossil fuel industry: "Everything is economy-driven, and any downturn, especially as severe as this looks like it's going to be in the economy, is going to have a very detrimental effect on the health industry and the ability for us to deliver health services" (as quoted in CBC News 2002). As these examples suggest, government agencies have adopted transformist tactics resulting in the neutralization of critical environmentalist ideas by tarnishing the reputations of critics and whistleblowers or laying-off detractors. As such, critics have not only been discredited within the public sphere, they have also been silenced.

6) The Government of Alberta and oil companies have consistently downplayed concerns about the high incidence of rare cancers and illnesses in Fort Chipewyan as potentially caused by upstream industrial activity. Despite evidence that would suggest a correlation between cancers and the megaproject, hegemonic authorities have repeatedly suggested that other causes must be responsible for the higher rates of illness within the indigenous community. In doing so, hegemonic authorities have neutralized the concerns of critics who have pointed to the way that bituminous operations have negative health impacts downstream.

For years the efforts of hegemonic authorities focused on denying the existence of high rates of illness and cancer in the community. However, once studies proved that the community was indeed at a higher risk, alternative explanations absolving industry's responsibility began to be put forward. As

Andrew Nikiforuk notes, despite years of repeated requests for a baseline health study for the community in 1996, 1999, and 2004, such pleas were ignored (2008, 88-92). In 2006, Alberta Health finally reviewed files and produced a short study, but only released the results in private at a regulatory hearing for Suncor, limiting public statements to its assertion that there was no correlation between industrial activity and health problems downstream. In the ensuing years, the government refused to fund further studies and denied the severity of health problems in the community (CBC Edmonton n.d.). As suggested above, the community's doctor was then fired and charged with causing undue alarm after bringing the story to the public, despite the fact that two community-members had already perished from cholangiocarcinoma, and three additional individuals had acquired it, all in a population of 1200.³ Finally, as Emmanuel Raoul notes, "after years of denial, Alberta health officials commissioned a new study and admitted in 2009 that the incidence of cancer was high, but qualified the findings with the comment that they were 'based on a small number of cases'" (Raoul 2010). Provincial authorities often suggest that the high rates of illness are due to lifestyle factors, an explanation with racist undertones (see McAnally 2009). Or, as Sally Williams has explained, government and industry often suggest that because bitumen naturally occurs on the banks of the Athabasca, one can not assume that the release of carcinogenic compounds in the water is due to industrial activity (Williams 2010).

In addition to giving excuses, oil companies are accused by community members of attempting to manipulate them into keeping silent about health

³ This rare form of bile duct cancer typically affects 1 in 100,000 people.

impacts. As one activist, Eriel Tchekwie Deranger, has claimed: “They will come in and sponsor things like ice rinks and playgrounds and computer labs – then come in a month later for their consultation process. They will dangle the carrot of a few jobs – it is clearly manipulative” (as quoted in Cormier 2010, 13-14). When George Poitras, former Chief of the Mikisew Cree First Nation and industry consultation coordinator, went on a speaking tour in Europe discussing health and environmental impacts, oil companies forced him to step down from his position: “The president of the longest-running company in the tar sands met with our leadership and in no uncertain terms said they did not like that I travel internationally on Mikisew time to bring negative media attention to the tar sands industry... So they said, either the Mikisew would have to terminate my employment or somehow silence me, or the Nation would lose contracts (as quoted in Cormier 2010, 14). As the examples demonstrate, environmental ideas about the likely correlation between industrial activity in the bituminous sands and health impacts downstream have been neutralized through a variety of techniques aiming to downplay criticisms that may implicitly problematize the pace and scale of development for public health reasons.

7) The Government of Alberta and oil companies have willfully disregarded and cut funding for environmental research focusing on the negative ecological impacts of development while allocating funding for research on decreasing the ecological footprints of various bitumen extraction methods. In this way, the idea of ecological research for the sake of the public good has been transformed into ecological research for the sake of continuing production. For decades, governments

publicly funded research into many aspects of bituminous sands operations, yet Andrew Nikiforuk argues that findings were often ignored when it came to environmental implications: “Governments spent millions of dollars studying the impacts and then let the research gather dust on the shelves. ‘By 1984-85, almost all of this research died on the vine and funding had been cut off. The reports stopped and the scientists left these projects. Some scientists have told me the provincial government just did not want to know. If they had the information, they couldn’t have allowed the development they did in the 1990s” (as quoted in Henton 2009a). Despite the disturbing connotations of government intentionally ignoring research, multiple examples point to this being a reality in the bituminous sands. As ecologist Kevin Timoney has explained in an interview with filmmaker Peter Mettler:

[We reviewed] unpublished reports by government or industry and we found that there’s lots and lots of evidence buried in these reports that industry and government are quite well aware that there are significant problems ... with very little or no evidence of anything being done by the government; very clear evidence that the tailings ponds are leaking and the government knows that they’re leaking and seeping ... So the Government is aware of this, it’s just that at the political level there’s no real admission that there are concerns...” (Timoney 2010).

A similar approach was adopted towards air pollution: In 2009 when critics started pointing to the impacts of air pollution on acid rain downwind of the megaproject, Alberta Environment announced that, “to reduce costs, Alberta will do less testing for acid rain in the northern oilsands region” (Canwest News Service 2009).

Yet while scientific evidence from studies pointing to the environmental impacts of development has been consistently ignored or underfunded, the government has allocated funds towards research that helps the image of the

bituminous sands. For example, the provincially funded Alberta Energy Research Institute (AERI) released a 2009 study claiming that GHG emissions in the bituminous sands were almost on par with emissions caused by the production of conventional oil. Again, the purpose of such a study is to give the impression that the megaproject is not as damaging as originally thought while simultaneously showcasing how governmental agencies have fulfilled their civic responsibility to conduct environmental research on the bituminous sands. Similarly, a study by the Canadian Energy Research Institute (CERI) in 2009 claimed that “green bitumen” can be produced by switching from natural gas to nuclear power as a primary source of energy, a move that would require the construction of four large nuclear power plants and more than two dozen small nuclear plants within a span of two decades (Healing 2009a). Like the example above, CERI’s study (and media coverage about it) works to disseminate the idea that the bituminous sands can be produced in an environmentally-friendly manner,⁴ and simultaneously suggests to the public that environmental research is being conducted and remains well funded. In short, hegemonic authorities have co-opted the critical environmentalist idea of allocating funds towards ‘environmental research’ on the oil sands.

8) The government of Alberta and the federal government have co-opted the idea of implementing stringent environmental regulations within the industry. Yet despite claiming that the industry is highly regulated, the rules of bitumen development are designed to facilitate development and allow oil companies to

⁴ Such studies are reported in popular newspapers with uncritical headlines, such as this example from the Calgary Herald: “ ‘Green’ oilsands possible, but expensive: Study” (see Healing 2009a).

regulate their own activity. As argued by Douglas Macdonald, author of *Business and Environmental Politics in Canada* (2007), since the 1990s the oil and gas sectors have faced few environmental regulations thanks to a prevailing ideology of self-regulated voluntarism. As a result of intensive lobbying by oil companies, governments ensured that regulations were not stringent: "Firms were under no requirement, financial or legal, to change their environmental behaviour" (as quoted in McClearn 2009). Further, the Canadian Environmental Assessment Agency (CEAA) and the ERCB have failed to enforce regulations that do exist. The Federal Government has also largely remained silent in the face of projects that threaten waterways and climatic pollution (two areas in which it is jurisdictionally involved), claiming that such energy projects fall within the purview of the province. Nevertheless, federal laws on GHG emissions, and laws on water contamination falling under the Fisheries Act, provide a framework for government action. Recently, Environmental Defense has filed charges against the federal government regarding its failure to enforce the Fisheries Act in the case of leaking tailings ponds (Environmental Defense 2010). It is no coincidence that both the provincial and federal governments have taken a lax stance on environmental regulations in the bituminous sands. Their true intention has been to facilitate their development, which requires oil companies to operate unimpeded by stringent rules. Yet such hegemonic authorities know that those conscious of ecological impacts of bitumen development would expect strong environmental regulations for operators. As such, they have co-opted the idea and claimed to be stringently enforcing regulations in the bituminous sands, while in fact allowing companies to monitor themselves.

9) While oil companies and industry groups claim to be open to discussion and criticism, in turn they show no signs of seriously considering criticisms. Rather, they have co-opted the idea of 'dialogue' to give the impression that they are open to discussion and willing to change. For example, in early September of 2009, when Greenpeace activists broke into Shell's Muskeg River mine and held a protest, the Royal Canadian Mounted Police and Shell security staff were careful not to respond with force, knowing that such a coercive response may lead to popular support for the protest. Rather than arresting the protesters or pressing charges, one of Shell's PR spokespersons, Paul Hagel, suggested they would like to sit down with Greenpeace and hear their perspective: "We want to get these reasonable critics to the table and explain our views... We acknowledge the impact of climate change. So we come on an even foot with Greenpeace. And we thought that would be enough to sit down and listen to their views and have them listen to our views" (as quoted in Warnica 2009). After, the company's executive vice president, John Abbott, used the media opportunity to point to the Greenpeace's unwillingness to engage in dialogue: "We invited Greenpeace to discuss their climate and energy views with us directly but they chose not to do so, which is disappointing" (as quoted in Polczer 2009c). Thus, as word of the protest made its way into the news, popular opinion swayed towards the seemingly moderate and constructive response of Shell. Through its communications response, the company was able to frame itself as an organization willing to engage in dialogue as juxtaposed with the radical environmental group.⁵

⁵ Interestingly, a similar protest at Suncor some weeks later was not handled by that company's security staff in similar form (likely because it does not yet have a similar policy on dealing with on-

The Canadian Association of Petroleum Producers (CAPP) and the provincial government have both recognized how promoting 'dialogue' works to silence criticism. CAPP has set-up an entire website dedicated to this purpose, where Canadians are provided "a forum to share their opinions and have a conversation about the country's oil sands" (Canadian Association of Petroleum Producers 2010). Posted comments are monitored by communications experts at oil companies and industry associations, who quickly respond to questions and criticisms with prepared facts. Similarly, on the Government of Alberta's official oil sands website, a promotional video for the bituminous sands showcases an employee of Alberta Environment rhetorically asking whether the government is open to environmental criticism: "Is there room for improvement? Do we need critiques by people throughout Canada and the world? Yes of course; that's what keeps us on our toes; it's what keeps us constantly reevaluating and looking for better ways of doing our business" (Government of Alberta n.d.). Yet as representatives from environmental and social policy organizations often explain, the opposing narrative is seldom heard, and rarely yields change (see, for example, Krugel 2009b). In part, the frequent suggestion that dialogue is needed is a way to co-opt one of the messages of the environmental movement, which claims that citizens should be engaged in a full-scale democratic discussion about the merits of developing the bituminous sands, and that environmental organizations within civil society should have their ideas heard and debated.

site protests). The RCMP arrested the demonstrators, and the company then filed a \$1.5 million lawsuit against Greenpeace. This more coercive response resulted in negative press for the oil company. As the example demonstrates, hegemonic authorities are more successful in building consent when they adopt transformist tactics rather than coercive responses.

The Project of Hegemonic Authorities

In reviewing these nine distinct strategies of environmental transformism, it is evident that the underlying purpose of hegemonic authorities has consistently been to ensure the continuation of bitumen production. However, the agents of transformism have purported to have an environmentalist agenda. Transformism in this sense has to do with the underlying motives behind an action. While Gramsci used the term in a different context, both contexts share the underlying purpose of silencing criticism through co-optation or neutralization.⁶ It is important to stress, however, that environmental transformism is a sociological phenomenon referring to tendencies within an immutably complex system of social relations. It does not refer to individual plans of agents conspiring to destroy the environment or the environmental movement. Rather, the broader argument suggested within the last two chapters is that Alberta's neoliberal political economy has created the conditions in which hegemonic authorities are compelled to protect the process of capital accumulation from potential threats. In this case, the growth of a critical environmental movement in Alberta has implicitly threatened the megaproject, and as such, steps have been taken (both intentionally and unwittingly) to silence critical environmental ideas, in part by co-opting some of its core concerns and in part by neutralizing its more radical suggestions.

⁶ The underlying motives of transformist strategies used by Italian Prime Minister Agostino Depretis in appointing opposition MPs to the ruling party's cabinet was to deemphasize the voice and power of the opposition.

Part II: The Repercussions of Environmental Transformism

As this thing starts to crank up again, are we going to change our
policy of come-one, come-all into the development of the oil sands?
- Alberta Energy Minister Ron Liepert (in Jones 2010)

Above I have pointed to the existence of environmental transformism in Alberta. This part of the chapter concludes the thesis by discussing the dangers and repercussions of such a process operating within neoliberal capitalist societies, and normatively points to the need for the development of good sense environmentalism. In short, the ensuing pages frames common sense environmentalism as a technical façade, constructed primarily with the underlying purpose of maintaining existing production relations, *not* for the purposes of environmental justice (as it claims). Further, it has been constructed by taking the main criticisms of environmentalists and turning them upside down, co-opting them, or neutralizing them for the sake of offering legitimacy to an historically-situated project of capital accumulation.

Interpreting Environmental Transformism

As explained in Chapter Two, neoliberal states can expect opposition, and tend to treat such opposition with hostility, acting against “all forms of social solidarity that put restraints on capital accumulation” (Harvey 2005, 75). Because the Government of Alberta and many of Canada’s hegemonic authorities thrive upon energy development and economic growth in the bituminous sands, such entities find opposition within groups and individuals that openly criticize the pace and scale of development in the bituminous sands. However, while Alberta’s Progressive Conservative Party is no doubt hostile towards outspoken environmentalists, the

state response has been ideological and calculated, rather than repressive. Attempts to protect the existing mode of capital accumulation have taken place largely at the level of discourse, not coercion. In building consent for the existing structure of political economy, environmental transformism has allowed the powerful to maintain hegemony without resorting to outright violence.

Yet in exposing the purpose of environmental transformism as a set of tactics employed by hegemonic authorities to maintain status quo relations that benefit dominant groups in society, the implication is that the dominant brand of environmentalism to come out of such a process is disinterested in working towards environmental justice. In Alberta, common sense environmentalism cannot disarticulate itself from (and in fact reproduces) the very neoliberal policies that have enabled the development of the bituminous sands in the first place. This type of environmental thought is thus destined to produce solutions that ultimately fail in their attempts to curb the ongoing degradation of the natural environment.

A classic example of the danger posed by environmental transformism is found in the ever ubiquitous campaigns within neoliberal societies to 'save the environment' by doing such mundane things as boycotting plastic bags. As George Monbiot has argued, such popular campaigns have fetishized symbols of consumption (such as the plastic bag) as the root of all environmental evil: "Why this fetishisation? Because dealing with plastic bags is easy. Easy for the government, easy for retailers, easy for shoppers. It threatens no one, makes money for the shops (if they charge for their bags) and ensures that everyone feels better about themselves, while continuing to trash the biosphere just as we did before"

(Monbiot 2009). As Monbiot suggests, the process of environmental transformism poses the threat that societies may believe that the natural environment is being protected while in fact degradation continues unabated.

Thus, environmental transformism explains why Alberta continues to face severe ecological devastation despite the appearance of a concerted multibillion-dollar strategy to conduct operations in a 'sustainable' manner. It also explains why opposition to the project has remained largely reactive, relatively ineffective, labeled as 'reckless' and unwilling to engage in 'dialogue'. By engaging in transformist tactics, by enacting policies that fit within a broader common sense environmentalist vision, by demonstrating in legal terms their deep concern for the environment, hegemonic authorities have beat critical environmentalists at their own game. Yet when all is said and done, the real outcome of environmental transformism is revealed: in Alberta, the environment faces severe decline as out of control growth in the energy sector brings with it the exponential growth of GHGs, the depletion of Alberta's fresh water reserves, the contamination of the air, water, land, flora and fauna, the destruction of ancient boreal forests and wildlife habitats, and the poisoning of local communities. The concept of environmental transformism therefore suggests that prospects for environmental justice are severely limited in Alberta's neoliberal capitalist society. It suggests that a politics of critical environmentalism is needed to bring about popular awareness of the cumulative ecological problems associated with the development of the bituminous sands. This type of popular awareness could emerge in the form of good sense environmentalism.

Identifying Good Sense Environmentalism

Identifying good sense environmentalism is more difficult than identifying common sense. Recall that good sense is borne from a critical reflection of common popular conceptions; it is “constructed out of critical engagement with the issues of the day” (Harvey 2005, 39). As Diana Coben (1998) explains, Gramsci saw good sense as analogous with ‘philosophy’,⁷ the latter term being defined by Gramsci as “criticism and the superseding of religion and ‘common sense’” (Hoare & Smith 1971, 326). Good sense is further explained as an “intellectual unity and an ethic in conformity with a conception of reality that has gone beyond common sense and become, if only within narrow limits, a critical conception” (Hoare & Smith 1971, 333). In this sense, the tar sands narrative lingers upon the boundaries of good sense environmentalism – yet it has not subsumed the title of good sense as it remains somewhat fractured, non-cohesive and has not clearly articulated a critical stance on the role played by the dominant political economic structures in continuing the megaproject. On the contrary, the ‘tar sands’ narrative remains reactive; it is more a response to the common sense narrative than a new popularized critical conception that challenges the fundamental structures underpinning common sense environmentalism. As the examples of transformism above suggest, today’s ‘tar sands’ narrative is the result of the weakening of yesterday’s ‘tar sands’ narrative.

The fact that the tar sands narrative cannot articulate a cohesive anti-capitalist stance (despite making prescriptions that would require full-stop

⁷ In his prison notebooks, Gramsci used the term ‘philosophy of praxis’ as a pseudonym for Marxism. ‘Philosophy’, in this sense, is related to a Marxist analysis of the dominant material and subjective structures of society.

interventions within neoliberal processes) is evidence that environmental transformism is taking place. In this regard, the conceptual kernels of a good sense environmentalist perspective towards the bituminous sands have been deflated and sidetracked – transformed, in short – thereby giving rise to its impotent doppelganger as a result of actions by hegemonic authorities working to absorb and liquidate critical environmentalist ideas.

Like the many jurisdictions that have undergone a wholehearted shift towards neoliberalism, Alberta has suffered in multiple respects. Neoliberal policies have not only brought ramifications in the areas of social spending and declining public services (as shown in Chapter Three), they have also manifested in environmental damage, and worse – in the construction of environmental subjectivities that allow degradation to continue. Indeed, the manifestation of neoliberalism as common sense in Alberta has come at the expense of good sense. Yet as Noel Castree has noted, new subjectivities can help lead to action that may facilitate the turn to good sense environmentalism:

The failed logic of neoliberalism and its ravenous craving for markets, commodities, and sites of accumulation across the planet, propels a loss of species that it has promised to defend, a destruction of ecosystems it has claimed to value, and a reduction in the quality of life that it professed to maintain. It is in need of replacement! We require utopian forms of environmental praxis to help us imagine alternative possibilities, emancipatory projects, and an end to social and environmental destruction at all scales (Castree 2007, 291).

At the core of a good sense environmentalist conception in Alberta is the idea of limiting production. A decision from the state to limit production in the bituminous sands would mark a fundamental break with the dominant neoliberal ethos. Despite the many groups that call for such a moratorium, the dominant

position within the centers of political power in Alberta and Canada is to ensure that business continues as usual. In turn, the idea of limiting production is increasingly pushed to the fringes and marginalized. Even former Alberta Premier Peter Lougheed has been criticized for asking for a production slow-down. As one analyst explains, the subsequent response to Lougheed by industry and government is a marker of the entrenchment of common sense thinking in Alberta:

Most every dramatic political and economic issue in the tar sands can be resolved by limiting production, but it's not possible to have that conversation in an economic or political culture based on [the idea] that relentless growth is good for you. That's the heretical position in all this – it's to slow down! So when someone like Peter Lougheed, Alberta's elder statesman, says 'slow down, behave like an owner, save for the future' – when those very conservative approaches are regarded as complete heresy then you really know how unhinged and unbalanced the whole thing has become! (Expert Subject A 2010).

The task of good sense environmentalism is therefore to overthrow the dominant conception of common sense and build new subjectivities that understand the interconnectivity between bitumen production and environmental injustice.

Lessons for EPE: A Normative Call for Good Sense Environmentalism

In his history of environmentalism, Donald Worster demonstrates how environmentalism originally emerged in the late 19th Century as a response to capitalist transformations. Early environmentalists believed “coordinated public planning would end what was viewed as the haphazard and exploitive practices common in the *laissez-faire* approach” (as quoted in Barton 2002, 10). While it is not the aim of this thesis to suggest that any form of public planning guarantees the end of ecological degradation (this depends, of course, on how sound the planning is, and more importantly whether or not it adequately confronts the problems of

human and natural exploitation), it *is* intended that the laissez-faire approach has failed astoundingly at protecting the natural world. As I have demonstrated in preceding chapters and through a Gramsci-influenced eco-Marxist theoretical framework, two ideologies which may be antinomical – neoliberalism and environmentalism – have been conjoined in our contemporary understanding of ‘common sense’. Eco-Marxists claim that they are in fact antithetical because of the direct causal link between the neoliberal capitalist mode of production and ecological destruction within both the material and subjective realms of production. This means that ‘good sense’ environmentalist ideas pose a threat to neoliberal capitalism, and often, capital attempts to respond to the threat through environmental transformism. In doing so, the development of good sense environmentalism has been stymied as its ideas are either co-opted or neutralized. In turn, popular support has been built for an impotent form of environmentalism which pushes market ecologist principles. While governments and corporations deal with ecological crises by employing transformist tactics, the physical destruction of the environment continues in full force, all the while failing to foment any genuine social protest against the true cause of the problem: neoliberal capitalism. Such is the genius of environmental transformism, applied by hegemonic authorities on the behalf of society’s ruling groups.

To conclude, this thesis can be interpreted a case study in the method of environmental political economy, in that it has attempted to theorize ecological problems and find solutions rooted in political economic structures. It has used a Gramsci-influenced eco-Marxist theory to explain in part how neoliberal capitalism

is an ecologically destructive force. This is disconcerting in consideration of the entrenchment of neoliberalism throughout the globe in recent decades. It is equally disconcerting given that an increasing number of powerful actors are investing more thought, time and capital into making people believe that economic growth is compatible with ecological justice. And yet, the very concept of environmental transformism raises questions about whether the two indicators of progress are in fact compatible.

The preceding pages have explored a number of social dangers resulting from the process of environmental transformism, for which this thesis implicitly serves as a warning alarm. First and foremost, I have attempted to expose the stereotypical puzzle built into neoliberal political economies, in which it commonly appears that great efforts are being taken to protect the environment while material indications suggest continued degradation. Secondly, I have demonstrated that in multiple cases where environmental policies, technologies and mandates have been framed as an attempt to bring about ecological sustainability, the true underlying purpose has rather been to enable further economic growth. Third, I have explained, through a theoretical and grounded examination of the process of environmental transformism, that today's dominant environmental subjectivities stem from the ideologies espoused by ruling groups and hegemonic authorities.

In understanding environmental transformism, environmental political economists are compelled to consider the implications of different development philosophies, to analyze from where such ideologies have emerged, and to consider the long term social impacts of environmental degradation. Alternatively, if we are

to take capital's reactionary attempt to transform good sense environmentalism into common sense environmentalism as a given, the concept of environmental transformism suggests a framework of political action that confronts the leading groups' attempts at imposing passive revolutionary changes; it suggests declaring what Gramsci would have called a 'war of position' as a *modus operandi* for critical environmentalists. Given that the concept of transformism has a firm rooting within Marxist revolutionary theory – one that has been worked out and developed by Gramsci and subsequent generations of neo-Gramscians – the concept implicitly calls for a revolutionary program of political action to confront the capitalist mode of production through the building of a counter-hegemonic ideologies founded upon good sense environmentalism. In line with Gramsci's theories of hegemony, the theory of environmental transformism gives agency to the counter-hegemonic social movement of workers and environmentalists who see a need for drastic changes to today's dominant paradigm.

APPENDIX A

Sample Interview Questions

The following is a sample of questions that were asked to interview subjects:

Balancing Diverging Interests

- 1) The Government of Alberta has expressed a commitment to finding a balance between the diverging interests of environmental organizations and the oil sector. How successful has the government been in taking all interests and viewpoints into account?
- 2) How has the work of [subjects' institution] been received by other groups in society?

The Relationship between Economy and Environment

- 3) What is the relationship between the economy and the environment?
- 4) How does economic growth relate to environmental sustainability?

Defining Sustainable Development

- 5) What would sustainable development in the bituminous sands look like?
- 6) Are current operations sustainable, or is sustainable development a long-term goal?
- 7) Is sustainable development a matter of quantity or quality, or both (in other words, is it a matter of production levels or production processes)?
- 8) Is it possible to make development in the bituminous sands sustainable?
- 9) Can technological innovation help make the bituminous sands sustainable?

Environmental Regulations & Policy

- 10) Is the current set of environmental regulations in the bituminous sands effective at producing more sustainable oil production?
- 11) Are there too many regulations, or are more needed?
- 12) Are there certain types of environmental regulations that would be more effective than others?
- 13) How do environmental policies in the United States affect oil development in Alberta?

Market Ecology

- 14) Is the free market a tool that can help society deal with the environmental impacts of resource development *or* does the free market hinder the ability of a society to deal with ecological impacts of resource development?

Public Opinion

- 15) Does your institution believe that a majority of Albertans/Canadians support the development of the bituminous sands?
- 16) Does your organization feel that *its* own views on development are supported by a majority (or a minority) of Albertans/Canadians?

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