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Martine Stevens and Patrick McCurdy Fort McMurray, Climate Change and 'The Beast': A Critical Discourse Analysis of Canadian News Editorials and Opinions



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Fort McMurray, Climate Change and 'The Beast': A Critical Discourse Analysis of Canadian News Editorials and Opinions

1 Introduction

In April 2019 a report from Environment and Climate Change Canada revealed that Canada was warming twice as fast the rest of the world (Environment and Climate Change Canada 2019). Amongst the many anticipated consequences of global warming is an expected increase in Canadian wildfires. Wildfires (also known as 'forest fires') manifest routinely in Canada's forests: each year, approximately 8,000 wildfires occur, burning an average of over 2,000,000 acres (Natural Resources Canada, 2017). Wildfires play a pivotal role in the revitalization of forest ecosystems. However, wildfires that create extensive and destructive impacts to surrounding human communities - thereby creating social disruptions prompt special attention from several disciplines, including geography, sociology, natural and biological sciences, and also media studies. Of great import is the increasing frequency and magnitude of wildfires (Jolly et al., 2015; Environment and Climate Change Canada 2019): recent mega wildfires in 2016 and 2017 that burned Alberta, British Columbia, as well as California and Texas reveal the social, environmental and political implications of this new reality. Indeed, the scientific community continually reminds us that extreme weather and natural disasters are born out of anthropogenic climate change and pose measurable threats to infrastructure, economies, and communities (Stoker et al., 2013). Despite the danger of such calamities, the option to ignore, dismiss, revoke, or reinterpret sciencebased assertions about the interaction between human activities and the atmosphere remains. Moreover, in a time of deep ecological crisis and deep mediatization, public understanding of crisis comes, at least in part, from its mediated representation. As such, critically examining case studies of mediated disaster against a backdrop of climate change and ecological disaster offer an important window into the representation of crisis.

This working paper presents a discourse analysis of Canadian news media coverage of one specific wildfire that encircled the municipality of Fort McMurray, Alberta beginning in May 2016. Named "The Beast," the blaze displaced the city's population and the aftermath continues to affect the lives of the residents. The attribution of climate change to the cause of the wildfire triggered debate in traditional and social media and in the statements of prominent federal politicians. As an array of sources and speakers advanced different interpretations of the wildfire, varying degrees of concern were placed on the science of attribution - scientific work that quantifies the extent to which greenhouse gas (GHG) emissions affect the risk of extreme weather events (Corneliussen 2016). Despite the unseasonably warm and dry conditions leading up to the fire, discourse that made the link between carbon emissions and the wildfire was quickly deemed misplaced and insensitive to those living and working in Fort McMurray given that many community members secure their livelihood from the fossil fuels sector. As a result, discourse on the subject of the wildfire was closely linked to either opposition or acceptance of the Alberta tar/oil¹ sands.

¹ The terms 'tar sands' and 'oil sands' are used interchangeably in public discourse referencing

2 Canada's Tar/Oil Sands, Fort McMurray and the Wild Fire

Alberta's bitumen sands are the third largest proven oil reserve in the world Since the turn of the 21st century, over 100 billion dollars has been invested into the processes associated with the recovery of bitumen sand from Canada's three deposits (Athabasca, Cold Lake, and Peace River) that are housed beneath Alberta's boreal forest (Dorow & O'Shaughnessy, 2013). Continued operations at the tar/oil sands are strongly opposed because the extraction and refinement processes are the fastest growing source of carbon dioxide emissions in Canada, and the greatest obstruction to meeting the country's obligations and commitment to reduce GHG emissions (Adkin, 2016, p. 3). As such there is an inherent tension between economic gain and environmental protectionism of Alberta's bitumen deposits.

Fort McMurray², Alberta was established alongside the growth and development of the Athabasca sands beginning in the late nineteenth century and continuing throughout the twentieth century. Its proximity to the bitumen sands has made it an attractive work location for tens of thousands of domestic and international workers. Given that the city services this particular resource industry, it is steeped in economic symbolism. Notably, the economy of the boomtown and of the province follows the movements of the price of oil. This economic symbolism influences the multiple meanings that have been assigned to the remote region. To its residents, for example, Fort McMurray represents home. To proponents of the sands, the derived energy source is considered a profitable investment; while to its protesters the industrial project must be phased out (Dorow & O'Shaughnessy, 2013). These tensions resurfaced in news media, political, and citizen discourse in 2016 when the wildfire swept across Fort McMurray.

To outsiders, remote northern Alberta has gained its reputation through a carefully devised narrative, constructed by regional, national, and international stakeholders since the early beginnings of Alberta's tar/oil sands development. The tar/oil sands have always been a mediated place in the Canadian consciousness, Gismondi and Davidson (2011) explain: "[the region] has become known to most of the world through the diaries, reports, photographs, and film images developed by explorers, travelers, government employees, and early industrialists" (p. 39). Such communication work was (and continues to be) remarkably important in order to gain the public's assent for a long-term and expensive project. Thus, economic indicators like job creation, resource royalties, markets, and foreign investment historically led the discussion on the extractive project (Paskey, Steward, & Williams, 2013). Importantly, this legacy persists in the discourse advanced by industry proponents such as fossil fuel industry conglomerates, international investors in the sands, conservative foundations, politicians, public relations firms, and a minority of scientists.

3 "The Beast" Fort McMurray Wildfire

In May 2016, a wildfire consumed nearly six hundred thousand hectares of boreal forest that encircle the municipality of Fort McMurray. While a state of emergency was instituted, the

Alberta's bitumen sands. Kidner's (2010) discourse analysis reveals that the terms are used in distinct and contentious ways by opposing groups. This thesis will use the slashed reference of the terms to uphold this discursive tension.

² This thesis will use the name 'Fort McMurray' to refer to the residential community and the bitumen sands, unless otherwise stipulated.

fire made the town's entire population - almost ninety thousand residents - disaster refugees, constituting the largest public evacuation in Canadian history (Mesley, 2016). Though unanimity on the cause of the wildfire has not been reached, unseasonable conditions contributed to its start: Alberta experienced exceptionally dry and warm winter and spring seasons in 2016, with temperatures exceeding seasonal averages by twenty to thirty degrees in April (Kolbert, 2016). Detected on May 1, the blaze destroyed 2,400 structures in the town after four days. Though no additional infrastructure damage in the town followed, the wildfire was not considered under control for another eight weeks ("Fort McMurray fire," 2016). The wildfire was exceptionally severe as the rising hot air formed its own weather system, producing a lightening storm that sparked additional fires in the surrounding forest once the blaze had begun (Snowdon, 2016). Not only is it Canada's most costly insured disaster at the time of writing, creating nearly four billion dollars in damage, but it was also an "economic setback" in the region as the wildfire temporarily halted oil production (Levin & Austin, 2016). Despite these substantial damages and expenses, the fire did not claim any lives.

The 2016 wildfire in Fort McMurray, Alberta reminds us that Canada is not excluded from natural disasters. Meanwhile, recent scholarship has identified a gulf between citizens' environmentally conscious values and citizens' continuous environmentally destructive behaviours (McCright & Dunlap, 2010; Newell & Paterson, 2012; Norgaard, 2011; Stoddart, 2011; Szerszynski, 2007). Meanwhile, recent commentary pieces and academic work writing about climate change describe publics as "sleepwalking," "paralyzed," and "in denial," and their behaviours are characterized by "irony" and "irrationality" (McCarthy, 2007, p. 178; Norgaard, 2011a; Szerszynski, 2007; Gismondi & Davidson, 2011). Michael McCarthy, environmental editor for *The Independent*, writes "global warming is being greeted with a yawn by half of the population of Britain" (2007; as cited in Norgaard, 2011a, p. 178). Despite the scientific consensus on the immediate ecological threats of climate change, McCarthy explains the tension that underscores the public's apathetic behaviour: "[Though] activists are [...] hyper-aware of problems and issues [...] Most citizens [...] are not idealists, never mind activists; their main concerns are naturally self-regarding" (2007, ¶1).

Thus, the long-term reality of climate change, regardless of mounting scientific evidence of its consequences, is overridden by the immediacy and urgency of several other public issues. Climate change is consequently caught up in a paradox: though it is understood by some as a contemporary global challenge, it nevertheless has yet to command due public and political attention necessary to halt or reverse its harm. Paradoxically, though, bitumen continues to be extracted, refined, and consumed and consequently emissions persist alongside increasingly frequent and severe extreme weather events As such, this working paper uses the 2016 Fort McMurray wildfire to explore how commentators and editorial boards in select Canadian newspapers articulated the relationship between the 2016 Fort McMurray wildfire and concerns about the tar/oil sands contribution to climate change in articles published between May 2016 and September 1, 2016. Before discussing the methodology and the discourse approach taken, we first present our conceptual framework.

4 Theorizing the Mediated Environment

In an analysis of public perceptions of climate change in a nationally representative British sample, Spence, Poortinga and Pidgeon (2011) found that many individuals consider climate

change to be "psychologically distant" from their own lives. Specifically participants reported believing that climate change affects only people in other countries and future generations. This is supported by "geographic distance," where the news audiences surveyed saw manifestations of climate change affecting distant locales through mediated representations. In light of these types of distance, how does climate change remain salient in the public mind and/or gain political attention? As Carvalho (2010) states, "media(ted) discourses play key roles in social life as they are both conditions of intelligibility of the world and conditions of possibility of action upon it" (p. 172). Agenda setting scholarship is of particular relevance. Early environmental communication studies mapped the flow of environmental concern from the news media and then to the public (Lindahl, 1983; Lowe & Rudig, 1986; Shoenfeld et al., 1979; Strodhoff et al., 1985). Scholars have observed that climate change made its way into the news media agenda for the first time in the summer of 1988 because of the severe heat and drought experienced in North America despite earlier claims and warnings made by the scientific community about the warming of the earth (Ungar, 1992; Mazur & Lee, 1993; as cited in Carvalho, 2010). More recently, Newell (2006) confirms the agenda setting function of the news media in order to address fluctuations in public attention to environmental issues: he explains that the news media both accelerate and direct "shifts of popular sentiment on the environment" (p. 73). Meanwhile, Hansen (1991; 2010a, b) speaks to the difficulties in relying on the agenda setting model or similar 'transmission' models of communication that are predicated on the diffusion of information from the media to news audiences. In several places Hansen (1991; 2000; 2010a; 2010b; 2015) maintains that a social constructivist perspective - as opposed to a transmission view of communication - provides a useful framework for understanding the role of news media in relation to environmental issues. That is, a social problem

cannot be identified and studied independently of what is being 'said' about it. Problems and issues of various kinds only become recognized as such [...] through talk, communication, discourse, which defines or 'constructs' them as problems or issues for public and political concern. (Hansen, 2010a, p. 14)

The first tenet of this model, then, is that social issues do not exist outside of what is being said about them. The second tenet is the importance of understanding the process by which "claims emerge, are publicized, elaborated, and contested" (Hansen, 2010a, p. 14; Hansen, 2015, p. 27). Together, these tenets remind us that it is of particular importance to also consider why "some claims gain prominence and acceptance, while others - which may be equally valid - do not" (Hansen, 2015, p. 17). As such, consideration of who gains access to news media representation is required to discover what themes and meaning are advanced in the news media's treatment of an issue (Trumbo, 1996, p. 270). As Birkland (2010) states, "a group that can create and promote the most effective depiction of an issue has an advantage in the battle over what, if anything, will be done about the problem" (p. 122).

In a mediatized world, mediated discourses are "conditions of possibility of action" upon the world (Carvalho, 2010, p. 172). Discourses on the environment, therefore, naturalize particular notions of humankind's relationship with the natural world, especially when the discourse is ideologically motivated (Milstein, 2009). Dominant notions of nature direct us to communicate about and perceive nature through particular lenses. It is the responsibility of the environmental communication scholar to reveal the power relationships embedded within interested representations of the natural world.

Concerning the mediatization of Canada's oil/tar sands, the economic/environment binary is often reproduced in discourse. Related, extant literature has identified the resource/romantic binary as a particularly dominant lens through which the natural world is depicted (Hansen, 2010a; Hodgins & Thompson, 2011; Remillard, 2011). The resource half of the binary measures nature according to its use-value to humans: we can control, dominate and pillage the natural world in order to attain the resources that offer our lives conveniences. In contrast, the romantic lens views divinity and sublimity in nature that is incomparable to human existence: in light of its grandeur, it is humankind's duty to preserve and protect nature (Remillard, 2011). The economic/environment binary in which oil is presented may be understood by zooming out to the level of our petroculture.

Petroculture & Petro-States

Writing about energy discourse requires understanding and acknowledging the dominance of oil in shaping our society in material ways as well as our values, beliefs, and feelings (Szeman, 2016. p. 9). Restated, understanding oil requires understanding of what oil has enabled. Common narratives we have about the energy source focus on today's material conveniences that are attributable to oil: as Szeman (2013, 2016) points out, cars, highways and other means of transportation, agricultural and food systems, the pervasive availability of petroleum-based plastic products, and our fundamental infrastructure such as roads, bridges, and telecommunication systems implicate the need for the energy source. The use of oil is also entwined with values (or desires), such as individual "autonomy and mobility," that have been widely accepted and presupposed (Szeman, 2016, p. 12). Not to be overlooked are the contributions to cultural progression that flowered since the labour-saving transition from coal to oil. LeMenager (2013) highlights these contributions:

The expansion of the U.S. middle class [...] into a mass culture, [...] the cultivation of the world's greatest education system of public education, and essentially middle-class movements like feminism, antiwar activism, and environmentalism presumed cheap energy. (p. 5)

Though we acknowledge the perceived benefits of the energy source, we often neglect that we live in a society not only oriented by oil but also enveloped in it. LeMenager (2013) calls today's relationship with oil "ultradeep" while Szeman (2016) uses the term *petro-culture* to succinctly underline that because oil intervenes in all area of life, we live in "an oil society through and through" (p. 11). She points out the implications and challenges to living in a petroculture. Exiting the current energy system will require both an infrastructure transition as well as a social and cultural transition. Of course, a major implication related to petroculture is the paradox it contains.

Thinking more broadly, the ideological role of oil is also embedded in petro-capitalism and petro-state. To secure its maintenance and expansion, capitalism presumes access to oil in ever increasing quantities (Carter, 2011). In fact, the *creation* of capitalism is attributed to access to oil supplies, which fostered the conditions necessary to enable the industrial revolution (Boykoff et al., 2009; Carter, 2011; Szeman, 2016). Some of oil's characteristics also allowed for the global expansion of capitalism. For instance, it offers the highest energy return of all sources used for transportation energy. It is also easy and inexpensive to transport and can be used constantly once available in comparison to human labour or biotic energy sources. For these reasons, oil provided a "quantum leap in the speed and reach of human activities" as well as the "enormous growth in labour productivity and social surplus

production" (Alvater, 1998; as cited in Carter, 2011, p. 3). The crucial tension of *petro-capitalism*, however, is the set of challenges that the fossil fuel industry poses: first, the worsening environmental risk and harm born out of extraction and consumption, and second, peaking oil supplies. Despite these threats, fossil fuels continue to dominate. As Carter (2011) notes, as conventional oil sources are depleted, the industry turns to unconventional sources, such as bitumen, or deposits that are "farther north, farther offshore and in ever more fragile landscapes," thereby deepening environmental impacts (p. 6).

In the Canadian context, the federal government has consistently argued that the country's economic future lies in the extraction and export of its oil deposits. As such, Canada may be understood as what is referred to as a "petro-state" (Carter 2011, 2016; Chen & Gunster, 2016, p. 307). Originally developed by Karl (1997), the petro-state concept describes the mutually dependent relationship formed between the state's government and the oil companies renting public land. Each party is reliant on the other to ensure the health of the energy sector with the end goal of securing profits for each party. Because of this, both work to mobilize public consent for the development of the industry. The petro-state's focus on maintaining the industry impedes the state from building a diversified economy and demands that the state must also defend the oil industry: thus, petro-states explain away concerns about environmental harm originating form resource extraction activities in order to protect its revenue source. As a result, industry actors remain powerful, the energy economy is prioritized and regarded as common sense, and there is insufficient environmental regulation (Carter, 2011).

The Politics and Mediatization of Natural Disasters

The Fort McMurray wildfire was a natural disaster; a disaster which unfolded on national and international media and quickly became politicized. As such it is necessary to review literature surrounding the politics, politicisation and mediation of natural disaster. Yet strangely, limited academic attention has examined natural disasters as political occasions. Instead, disaster literature focuses on public response during a disaster and its aftermath as well the public uptake of mediated disaster myths (e.g. Rodriguez & Dynes, 2006; Garfield, 2007). Of late, scholars have taken Hurricane Katrina as a case to examine the strong relationship between political power and messages contained in the mass media about disasters (Klein, 2007; Tierney, Bevc, & Kuligowski, 2006). Because natural disasters can be opportunities or "catalysts" to renew public and policy interests in environmental issues (Ashlin & Ladle, 2007, p. 330), academic scholarship is warranted. To this end, we understand natural disasters according to their social impact: when a community lacks the capacity to recover independently from physical and social damage created from natural hazards (floods, fires, earthquakes, landslides, droughts), the event is understood as a natural disaster (Ashlin & Ladle, 2007).

No different than the construction of social issues in the media (Hansen, 2011), the news media constructs a natural disaster: how it is known, responded to, and politically aligned (Pantti, Wahl-Jorgensen, & Cottle, 2012; von Engelhardt & Jansz, 2015). Spatial and temporal distances make audiences reliant on the details communicated by news outlets about the event, thereby giving the news media "considerable power to shape opinion and to connect people and communities" (Littlefield & Quenette, 2007; as cited in Ewart & McLean, 2014, p. 168).

"Within minutes after a major impact," Olson (2000) writes, "disasters start becoming political" (p. 266). Though few scholars have considered disasters as political occasions, Olson offers several highly relevant insights to fill this gap. Political elites are challenged to not only manage disasters, but also explain them (ibid.). In any disaster, politicizing questions are posed to government officials in the aftermath, one of which is always "what happened?" (ibid.) As "innocuous" as the question seems, the answer to the question "starts the process of defining the event and constructing its meaning," which injects what is otherwise a scientific or technical explanation with politics (ibid.). This use of language and symbols to "construct beliefs about the significance of events" is essentially a "critical element of political manoeuvre" and requires that the political official negotiate the placement of responsibility (Edelman, 1985, p. 10; as cited in Olson, 2000, p. 276). Because voters can evaluate a politician's behaviour post-disaster, constructing the meaning of the disaster, though deeply political, requires sensitivity.

In the aftermath, natural disasters are also politically aligned such that political response to the "exogenous shocks" of a disaster can be used to instate or maintain a political agenda (Olson, 2000, p. 266). Conversely, Pelling and Dill (2005) explain that existing political systems may be put under scrutiny, while other outcomes of political intervention post-disaster can include interventions to "entrench or destabilize current power-holders, change power-sharing relationships within recognized sectors, or to legitimize or de-legitimize new sectors" (p.1). Citing extant literature, Pantti et al. (2012) pull on two different approaches that usefully theorize the strong relationship between political power and mediated disasters in the specific case of Hurricane Katrina: "disaster shocks" (Klein, 2007) and "focusing events" (Tierney, Bevc, & Kuligowski, 2006). While Olson (2000) confirms that disasters are political occasions, Klein (2007) and Tierney et al. (2006) demonstrate that disasters, and the narratives that surround them, can be steered in specific political directions.

Disasters are further politicized through discussions of responsibility, specifically the use of discourse to speak to the responsibilities and capabilities of authorities in a policy context. Stone (1989) observes:

In politics, causal theories are neither right nor wrong, nor are they mutually exclusive. They are ideas about causation [...] The different sides in an issue act as if they're trying to find the 'true' cause, but they are always struggling to influence which idea is selected to guide policy. Political conflicts over causal stories are, therefore, more than empirical claims about sequences of events. They are fights about the possibility of control and the assignment of responsibility. (p. 283; as cited in Olson, 2000, p. 276-277)

By suppressing certain issues through one's discourse, "conflictual items" can be overridden and the preferred political agenda can be maintained during the disaster response period (Olson, 2000, p. 287).

5 Methodology

This paper is based on a critical discourse analysis (CDA) of the "story lines" of 40 opinion and editorial articles which appeared in Canadian newspapers. In this section we outline our approach to CDA along with the selection and coding of articles. In line with Dryzek (1997), we understand discourse as systems of meaning and representation. He elaborates on this rendering of discourse:

Discourses are a shared way of apprehending the world. Embedded in language, it enables those who subscribe to it to interpret bits of information and put them together into coherent stories or accounts. Discourses construct meanings and relationships, helping define common sense and legitimate knowledge. Each discourse rests on assumptions, judgements, and contentions that provide the basic terms for analysis, debates, agreements, and disagreements. [...] [They] both enable and constrain communication. (p. 8)

According to Murphy (2011), this understanding has much to owe to Foucault, whose work is grounded in the assumption that powerful and dominant discourses will reappear as hegemonic and naturalized (p. 220). Indeed, Dryzek (1997) asserts dominant "discourses do not need conscious adherence or articulation" as they are "so ingrained and taken for granted that it would never occur to anyone to question them" (p. 45). However the role of the critical discourse analyst is to recognize such areas of social concern in order to shine a light on existing inequities. Given that this thesis investigates how a sample of opinion discourse articulated the relationship between the 2016 Fort McMurray wildfire and concerns about the tar/oil sands, CDA is an appropriate method of inquiry. Recent studies in the field of media and communication reinforce this. For example, scholars employ CDA to examine the discursive construction of environment-related issues in the media, such as the construction of climate change and the greenhouse effect in Canadian and British press (Carvalho, 2005, 2007; DiFrancesco & Young, 2010; Doulton & Brown, 2009; Young, 2013; Young & Dugas, 2011) as well as media constructions of the Alberta oil and gas industry (Gunster & Saurette, 2014; Takach, 2013; Way, 2011).

In line with the above definition of discourse, discourse analyses are caught up with examining how discourses permeate texts and the associated "assumptions, judgements, and contentions" contained therein (Dryzek, 1997, p. 8). In Murphy's (2011) terms, CDA is "primarily a way to seek out and identify how political power is packaged in cultural story lines" (p. 220). To this end, analysis is primarily concerned with uncovering the underlying assumptions that such discourses are predicated on and the motives of the social actors that advance them (ibid.).

Hajer (2006) reminds us "language profoundly shapes our view of the world and reality, instead of merely being a neutral medium mirroring it" (p. 66). The storyline concept is featured in some examples of environmental communication research to date (Chen & Gunster, 2016; Gunster & Saurette, 2014; McComas & Shanahan, 1999). However Hajer (1995, 2006) privileges the concept in his contributions to the field as it plays a central role in his approach to discourse analysis. Specifically, Hajer (1995) understands public debates as struggles between actors, or groups of actors, to gain "discursive hegemony" and "secure support for their [respective] definition of reality" (p. 59). Part of this involves positioning others in a specific way, and in Gunster and Saurette's (2014) words, the most direct way to do so is to "tell stories about them" (p. 336). Storylines function as mental shortcuts: they summarize one side of a complex debate and offer listeners with an argument and a worldview to adopt. Thus, the storyline holds multiple functions: it provides a version of social reality or of a phenomenon, it is a form of argumentation that can be imposed on others, and it insulates its adherents from incongruous facts and events (Gunster & Saurette, 2014). Storylines can also cast key actors in archetypal roles, like villains and heroes, to further direct cognitive processing to a certain end. By validating certain actors and phenomena while criticizing others according to these pre-existing patterns, storylines are

embedded with power relationships and "suggest unity in the [...] variety of separate discursive component parts of a problem" (Hajer, 1995, p. 56).

Concerning the application of CDA, we apply Fairclough's (1989) three-dimensional model of discourse analysis which aims to understand how discourse plays a role in maintaining, reproducing, or challenging surrounding social contexts. As outlined in Fairclough's model, every instance of language use is a communicative event that consists of three dimensions: (1) it is a *text* (speech, writing, visual image, or a combination of these); (2) it is a *discursive practice* that involves the production and consumption of texts; and (3) it is a *social practice*. Given that all three elements need to be included in a discourse analysis of a communicative event, the analysis will focus on the following corresponding features: (1) the linguistic features of the text; (2) processes related to production and consumption; (3) the surrounding social context that the communicative event exists within (Jorgenson & Phillips, 2002, p. 68).

Data Sample and Collection

The dataset was obtained from the ProQuest and Factiva databases with a search for editorial, opinion and commentaries on the Fort McMurray published between May 1, 2016 and September 1, 2016. The time period was selected to reflect the date the "The Beast" fire was identified spanning to when the 2016 forest fire season ended (September 1, 2016)³. The specific search looked for opinion discourses that mention "Fort McMurray" AND "fire" OR "wildfire" AND "Alberta" (n=52) in Canada's two predominant national publications, the *National Post* and *The Globe and Mail* and two regional publications, the *Calgary Herald* and the *Edmonton Journal*. Though the fire was contained in one regional area of Alberta, the events attracted national attention. Thus, in selecting this group of newspapers, the objective was to ensure items were sourced from newspapers that served national and regional audiences.⁴ Common to three of these newspapers is the Postmedia Network brand: the *National Post* as well as the two regional newspapers are part of the newspaper chain, which owns a majority of the regional newspapers across Western Canada (Gusnter & Saurette, 2014). Before coding articles were read to remove duplicates and false positives. Remaining articles (N=40). Table 1 provides a breakdown of the corpus according to publication.

Table 1: Type of Article by Publication

Publication	Editorials	Commentaries	Total	
The Globe and Mail	3	10	13	
National Post	1	4	5	
Calgary Herald	4	9	13	
Edmonton Journal	7	2	9	
Total	15	25	40	

³ Some of the major developments in the news cycle of the fire include the return of evacuees to the community in June 2016, the date the fire was considered under control in July 2016, and flooding in Fort McMurray forcing further evacuations in August 2016.

⁴ I considered including a local publication in this corpus - *Fort McMurray Today* - to gather an exclusively localized account. However, the databases returned no opinion discourse items from that publication.

Articles were coded in Atlas.ti following Flick's (1998) theoretically driven thematic coding (p. 318). In instances where codes grounded in established literature were not applicable, I began open coding (Hindman, 2003, p. 672). After an initial round of coding, broad themes were refined (for example 'environment' and 'economy') were broken down into several specific codes and a second reading and coding was undertaken. During this second review four main aspects were focussed on in relation to the Fort McMurray fire: (1) what the cause of the fire was attributed to; (2) discussion of economic indicators related to the tar/oil sands; (3) discussion of climate change; and (4) a focus on the well-being of Fort McMurray residents. Table 2 shows these categories, the codes that comprise each one respectively, and the frequency of each code. After this coding process, the content of each dataset item was analyzed in line with the three dimensions of Fairclough's (1989) CDA model.

Table 2: Frequency of codes that comprise the four main themes addressed in dataset

Catagory	Codes	Frequency of codes				
Category	Codes	GM	NP	EJ	CH	Total
Attributing the	Karmic retribution	3	3	0	3	9
cause of the fire	Forest fire patterns	2	1	1	0	4
	Natural variability of the climate	1	1	1	0	3
Climate change	Broad environmental impacts of	4	0	1	1	6
	changing climate Denial, dismissal, skepticism	1	0	0	1	2
	Scientific evidence linked to climate	1	1	1	1	4
	change	'	'	'	'	4
	Politics of climate change	0	1	0	0	1
Economy	Boom and bust economy	7	1	0	2	10
	General reference to Fort McMurray's	8	0	0	1	9
	contributions to the economy	4	4	0	2	7
	Normalizing oil	4	1	0	2	7
	Discrediting critiques of fossil fuels	2	4	0	0	6
	Job creation	3	1	0	3	7
	Energy security	4	0	0	1	5
	Wealth creation	3	0	1	0	4
	Ethical oil	2	0	0	0	2
Regional focus	Compassion from Canadians for Fort McMurray	7	3	2	3	15
	Humanizing effect of the fire	3	4	2	5	14
	Albertan frontier	6	1	3	3	13
	National impacts of the fire	5	1	0	2	8
	Alberta as mediated space	3	2	0	3	8
	Scrutiny placed on region	1	2	0	0	3

6 Environmental Villains - Alberta's Oil Industry Under Siege

The results of our CDA reaffirm the status of Alberta's oil sands as a heavily polarized subject with contending ideologies shaping the ongoing public debate concerning economic growth and environmental trauma in Canada. In this section we discuss the results of our discourse analysis with a specific focus on how environmental advocacy in relation to the oil industry in and around Fort McMurray is constructed in the dataset. As will be discussed in greater detail, discourse advancing environmental advocacy was all but absent from items in the dataset (n=1, 2.5%). Instead environmental interests were constructed as a force of

subversion by industry proponents: the dataset suggests that environmental advocates, in their criticism of the sands and suggestion of the karmic nature of the fire, were intent on subverting and destroying the industry, and by extension, the livelihoods of its employees and surrounding residents. Proponents construct advocates as antagonistic to the ideals housed in the oil industry, namely those of economic opportunity, individual determination, and dominance over the landscape. The environmental movement is consequently cast as the villain in this ongoing debate between supporters and opponents, especially in news and social media commentary that transpired at the outset of the 2016 Fort McMurray fire.

In what follows, we being by expanding on a specific social media comment that was widely interpreted as an act of subversion by oil sands proponents. To diffuse this opposition and bolster the image of the industry, authors in the dataset used these storylines: (1) ordinary people, (2) the natural variability of the climate, and (3) ethical oil. The remainder of this section considers how authors used these storylines to respond to environmental critique in the ongoing debate between pro- and anti-carbon-based energy.

Framing the Wildfire in Moral Terms

As the country's major source of oil extraction, some journalists described the Fort McMurray wildfire as a "black irony": "an oil capital consumed by the climate change it is causing" (J. Brown, 2016; Stenson, 2016). Social media commentary made similar connections between the changing climate and the wildfire with a sizeable amount of attention going to a public servant in the town of Taber, Alberta and former NDP candidate, Tom Moffatt, for describing the fire as "karmic" on his twitter account⁵ (Tom Moffatt, 2016). Moffatt received backlash for openly suggesting that the Fort McMurray fire was a force of retribution on the community given that Fort McMurray is home to the carbon intensive bitumen extraction process. Moffatt's comment orients a portion of this dataset, with authors directly referencing and denouncing his subversive opinion (n=9, 22.5%). No dataset items supported or defended his view.

The sharp attention focused on Moffatt's single criticism is revealing: dataset authors exaggerated the impact of his discourse in order to frame environmental criticism as unfair and immoral. Specifically, authors leveraged Moffatt's dissenting opinion to argue that the industry was under siege by environmentalists in its time of need. Instead of silencing or ignoring the discourse, dataset authors highlighted the criticism in order to lend strength to the ideology that supports the tar/oil sands. This allowed proponents to "pre-determine how such criticism will be heard and understood" (Gunster & Saurette, 2014, p. 353). With this context in mind, the next sections focus on the three above-mentioned storylines to uncover how select items in the dataset diffused the perceived threat of environmentalists. As we will see, by highlighting the political salience of contending groups, and by casting advocates in a specific role within the storyline, the moral conclusion favours the dominant interest of the tar/oil sands.

⁵ In its entirety, Tom Moffatt's tweet reads: "Karmic #climatechange burns CDN oilsands city #uspoli #FeelTheBern #ykl #yyc #yvr #Toronto #cdnpoli" (Tom Moffatt, 2016).

Ordinary People

The first storyline is concerned with partisan intervention in the conversation about the oil sands (n=1, 2.5%). As previously reviewed in the literature, studies have documented how political affiliation is closely tied to political response to global climate change: with policymakers on the Left willing to identify the negative environmental consequences of industrial capitalism and policymakers on the Right working to dismiss and deny such claims in order to protect the fossil fuel industry's economic interests (McCright & Dunlap, 2011). This storyline relies on privileging the political Right ideology in order to smear environmental arguments, and leverage critical comments in order to legitimize petro-capitalist activities. As addressed below, this storyline casts opposition to the oil sands as an aggressive force that is interfering with petro-capitalist priorities - priorities that are essential to supporting the interests and values of ordinary Canadian families. To unpack this storyline, we will rely on a *National Post* commentary in the dataset by Philip Cross (2016) that strongly advances a partisan response to Moffatt's criticism. Of note are Cross's professional affiliations: he is employed by The Macdonald-Laurier Institute - a right-leaning public policy think tank.

Cross's (2016) commentary emphasizes divergent values between opponents and proponents of Alberta's oil industry, which he associates with the political Left and Right, respectively. Using Moffatt's comment to launch into a discussion on the petroleum industry, Cross argues that opposition to the sands is opposition to "timeless Conservative values" held by "ordinary people" (p. FP9). Examining his linguistic choices confirms how he perceives Conservative ideology as unequivocally superior to encroaching liberal principles. This is plainly visible, for example, with the assortment of identifiers he inconsistently uses when referring to individuals or groups that fall on the Left side of the spectrum, including "progressives," "collectivists," "Leapers," "leftists," "environmentalists," and "elitists" (p. FP9). In his application, these terms are menacing in contrast to his consistent use of the term "ordinary people" when referring to members of the political Right. Using a malleable term like "ordinary people" is strategic: it casts a wide net that allows Cross to appeal to a huge swathe of the population - namely the average Canadian working-class family. As mentioned, Cross only defines "ordinary people" according to Conservative values, which he identifies as individualism and market liberalism. He lists no other qualities that determine membership to this blanket term.

Cross's (2016) aim is to use Moffatt as an exemplar to demonstrate the need to resist liberal ideology. Liberal values pose a threat to how Canadians "organize their lives," especially around fossil fuel use (p. FP9). To do this, he frames environmental concern as an "elitist" issue. He explains how moving away from oil extraction and consumption would alter material and social relations:

[Liberal elitists] distrust ordinary people to ever make the politically correct decision to disavow materialism, sell everything, move into huts and live off organic vegetables grown in their backyards, all the while taking mass transit to the local Employment Insurance office, given the mass disemployment that would occur in a world without cheap fossil fuels. (Cross, 2016, p. FP9)

The above passage shows Cross's effort to construct a world without fossil fuels as not only undesirable but also to be feared. Cross also heightens the storyline that poses environmentalists as villains by employing language associated with warfare, thereby demonstrating how this group is intervening in Alberta's (and Canada's) petro-capital interests: "Since

capitalism did not *self-destruct*, activists [...] shifted to exploiting environmentalism to achieve their goal of *torpedoing* our economic system, this time by *choking off* access to cheap energy sources" (p. FP9, emphasis added).

Casting environmentalists as radical was similarly seen in the discourse of other dataset items. Authors used charged language to refer to members of the environmental movement, using terms like "eco-propagandist," "eco-evangelist," and "environmental extremist" (Cosh, 2016; Gerson, 2016; Manning, 2016). The use of such terms implies environmental advocates are intolerant and insurgent, perhaps even militaristic. These exaggerated terms strongly contribute to constructing advocates as a force waging war on innocent "ordinary people" (Cross, 2016, p. FP9). Heightening the binary between opponents and proponents through this use of language, though, is an effort to advance simplified and linear judgements about antagonistic groups.

Also of note in Cross's (2016) discourse is his concentration on ideology. Similar to the reference to "propagandist" and "evangelist" Cross uses "ideology" as a dirty word. This is clear when he anchors the "elite environmental movement" to an "ideology" while he grants "values" to "ordinary people" (p. FP9). This application of ideology carries undercurrents of social power, with the implication that an elite group is working to impose its influence on the masses. He persists, arguing "members of the environmental movement regularly put ideology before the well-being of ordinary people" (p. FP9). He takes specific aim at "Leapers," supporters of author Naomi Klein's *The Leap Manifesto*. He sharpens the conflict across partisan lines further in his discussion about this document when he claims that Leapers view ordinary people with "contempt," "distrust," and "disdain" (p. FP9). Despite how Cross strategically contrasts ideology and values, though, his argument in favour of timeless conservatism is no less ideologically motivated. While his commentary works to slander liberal environmental advocates, he is simultaneously building a case for and promoting a conservative, pro-fossil fuel ideology that caters to a hard-working contingent of Canadians working to protect and maintain certain moral standards.

In summary, injecting the conversation around the oil sands with partisan values dramatizes the debate. Moffatt's "karmic" comment threatened Cross's (2016) ideological principles and existing political and economic orientations. Accordingly, he did not hesitate to discredit the reputation of opposing political parties. His interpretation of the debate attempts to elide critical thinking in readers by embodying a certain political and ideological position of his own. This reputation of partisan bias spills over into the next section of this chapter where I examine another storyline present in the dataset - the natural variability of the climate - where political stripes influence the representation of climate science.

Natural Variability of the Climate

Wildfires are an example of extreme weather phenomena that occur naturally. However climate change is now a factor influencing the frequency and magnitude of such events.

⁶ Released during the 2015 federal election campaign, the *Leap Manifesto* contains a series of proposals related to Canada's energy future. Chief among these is a shift away from fossil fuel extraction and consumption entirely by 2050 and a full transition to renewable energy sources. Other proposals include an end to all pipeline projects, the collective ownership and control of energy sources, the expansion of low-carbon jobs, and advocacy for Indigenous land and treaty rights ("The Leap Manifesto," n.d.). The Manifesto is not affiliated with the Liberal Party of Canada.

This section is focused on how select authors conflated weather with climate change⁷ in an effort to explain (away) the conditions that fostered the flames. Part of this storyline is the claim that it is not possible to attribute the cause of an extreme weather event to climate change. Indeed, the claim that the wildfire is attributable to natural variations in weather arose in the dataset (n=3, 7.5%) despite leading research in attribution science being completed at the Environmental Change Institute at the University of Oxford that is able to determine if climate change did play a role in a specific extreme weather event (Sneed, 2017). In this section we review examples from the dataset that explained the conditions leading up to the fire as natural fluctuations of the environment outside of human control, or in other words, as weather. This storyline is part of a dual-sided conversation - first, the view that acknowledges the role of human activities in climate change and second, the view that dismisses and denies such connections in favour of explaining weather extremes through the natural variability and fluctuation of climatic factors. This storyline has much to do with attribution - how the cause of the wildfire was discussed in dataset discourse. As Olson (2000) tells us, politicians are forced to construct meaning around events and answer the question: "what happened?" In light of this, it is clear how partisan bias can influence how the present storyline is advanced in the dataset, not unlike the storyline covered in the previous section.

Some authors make a cause for the natural variability of the climate by conflating weather and climate (n=3, 7.5%). In order to deflect responsibility for the wildfire, Morgan (2016) assumes the role of primary definer and reconstructs climate science data. As the retired President and CEO of EnCana Corporation, Morgan's stance is aligned with his professional interests. His commentary piece works to deny claims of anthropogenic climate change in relation to the cause of the wildfire by asserting that the weather conditions leading up to the fire are within historical limits. Writing for The Globe and Mail, he makes his position plain in the headline: 'Tying an extreme weather event to atmospheric carbon dioxide simply isn't credible.' He supports his position by listing historical examples of extreme weather patterns, suggesting that such examples serve as precedent to explain the Fort McMurray fire as a routine happening. For example, Morgan compares the Fort McMurray fire to a period of severe drought in the 1930s that caused dust storms in Canada's prairies. He continues to build a case for the natural variability of the climate by listing other periods of abnormal heating and cooling in the 20th century. For example, he identifies the 1930s as the "hottest decade on record in Canada" and goes on to explain that the period was followed by forty years of "cooling" (p. B8). He even uses weather patterns to deny the link between carbon emissions and the warming of the Earth's atmosphere. Morgan writes that "scientists struggle to explain" how a period of atmospheric cooling occurred in parallel with a rapid increase of carbon emissions (p. B8). The claims Morgan uses to support his argument are not verifiable - he includes no references to historic weather data or any peerreviewed studies that corroborate the connections he makes. Moreover, in consideration of the complexity of the scientific subject he is trying to discuss, his argument is heavily simplified.

⁷ NASA (2005) offers this distinction between "weather" and "climate": "The difference between weather and climate is a measure of time. Weather is what conditions of the atmosphere are over a short period of time, and climate is how the atmosphere 'behaves' over relatively long periods of time" (n.p.).

Morgan's (2016) descriptions of historic climate and weather patterns inject climate science with doubt, which carries repercussions: extreme weather events are constructed as usual, expected, and temporary. By making reference to the Dust Bowl to defend his position, he implies that extreme weather events recur naturally, thereby diminishing the discourse of the scientific community and environmental advocacy groups that demand action. Morgan holds a vested interest in the oil industry and so his professional status lends authority to his commentary. As such, his reconstruction of the science not only evidence put forward by the Intergovernmental Panel on Climate Change (IPCC) on the relationship between climate change and extreme weather events, but also contributes to discourse of doubt and denial attached to climate science. This point may be underscored by reviewing a further example that uses the same storyline.

Gerson's (2016) piece for the *National Post* similarly conflates weather events with the climate variability:

[Alberta] seems to revel in extreme weather: tornadoes, blizzards, floods and droughts. Sometimes in the same month. So it is entirely possible - likely, even - that the current hot, dry spring from whence this inferno began is well within long-term historical norms. (n.p.)

Ultimately her piece is one of very mixed signals: she acknowledges "for argument's sake" that climate change could be a contributing factor to the cause of the fire, but she diminishes the environmentally harmful consequences of bitumen extraction. In fact, her discourse undermines any urgency or severity attached to climate change when she claims that the introduction of "drastic climate change measures" in Canada would have an "utterly nominal" effect on a global scale since "the [Alberta] oil sands account for a fraction of a fraction of global emissions" (n.p.). First, this diminishes scientific evidence that speaks to the range of impacts emissions cause. Specifically, she diminishes scientific evidence because she overlooks the record-breaking temperatures in the region in the days leading up to the identification of the wildfire. These temperatures were four to five degrees greater than the previous highest temperature records held in the region and were coupled with a low snow pack and an early snowmelt (J. Brown, 2016). By labeling the wildfire as weather, she is failing to acknowledge that ultimately, our Earth is warming, and is thus creating fireprone circumstances. Second, this promotes passivity in responding to climate change. By downplaying the effects of climate change, inactivity on an individual and organizational level is justified. Though Gerson refers to climate change as a collective problem and uses the pronoun "we" in order to transfer the responsibility onto all Canadians, it is unclear what is expected of readers, Canadians, or policy makers in the project of addressing climate change.

This storyline reveals how ideology can influence the interpretation and reconstruction of scientific facts in opinion journalism. Despite definitive evidence of the impact of anthropogenic carbon emissions, this storyline amplifies the denialist viewpoint by challenging scientific authority. As a consequence, the sense that climate change is non-problematic is fostered. As mentioned above, emerging attribution science can link specific extreme weather events to climate change, thereby nullifying any individual's claim that the conditions are antecedent. What requires the most attention in this storyline is the complacency this line of reasoning breeds. This bled into the subject of wildland fires in the dataset, where, for example, discourse affirmed that Canadians "can learn to live with the threat of forest fires" (Flannigan & Wotton, 2016). Though fires do occur naturally, claims that the population can persist alongside the rising number of extreme natural disasters is not

something that should be unquestionably accepted as truth. The next section considers the storyline that justifies the continued development of the tar/oil sands according to the line of reasoning that Canada's bitumen is sourced under "ethical" conditions in comparison to other petro-states.

Ethical Oil

According to the ethical oil storyline, Canadian tar/oil sands not only produce economic assets, but are also a morally superior source of oil. This storyline concludes that refined bitumen sourced from Alberta can displace "conflict" oil from Venezuelan, Middle Eastern or Russian sources (Levant, 2010). This line of reasoning is credited to Canadian author Ezra Levant, who develops this argument in his book *Ethical Oil: The Case for Canada's Oil Sands* (2010). Levant's argument is based in a syllogism: Canada has an abundance of fossil fuels; Canada comes out ahead ethically on matters of human rights, labour safety, and political freedom in comparison to other petro-states; therefore Canadian sourced oil is the most ethical choice to fill the world's need for the resource. He uses this argument to defend industry practices and also rebut environmental critique. The following passage from Levant's monograph sets up his logic:

Oil is an international commodity; if an oil-thirsty country such as China or the United States can't buy oil from one country, they'll buy it from another. So even if the oil sands were to completely shut down, the world wouldn't use one barrel less. [...] The question is not whether we should use oil sands oil instead of some perfect fantasy fuel that hasn't been invented yet. Until that miracle fuel is invented, the question is whether we should use oil from the [Canadian] oil sands or oil from the other places in the world that pump it. (Levant, 2010, p. 6-7)

In this section we turn to examples from the dataset (n=2, 5%) that employ this "either/or" logic to defend Alberta's oil industry in the context of petro-capitalism (Szeman, 2013).

The author in the dataset that relied heavily on this storyline was Morgan (2016), whose commentary piece was also the focus in the previous section regarding the natural variability of the climate. Recall that Morgan's stance is aligned with his professional interests. As such, by using the ethical oil storyline, Morgan works to bolster the reputation of the sands against criticism. In fact, his discourse closely resembles Levant's passage quoted above. He argues that oil from the Middle East and Northern Africa is instilled with poor values that are undesirable compared to Canada's product. Petro-states in these regions have "appalling human-rights records" and support "extremist groups that shatter the lives of people throughout [those] regions and foment terror across the West" (p. B8). He validates continued activities in Canada's tar/oil sands by presenting readers with an undesirable alternative: oil sourced from countries with non-Canadian values. Moreover, he notes that the global consumption of oil will not decline nor halt if Canada immediately ended its extraction activities. As we saw during the Fort McMurray fire, temporarily closed facilities "took about one million barrels of oil a day out of production. But [...] countries including Saudi Arabia, Nigeria, Angola and Ivory Coast quickly filled the void" (p. B8). Morgan even counters claims that bitumen is an unethical source of fuel because of its overly high environmental impacts by claiming that the Canadian sands only contribute "a minuscule one-tenth of a per cent" to global emissions (p. B8). By claiming that the tar/oil sands make minimal contributions to global emissions, Morgan's discourse omits other environmental impacts the industry has on the surrounding ecosystem. For example, there are serious concerns about

the massive amounts of freshwater the industry drains from the Mackenzie River Basin. Struzik (2013) describes the unparalleled use of water in order to maintain extraction activities:

In 2011, companies mining the tar sands siphoned approximately 370 million cubic metres of water from the Athabasca River alone, which was heated or converted into steam to separate the viscous oil, or bitumen, from sand formations. That quantity exceeds the amount of water that the city of Toronto, with a population of 2.8 million people, uses annually. (¶2)

Further, there is concern surrounding the water that is diverted after use to tailings ponds and the impact of contaminants contained in the water on groundwater supplies (Struzik, 2013). Producing two and half million barrels per day (Government of Alberta, 2016), the environmental impacts of the Alberta tar/oil sands certainly cannot be cast as negligible. Though this storyline is a clear attempt to bolster Canadian bitumen against critique, this storyline is essentially arguing that environmental arguments are insignificant because of its "ethical" stamp of approval. This storyline, then, places priorities in hierarchical order, with threats to the environment falling to the bottom of the list.

With Morgan's professional interests in mind, we are made aware of the force undergirding his persistence in deflecting and assailing opposition to the sands: there is a substantial amount of revenue to be made in the tar/oil sands and accordingly, those economic interests must be preserved by making Canadians more comfortable with the contentious subject. However by prioritizing economics above the environmental harm and damage, this line of reasoning encourages readers to accept that our petro-capitalist society cannot be altered or challenged. As Szeman (2013) notes, a main difficulty is that the argument makes clear that the only alternative to ethical Canadian oil is "something much worse": "one can reject both in favour of a possibility that exceeds and escapes the necessity of the given in favour of some third term yet to be named" (p. 159).

A powerful storyline shields its adherents from information that challenges the worldview captured in the storyline (Gunster & Saurette, 2014). Accordingly, the ethical oil storyline is crucial to protecting and justifying Canada's petro-state. There are implications, though, in placing a moralizing label on the resource. The frame compares the values embedded in Canada's extractive practices to international competitors while failing to consider Canada's Indigenous populations, whose traditional territories bear the risk of continued oil sands development. Moreover, this line of argumentation fails to consider the disproportionate amounts of profit flowing to oil companies while vulnerable populations, which possess comparatively low carbon footprints, endure ecological calamities. Acknowledging this injustice, it is undeniable that the "ethical" label does not, in fact, fit our dig and burn economy. As Szeman (2013) points out, this frame is a strategy to influence how people within and beyond Canadian borders know about oil. With or without the "ethical" label, however, the asymmetric effects of oil remain.

7 Conclusion

Using Moffatt's dissenting opinion of the link between the tar/oil sands and climate change as a springboard, the three storylines discussed in this paper - ordinary people, the conflation of weather and climate, and ethical oil - craft a narrative that legitimizes the continuation of the tar/oil sands development. Significantly, all three storylines feature a political slant. While Cross's (2016) piece lists its political persuasion explicitly by drawing battle

lines between conservative and liberal ideologies, the arguments that conflate weather and climate and that support the ethical oil line of reasoning also have Right-leaning roots. The argument that conflates weather and climate to diminish the urgency of climate science, for example, is associated with the organized climate denial industry, which is fronted by conservative organizations. Climate sceptics and denialists continue to reproduce this line of reasoning where cold weather, in light of expected warming, is trumpeted as clear evidence that climate change is a hoax (see Gavin, Leonard-Milsom, & Montgomery, 2011). Trumpeting bitumen as ethical oil is similarly grounded in ideological motivation: namely, the storyline defends the resource in order to promote the petro-state and overlooks the environmental impacts generated by the tar/oil sands. As Gunster and Saurette (2014) argue, a powerful storyline lies in its capacity to "allow us to close our eyes and our ears to what we do not want to see or hear or know or feel" (p. 352). As such, the storylines uncovered presently are an effort to explain away critique of the sands. This is reinforced by the absence of discourse favouring anti-carbon based energy across all newspapers surveyed. Working in tandem with the storylines discussed in this chapter, the next chapter defends the oil sands by framing it as an economic story.

This paper has been driven by an interest in how select editorial boards and commentators articulated the relationship between the 2016 Fort McMurray wildfire and concerns about the tar/oil sands contribution to climate change. Our results show an unwillingness to connect the disaster of the Fort McMurray wildfire to the wider phenomenon of climate change. Instead, representation aligned with political positions whereby authors advanced storylines using an "us" versus "them" logic, with conservative members suggesting that a problem does not lie with bitumen extraction, but with the combatant and subversive liberal environmentalists. This suggests is a hegemonic conceptualization of bitumen whereby a dominant narrative exists which seeks to protect the interests of the tar/oil sands industry by imparting legitimacy onto the resource and thus reinforcing Alberta's status as a petrostate. Aside from assessing tar/oil sands opponents as ideologically motivated, scant regard was paid to environmental critique of the industry. Yet our paper has only examined discourse pertaining to a single event and thus does not offer a comprehensive assessment of news media portrayals of bitumen or resource development broadly. With the series of wildfires that swept through western Canada and United States in 2016 and 2017, an investigation into what mediated knowledge(s) were constructed, upheld, and silenced over the course of these events is warranted.

Szeman (2016) uses the "deepening" concept too in his work on alternate energy futures by pointing out how our social, economic, and political practices are extensively embedded in oil (p. 18). Because we are suspended deeply in petroculture, it can be difficult to imagine an alternative energy future. This is especially true when a taboo is placed on speaking about climate change in the context of a wildfire hastened by it. Indeed, the attempt to link the Fort McMurray fire to climate change was swiftly swatted down not only by our Prime Minister but also, as seen, by the editorial boards and commentators holding the pen on the opinion items under examination in this thesis. Despite burgeoning research on the science of attribution (Sneed, 2017), the claim that it is impossible to link any single event to climate change was observed in the dataset (n=6, 15%). Alongside this claim, the experiences of the evacuees figured prominently in the dataset with the belief that evacuees received undeserved condemnation during a time of hardship appearing in the dataset (n=6, 15%).

Early in our paper we touched on the politicization of disasters, where focusing events direct attention to an issue that may have held a dormant standing on the public agenda, creating a sudden spike of intense interest. In turn, windows of opportunity emerge to discuss and possibly embrace policy solutions (Olson, 2000; Tierney et al., 2006). To echo Elizabeth May (2016), if we cannot talk about climate change in the midst of a visible and proximate disaster accelerated by climate change, then when can we? Readjusting the dominant focus back to those afflicted by the wildfire is certainly the moral thing to do. With the reality of climate change deepening around us, though, we argue that there is a moral and ethical obligation to advance discourse that expresses compassion for disaster victims while *also* entering into discussions on climate change mitigation. With research indicating that the reality of climate change is worsening at an alarming rate (Stoker et al., 2013), there is a case to be made that the public should be kept apprised of the extreme weather-climate change connection. As Fairclough (1992) argues, social change can occur when hegemonic power encounters resistance. As such, the dominant role of the tar/oil sands in northern Alberta is emblematic of the dire need to discuss our environmental crisis.

8 References

- Adkin, L. E. (2016). Ecology and Governance in a First-World Petro-State. In L.E. Adkin (Ed.), *First World Petro-Politics: The Political Ecology and Governance of Alberta* (pp. 3-51). Toronto: University of Toronto Press.
- Adkin, L. E. & Miller, B. (2016). Alberta, Fossil Capitalism, and the Political Ecology of
- Change. In L.E. Adkin (Ed.), First World Petro-Politics: The Political Ecology and
- Governance of Alberta (pp. 527-560). Toronto: University of Toronto Press.
- Adkin, L. E. & Stares, B. J. (2016). Turning Up the Heat: Hegemonic Politics in a First World
- Petro-State. In L.E. Adkin (Ed.), First World Petro-Politics: The Political Ecology and
- Governance of Alberta (pp. 190-239). Toronto: University of Toronto Press.
- Altvater, E. (2006). The social and natural environment of fossil capitalism. *Socialist Register*, 46, 37-59.
- Anderson, A. (2009). Media, politics, and climate change: towards a new research agenda. *Sociology Compass*, 3(2), 166-182.
- Anderson, A., & Marhadour, A. (2007). Slick PR? The media politics of the Prestige oil spill. *Science Communication*, 29(1), 96-115.
- Antilla, L. (2005). Climate of scepticism: US newspaper coverage of the science of climate change. *Global environmental change*, 15(4), 338-352.
- Ashlin, A., & Ladle, R. J. (2007). 'Natural disasters' and newspapers: Post-tsunami environmental discourse. *Environmental Hazards*, 7(4), 330-341.
- Bailey, I. (2016, May 06). Fort McMurray underscores value of natural resources to Canada's economy: Clark. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/news/politics/fort-mac-losses-underscore-value-of-resources-to-canadian-economy-clark/article29929053/
- Beaumont, H. (2017, Sep 12). Wildfires are raging across western North America and climate change is contributing. *Vice*. Retrieved from https://news.vice.com/en_ca/article/9kdz7p/wildfires-are-raging-across-western-north-america-and-climate-change-is-contributing
- Beine, M., Bos, C. S., & Coulombe, S. (2012). Does the Canadian economy suffer from Dutch disease? *Resource and Energy Economics*, 34(4), 468-492.
- Bell, A., & Garrett, P. (Eds.). (1998). Approaches to media discourse. Wiley-Blackwell.
- Bennett, T. (1982). Theories of the media, theories of society. In T. Bennett, J. Curran, M. Gurevitch, & J. Woollacott (Eds.), *Culture*, *society and the media*, 30-55. London: Methuen & Co. Ltd.
- Birkland, T. A. (2007). Agenda setting in public policy. In F. Fischer & G. Miller (Eds.), Handbook of public policy analysis: Theory, politics, and methods (pp. 63-78). Boca Raton: CRC Press.

- BlakeSiefken (2016, May 04). I'm glad #FortMacFire is happening in the province most responsible for the climate change that caused the fire in the first place. Retrieved from http://www.huffingtonpost.ca/2016/05/05/fort-mcmurray-fire_n_9851942.html
- Blumer, H. (1971). Social problems as collective behavior. Social problems, 18(3), 298-306.
- Boykoff, M.T. (2007). Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006. *Area*, 39(4), 470-481.
- Boykoff, M. T. (2008). The cultural politics of climate change discourse in UK tabloids. *Political geography*, 27(5), 549-569.
- Boykoff, M. T. (2013). Public enemy no. 1? Understanding media representations of outlier views on climate change. *American Behavioral Scientist*, 57(6), 796-817.
- Boykoff, M.T., & Boykoff, J.M. (2004). Balance as bias: global warming and the US prestige press. *Global Environmental Change*, 14(2), 125-136.
- Boykoff, M., Bumpus, A., Liverman, D., & Randalls, S. (2009). Theorizing the Carbon Economy: Introduction to the Special Issue. *Environment and Planning A*, 41(10), 2299-2304.
- Brown, D. (2016, May 04). The Perfect Wildfire: Why Fort McMurray Is Burning. *Vice*. Retrieved from https://www.vice.com/en_ca/article/bnpwn3/the-perfect-wildfire-why-fort-mcmurray-is-burning
- Brown, J. (2016, May 06). Fort McMurray fire: How soon is too soon to talk about climate change? (Radio news program) *The 180*. Toronto: CBC. Retrieved from <a href="http://www.cbc.ca/radio/the180/vancouver-recovers-from-jane-jacobs-women-on-banknotes-and-the-politics-of-climate-change-and-wildfires-1.3570513/fort-mcmurray-fire-how-soon-is-too-soon-to-talk-about-climate-change-1.3570851
- Carter, A. (2011). Environmental Policy In A Petro-State: The Resource Curse And Political Ecology In Canada's Oil Frontier (Doctoral Dissertation). Retrieved from Cornell University Database.
- Carter, A. (2016). The Petro-Politics of Environmental Regulation in the Tar Sands. In L. E. Adkin (Ed.), First world petro-politics: The political ecology and governance of Alberta (pp. 152-189). Toronto: University of Toronto Press.
- Carvalho, A. (2002). Climate in the news: the British press and the discursive construction of the greenhouse effect (Doctoral Dissertation). Retrieved from University College of London Databse.
- Carvalho, A. (2005). Representing the politics of the greenhouse effect. *Critical Discourse Studies*, 2(1), 1-29.
- Carvalho, A. (2007). Ideological cultures and media discourses on scientific knowledge: re-reading news on climate change. *Public Understanding of Science*, 16(2), 223-243.
- CBC News, (2016, May 04). Justin Trudeau speaks to reporters after caucus meeting. Retrieved from https://www.youtube.com/watch?v=QUaY-wpxKB8
- Chen, S., & Gunster, S. (2016). "Ethereal Carbon": legitimizing liquefied natural gas in British Columbia. *Environmental Communication*, 10(3), 305-321.
- Cohen, B. (1963). The Press and Foreign Policy. New Jersey: Princeton University Press.
- Cornellussen, S. (2016, Mar 23). Science and journalism revisit the attribution of extreme weather to climate change. *Physics Today*. Retrieved from http://physicstoday.scitation.org/do/10.1063/PT.5.8170/full/
- Cottle, S. (2012). TV news, lay voices and the visualization of environmental risks. In S. Allan (Ed.), *Environmental Risks and the Media* (pp. 29-44). London: Routledge.
- DiFrancesco, D. A., & Young, N. (2011). Seeing climate change: The visual construction of global warming in Canadian national print media. *Cultural Geographies*, 18(4), 517-536.
- Dobson, S., Lemphers, N. & Guilbeault, S. (2013). Booms, Busts and Bitumen: The economic implications of Canadian oilsands development. The Pembina Institute and Équiterre.
- Doherty, R. J. (2015). The alienation of humans from nature: media and environmental discourse (Doctoral Dissertation). Retrieved from University of Illinois at Urbana-Champaign Database.
- Dorow, S., & O'Shaughnessy, S. (2013). Fort McMurray, Wood Buffalo, and the oil/tar sands: Revisiting the sociology of "community". *Canadian Journal of Sociology*, 38(2), 121-140.
- Doulton, H. & Brown, K. (2009). Ten years to prevent catastrophe?: Discourses of climate change and international development in the UK press. *Global Environmental Change*, 19(2), 191-202.

- Dryzek, J. S. (1997). The politics of the earth: Environmental discourses. Oxford: Oxford University Press.
- Dunlap, R. E. (2013). Climate change skepticism and denial: An introduction. *American behavioral scientist*, 57(6), 691-698.
- Eagleton, T. (1991). Ideology: An Introduction. London: Verso.
- Ewart, J., & McLean, H. (2015). Ducking for cover in the 'blame game': news framing of the findings of two reports into the 2010-11 Queensland floods. *Disasters*, 39(1), 166-184.
- Fairclough, N. (1989). Language and power. London: Longman.
- Fairclough, N. (1992). Discourse and Social Change. Cambridge: Polity Press.
- Fairclough, N. (1995). Critical Analysis of Media Discourse. In Marris, P., & Thornham, S. (2000). *Media studies: A reader* (pp. 308-325). New York: New York University Press.
- Fairclough, N. (1995a). Critical Discourse Analysis. London: Longman.
- Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. New York: Routledge.
- Fairclough, N., Mulderigg, J., & Wodak, R. (2011). Critical Discourse Analysis. In Van Dijk, T. A. (Ed.), Discourse studies: A multidisciplinary introduction. Los Angeles: Sage.
- Finch, D., Deephouse, D., & Varella, P. (2014). Examining an Individual's Legitimacy Judgment Using the Value-Attitude System: The Role of Environmental and Economic Values and Source Credibility. *Journal of Business Ethics*, 127(2), 265-281.
- Flick, U. (2009). An introduction to qualitative research. London: Sage.
- Fort McMurray wildfire now considered under control. (2016, July 05). *CBC*. Retrieved from http://www.cbc.ca/news/canada/edmonton/fort-mcmurray-wildfire-now-considered-under-control-1.3664947
- Garfield, G. (2007). Hurricane Katrina: The making of unworthy disaster victims. *Journal of African American Studies*, 10(4), 55-74.
- Gavin, N. T., Leonard-Milsom, L., & Montgomery, J. (2011). Climate change, flooding and the media in Britain. *Public Understanding of Science*, 20(3), 422-438.
- Geddes, J. (2016, November 29). Trudeau, a 'grandson of B.C.', makes his case. *Maclean's*. Retrieved from http://www.macleans.ca/politics/ottawa/trudeau-a-grandson-of-b-c-makes-his-case-for-trans-mountain-pipeline/
- Gill, R. (2000). Discourse Analysis. In Bauer, M. W., & Gaskell, G. (Eds.). *Qualitative researching with text, image and sound: A practical handbook for social research.* London: Sage.
- Gismondi, M. & Davidson, D.J. (2011). Challenging Legitimacy at the Precipice of Energy Calamity. New York: Springer.

 Government of Alberta. (1997). Government of Alberta Business Plan 1997-2000. Retrieved
 - http://webcache.googleusercontent.com/search?q=cache:http://www.finance.al-berta.ca/publications/Budget/budget1997-
 - 2000/1997/GOVBP.PDF&gws_rd=cr&dcr=0&ei=ICXaWYSpPMvQjwSBu6ToCA
- Government of Alberta (2016). 2016-17 Second Quarter Fiscal Update and Economic Statement. Retrieved from https://open.alberta.ca/dataset/9c81a5a7-cdf1-49ad-a923-d1ecb42944e4/re-source/97c10150-c9f4-4df9-8fef-fe2606876f47/download/2016-2016-17-2nd-Quarter-Fiscal-Update-and-Economic-Statement-2016-11-28.pdf
- Government of Alberta. (2016). Alberta Energy: Oil Sands. Retrieved from http://www.energy.al-berta.ca/OurBusiness/oilsands.asp
- Government of Alberta (2017). Heritage Fund Information. Retrieved from http://finance.al-berta.ca/business/ahstf/index.html
- Government of Canada. (2017). Global greenhouse gas emissions. Retrieved from https://www.can-ada.ca/en/environment-climate-change/services/environmental-indicators/global-greenhouse-gas-emissions.html
- Green Party of Canada. (2016, May 04). Elizabeth May issues statement on Fort McMurray Wildfires. Retrieved from https://www.greenparty.ca/en/media-release/2016-05-04/elizabeth-may-is-sues-statement-fort-mcmurray-wildfires
- Greenberg, J. (2000). Opinion Discourse and Canadian Newspapers: The Case of the Chinese "Boat People." *Canadian journal of communication*, 25(4).

- Gunster, S. & Saurette, P. (2014). Storylines in the sands: News, narrative, and ideology in the Calgary Herald. *Canadian journal of Communication*, 39(3), 333.
- Hajer, M. A. (1995). The politics of environmental discourse: ecological modernization and the policy process. Oxford: Clarendon Press.
- Hajer, M. A. (2006). Doing discourse analysis: coalitions, practices, and meanings. In M. van den Brink & T. Metze, *Words Matter in Policy and Planning* (pp. 65-76). Utrecht: Labor Gradimedia.
- Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (1978). *Policing the Crisis: Mugging, the State, and the Law and Order*. London: Macmillan.
- Haluza-Delay, R. (2018). Giving consent in the petrostate: Hegemony and Alberta oil sands. *Journal for Activist Science and Technology Education*, 4(1), 1-6.
- Hammersley, M. (1997). On the foundations of critical discourse analysis. *Language & Communication*, 17(3), 237-248.
- Hannigan, J. (2006). Media and environmental communication. In J. Hannigan (Ed.), *Environmental Sociology* (pp. 79-93). Oxon: Routledge.
- Hansen, A. (1991). The media and the social construction of the environment. *Media*, *Culture* & *Society*, 13(4), 443-458.
- Hansen, A. (2000). Claims making in the Brent Spar Controversy. In Allen, S., Adam, B., & Carter, C. (Eds.), *Environmental Risks and the Media* (pp. 55-72). London: Routledge.
- Hansen, A. (2010a). Media publics, politics and environmental issues. In A. Hansen (Ed.), *Environment, Media, and Communication* (pp. 159-182). New York: Routledge.
- Hansen, A. (2010b). Communication and the construction of environmental issues. In A. Hansen (Ed.), *Environment, Media, and Communication* (pp. 13-35). New York: Routledge.
- Hansen, A. (2015). Communication, media, and the social construction of the environment. In J. Cox, & Hansen, A. (Eds.), *The Routledge Handbook of Environment and Communication* (pp. 25-38). Oxon: Routledge.
- Hindman, E. B. (2003). The princess and the paparazzi: Blame, responsibility, and the media's role in the death of Diana. *Journalism & Mass Communication Quarterly*, 80(3), 666-688.
- Hough, B. J. (2015). A Comparative Discourse Analysis of Media Texts Pertaining to Fracking in North Dakota's Bakken Region (Doctoral dissertation). Retrieved from Ohio University Database.
- Huber, M. (2009). Energizing Historical Materialism: Fossil Fuels, Space, and the Capitalist Mode of Production. *Geoforum*, 40(1), 105-115.
- Hynds, E. (1990). Changes in Editorials: A Study of Three Newspapers, 1955-1985. *Journalism Quarterly*, 67(2), 302-12.
- Hynds, E. (1994). Editors at most U.S. dailies see vital role for editorial page. *Journalism Quarterly*, 71(3), 573-582.
- Jacques, P. J., Dunlap, R. E., & Freeman, M. (2008). The organisation of denial: Conservative think tanks and environmental scepticism. *Environmental politics*, 17(3), 349-385.
- Jolly, W. M., Cochrane, M. A., Freeborn, P. H., Holden, Z. A., Brown, T. J., Williamson, G. J., & Bowman, D. M. (2015). Climate-induced variations in global wildfire danger from 1979 to 2013. *Nature communications*, 6, 7537.
- Jorgensen, M. W., & Phillips, L. J. (2002). Discourse analysis as theory and method. London: Sage.
- Kaijser, A., & Kronsell, A. (2013). Climate change through the lens of intersectionality. *Environmental politics*, 23(3), 417-433.
- Karl, T. (1997). *The Paradox of Plenty: Oil Booms and Petro-States*. Berkeley: University of California Press.
- Kellner, D. (1995). Media Culture: Cultural Studies, Identity and Politics between the Modern and the Postmodern. London: Routledge.
- Kidner, K. 2010. Oil sands or tar sands? What these words really mean in Alberta. Conference presentation, Unwrap the Research Conference, October 22-24. Fort McMurray, AB.
- Klein, N. (2007). The Shock Doctrine: The Rise of Disaster Capitalism. Toronto: A.A. Knopf Canada.
- Kolbert, E. (2016, May 05). Fort McMurray and the Fires of Climate Change. *The New Yorker*. Retrieved from http://www.newyorker.com/news/daily-comment/fort-mcmurray-and-the-Fires-of-climate-change

- Kress, G. and van Leeuwen, T. (1996). *Reading Images: The Grammar of Visual Design*. London: Routledge.
- LeMenager, S. (2013). Living Oil: Petroleum Culture in the American Century. Oxford: Oxford University Press.
- Levant, E. (2011). Ethical oil: The case for Canada's oil sands. Toronto: McClelland & Stewart Limited.
- Levin, D. and Austen, I. (2016, May 08). Fort McMurray, a Canadian Oil Boom Town, Is Left in Ashes.

 The New York Times. Retrieved from http://www.nytimes.com/2016/05/09/world/americas/fort-mcmurray-fire-canada-oil-boom.html?_r=0
- Lindahl, R. (1983). Media Concentration On Local Political Campaigns: A study on local newspapers and campaign organizations during the 1980 nuclear power referendum in Sweden. *Gazette*, 31(1), 99-115.
- Lowe, P., & Rudig, W. (1986). Political Ecology and the Social Sciences the State of the Art. *British Journal of Political Science*, 16(4), 513-550.
- Lupick, T. (2016, May 04). Green Party leader Elizabeth May dares to talk climate change and Fort McMurray fire. *Georgia Straight*. Retrieved from http://www.straight.com/news/692456/green-party-leader-elizabeth-may-dares-talk-climate-change-and-fort-mcmurray-fire
- Marginson, S. (2008). Global Field and Global Imagining: Bourdieu and Worldwide Higher Education. British Journal of Sociology of Education, 29(3), 303-315.
- Martin, J. R. (1992). English Text: System and Structure. Amsterdam: John Benjamins.
- Marx, K., & Engels, F. (1965). The German Ideology. London. (Original work published in 1845).
- May, E. (2016, May 19). Why can't we talk about climate change? The Island Tides, p. 3.
- McCarthy, M. (2007, Jul 06). We Shouldn't Be Shocked by Public Apathy. *The Independent*. Retrieved from http://www.independent.co.uk/environment/climate-change/we-shouldnt-be-shocked-by-public-apathy-5333852.html
- McCright, A. M., & Dunlap, R. E. (2003). Defeating Kyoto: The conservative movement's impact on US climate change policy. *Social Problems*, 50(3), 348-373.
- McCright, A. M., & Dunlap, R. E. (2010). Anti-reflexivity. Theory, Culture & Society, 27(2-3), 100-133.
- McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming, 2001-2010. *The Sociological Quarterly*, 52(2), 155-194.
- McGregor, S.L.T. (2003). Critical discourse analysis—a primer. Kappa Omicron NuForum. Retrieved from http://www.kon.org/archives/forum/15-1/mcgregorcda.html
- McNair, B. (1995). An introduction to political communication. New York: Taylor & Francis.
- Mesley, W. (2016, May 08). Panel: The Science Behind the Fort McMurray Fire. [News program]. In D. Spandier (Producer), *The National*. Toronto: CBC.
- Miles, B., & Morse, S. (2007). The role of news media in natural disaster risk and recovery. *Ecological Economics*, 63(2-3), 365-373.
- Milner, B. & Lewis, J. (2015, Aug 14). Alberta and Norway: Two oil powers: worlds apart. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/report-on-business/international-business/norways-sovereign-wealth-fund/article25973060/
- Milstein, T. (2009). Environmental communication theories. In S. W. Littlejohn & K. A. Foss (Eds.), *Encyclopedia of communication theory* (Vol. 2, pp. 345-349). Thousand Oaks: Sage.
- Murphy, P. D. (2011). Putting the Earth into global media studies. *Communication Theory*, 21(3), 217-238.
- Murphy, R. (2015). The media construction of climate change quiescence: Veiling the visibility of a super emitter. *Canadian Journal of Sociology*, 40(3), 331.
- National Aeronautics and Space Administration (NASA). (2005). What's the Difference Between Weather and Climate? Retrieved from https://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html
- Natural Resources Canada. (2017). Canadian Wildland Fire Information System. Retrieved from http://cwfis.cfs.nrcan.gc.ca/ha/nfdb?type=hands&year=1986

- Nelkin, D. (1991). Why is Science Writing so Uncritical of Science? In L. Wilkins, & Patterson, P., Risky Business: Communicating Issues of Science, Risk and Public Policy (pp. ix-xiii). New York: Greenwood Press.
- Newell, P. (2006). Climate of opinion: the agenda-setting role of the mass media. In *Climate for change: Non-state actors and the global politics of the greenhouse* (pp. 68-95). Cambridge: Cambridge UP.
- Newell, P., & Paterson, M. (2010). Introducing climate capitalism. In *Climate capitalism: global* warming and the transformation of the economy (pp. 1-10). Cambridge: Cambridge University Press.
- Nikiforuk, A. (2009). Tar Sands: Dirty Oil and the Future of a Continent. Vancouver: Greystone Books.
- Norgaard, K. (2011). Introduction: The Failure to Act, Denial versus Indifference, Apathy, and Ignorance. In Norgaard, K., Living in Denial: Climate Change, Emotions, and Everyday Life (pp. 1-10). Cambridge: The Massachusetts Institute of Technology Press.
- Norgaard, K. (2011a). Climate Change as Background Noise in the United States. In Norgaard, K., *Living in Denial: Climate Change, Emotions, and Everyday Life* (pp. 177-206). Cambridge: The Massachusetts Institute of Technology Press.
- Olausson, U. (2009). Global warming—global responsibility? Media frames of collective action and scientific certainty. *Public Understanding of Science*. *18*(4), 421-436.
- Olson, R. (2000). Towards a Politics of Disaster. *International Journal of Emergencies and Disasters*. 18(2), 265-287.
- Pantti, M., Wahl-Jorgensen, M. & Cottle, S. (2012). Disasters and the Media. New York: Peter Lang.
- Parlee, B. L. (2015). Avoiding the resource curse: indigenous communities and Canada's oil sands. *World Development*, 74, 425-436.
- Paskey, J., Steward, G, & Williams, A. (2013). The Alberta Oil Sands Then and Now: An Investigation of the Economic, Environmental and Social Discourses Across Four Decades, OSRIN Report No. TR-38. Edmonton: Oil Sands Research and Information Network, University of Alberta, School of Energy and the Environment.
- Pelling, M., & Dill, K. (2005). *Natural Disasters as Catalysts for Political Change* (No. 1). Working Paper.
- Pettenger, M. E. (2007). Introduction: power, knowledge and the social construction of climate change. In Pettenger, M. E. (Ed.). *The social construction of climate change: Power, knowledge, norms, discourses.* Ashgate Publishing, Ltd.
- Poortinga, W., Spence, A., Whitmarsh, L., Capstick, S., & Pidgeon, N. F. (2011). Uncertain climate: An investigation into public scepticism about anthropogenic climate change. *Global environmental change*, 21(3), 1015-1024.
- Remillard, C. (2011). Picturing environmental risk: The Canadian oil sands and the *National Geographic*. *International Communication Gazette*, 73(1-2), 127-143.
- Rodriguez, H., & Dynes, R. (2006). Finding and framing Katrina: The social construction of disaster. Social Science Research Council. Retrieved from http://understanding-katrina.ssrc.org/Dynes_Rodriguez
- Rosa, L., Davis, K. F., Rulli, M. C., & D'Odorico, P. (2017). Environmental consequences of oil production from oil sands. *Earth's Future*, 5(2), 158-170.
- Schneider, R. & Dyer, S. (2006). *Death by 1000 cuts: Impacts of in situ oil sands development on Alberta's boreal forest.* Edmonton: Pembina Institute.
- Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: climate change and the discourse of environmental justice. *Wiley Interdisciplinary Reviews: Climate Change*, 5(3), 359-374.
- Schoenfeld, A.C., Meier, R.F., & Griffin, R.J. (1979). Constructing a social problem: the press and the environment. *Social Problems*, 27(1), 38-61.
- Shelley, T. (2005). Oil: Politics, Poverty and the Planet. Halifax: Fernwood.
- Smith, P. & Bell, A. (2007). Unravelling the Web of Discourse Analysis. In E. Devereux (Ed.), *Media Studies: Key Issues and Debates* (78-100). London: Sage.

- Sneed, A. (2017, Jan 02). Yes, Some Extreme Weather Can Be Blamed on Climate Change. *Scientific American*. Retrieved from https://www.scientificamerican.com/article/yes-some-extreme-weather-can-be-blamed-on-climate-change/
- Snowdon, W. (2016, May 05). Fort McMurray fire creates its own lightening. *CBC*. Retrieved from http://www.cbc.ca/news/canada/edmonton/fort-mcmurray-wildfire-creates-its-own-lightning-1.3568325
- Sorenson, C. & Hutchins, A. (2015, Jul 15). How Canada's economy went from boom to recession so fast. *Maclean's*. Retrieved from http://www.macleans.ca/economy/fromeconomicanaly-sis/how-canadas-economy-went-from-boom-to-recession-so-fast/
- Spector, M., & Kisuse, J.I. (1973). Social problems: a formulation. Social Problems, 21(2), 145-159.
- Spector, M., & Kitsuse, J. I. (1987). Constructing social problems. New York: Aldine de Gruyter.
- Spence, A., Poortinga, W., & Pidgeon, N. (2012). The psychological distance of climate change. *Risk Analysis*, 32(6), 957-972.
- Sperl, A. (2013). Climate Change Denial in Canada: An Evaluation of the Fraser Institute and Friends of Science Positions (Doctoral Dissertation). Retrieved from Carleton University Database.
- Stenson, F. (2016, May 16). Fort McMurray: Understanding a city of dreams. *Maclean's*. Retrieved from http://www.macleans.ca/news/canada/fort-mcmurray-a-city-of-dreams/
- Stocking, S. H., & Holstein, L. W. (2009). Manufacturing doubt: journalists' roles and the construction of ignorance in a scientific controversy. *Public Understanding of Science*, *18*(1), 23-42.
- Stoddard, M. (2011). "If we wanted to be environmentally sustainable, we'd take the bus": Skiing, mobility and the irony of climate change. *Human Ecology Review*, 18(1), 19-29.
- Stoker, T.F., Qin, D., Plattner, G.K., Tignor, M., Allen, S.K., Boschung, J., Nauels, A., Xia, Y., Bex, V., and Midgley, P.M. (Eds.) (2013). IPCC 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.
- Strodthoff, G.G., Hawkins, R.P., & Schoenfeld, A.C. (1985). Media roles in a social movement: A model of ideology diffusion. *Journal of Communication*, 35(2), 134-153.
- Struzik, E. (2013, Aug 05). With Tar Sands Development, Growing Concern on Water Use. *Yale Environment 360*. Retrieved from http://e360.yale.edu/features/with_tar_sands_development_growing_concern_on_water_use
- Suzuki, D. (n.d.). Canada and the Kyoto Protocol. Retrieved from http://www.davidsuzuki.org/issues/climate-change/science/canada-climate-change/canada-and-kyoto/
- Szerszynski, B. (2007). The Post-ecologist condition: Irony as symptom and cure. *Environmental Politics*, 16(2), 337-355. https://doi.org/10.1080/09644010701211965
- Szeman, I. (2013). How to know about oil: Energy epistemologies and political futures. *Journal of Canadian Studies*, 47(3), 145-168.
- Szeman, I. & Petrocultures Research Group. (2016). *After Oil*. Morgantown: West versity Press.
- Taft, K. (2017, Oct 01). A Captive State: How the oil industry still runs Alberta. *Alberta Views*. Retrieved from https://albertaviews.ca/a-captive-state/
- Takach, G. (2013). Selling nature in a resource-based economy: Romantic/extractive gazes and Alberta's bituminous sands. *Environmental Communication: A Journal of Nature and Culture*, 7(2), 211-230.
- Tenorio, E. H. (2011). Critical discourse analysis, an overview. *Nordic Journal of English Studies*, 10(1), 183-210.
- "The Leap Manifesto." (n.d.). Retrieved from https://leapmanifesto.org/en/the-leap-manifesto/
 "The oil conundrum." (2016, Jan 23). *The Economist*. Retrieved from https://www.economist.com/news/briefing/21688919-plunging-prices-have-neither-halted-oil-production-nor-stimulated-surge-global-growth
- Tierney, K., Bevc, C., & Kuligowski, E. (2006). Metaphors matter: Disaster myths, media frames, and their consequences in Hurricane Katrina. *The annals of the American academy of political and social science*, 604(1), 57-81.s
- Timoney, K. P., & Lee, P. (2009). Does the Alberta tar sands industry pollute? The scientific evidence. *The Open Conservation Biology Journal*, 3(2009), 65-81.

- TomMoffat. (2016, May 04). Karmic #climatechange fire burns CDN oilsands city. Retrieved from https://www.nationalobserver.com/2016/05/04/news/wildfire-heart-oilsands-country-serves-latest-climate-change-flashpoint
- Trumbo, C. (1996). Constructing climate change: claims and frames in US news coverage of an environmental issue. *Public Understanding of Science*, 5 (3), 269-283.
- Way, L. (2011). An energy superpower or a super sales pitch? Building the case through an examination of Canadian newspapers coverage of oil sands. *Canadian Political Science Review*, 5(1), 74-98.
- Wodak, R., & Meyer, M. (2001). Methods of critical discourse analysis. Thousand Oaks: Sage.
- Van Dijk, T. (1991). Racism and the Press. London: Routledge.
- Van Dijk, T. A. (1993). Principles of critical discourse analysis. Discourse & Society, 4(2), 249-283.
- Van Dijk, T.A. (1996). 'Opinions and ideologies in editorials'. Paper for the 14th International Symposium of Critical Discourse Analysis: Language, Social Life and Critical Thought. Athens, 14-16 December 1995. Retrieved from http://www.discursos.org/unpublished%20articles/Opinions%20and%20ideologies%20in%20editorials.htm
- Venton, P., & La Trobe, S. (2008). Linking climate change adaptation and disaster risk reduction. In *Linking climate change adaptation and disaster risk reduction*. Tearfund; Institute of Development Studies (IDS).
- Von Engelhardt, J., & Jansz, J. (2015). Distant suffering and the mediation of humanitarian disaster. In R. Anderson (Ed.) World suffering and quality of life (pp. 75-87). New York: Springer.
- Wang, X., Thompson, D. K., Marshall, G. A., Tymstra, C., Carr, R., & Flannigan, M. D. (2015). Increasing frequency of extreme fire weather in Canada with climate change. *Climatic Change*, 130(4), 573-586.
- Young, N. (2013). Working the fringes: The role of letters to the editor in advancing non-standard media narratives about climate change. *Public Understanding of Science*, 22(4), 443-459.
- Young, N. & Dugas, E. (2011). Representations of climate change in Canadian national print media: The banalization of global warming. *Canadian Review of Sociology*, 48(1), 1-22.
- Zehr, S. (2000). Public representations of scientific uncertainty about global climate change. *Public Understanding of Science*, 9(2), 85-103.

Dataset Items

- (2016, May 5). A natural disaster unlike any other. The Globe and Mail. p. A14.
- (2016, May 5). Strength is in Numbers. Edmonton Journal, p. A12.
- (2016, May 6). Solidarity a Must Now. Calgary Herald, n.p.
- (2016, May 7). An NDP Alberta one year later. The Globe and Mail. p. F6.
- (2016, May 7). Selfless Generosity. Calgary Herald, n.p.
- (2016, May 10). It's matter of waiting. Edmonton Journal, n.p.
- (2016, May 17). Fort Mac Strong. The Globe and Mail. p. A12.
- (2016, May 18). Waiting out wildfire right call. Edmonton Journal, p. A10.
- (2016, May 25). Let us help all in need. Edmonton Journal, p. A10.
- (2016, May 27). New road should be part of rebuild. Edmonton Journal, p. A14.
- (2016, Jun 1). Rebuilding Fort Mac. Calgary Herald, n.p.
- (2016, Jun 7). An Orderly Comeback. Edmonton Journal, n.p.
- (2016, Jun 30). Fire chief gets it right. Calgary Herald, n.p.
- (2016, Jul 7). One Canada, please. The Globe and Mail. p. A10.
- Adamski, P. (2016, Jun 3). Climate change does matter. Edmonton Journal, p. A10.
- Barry, C. (2016, Jul 6). Fort McMurray blaze seemed to have a brain and "its own plan". *Calgary Herald*, p. A9.
- Breakenridge, R. (2016a, May 17). It's too soon to assess NDP's response to Fort McMurray wildfire. *Calgary Herald*, p. A11.
- Breakenridge, R. (2016b, Aug 30). If Notley has plan for the economy, it would be nice to see it. *Calgary Herald*, p. A11.
- Brian, J. (2016, May 11). Fire may take our homes but it will never take away our spirit. *Calgary Herald*, n.p.
- Cosh, C. (2016a, May 4). In a redoubt north of Fort McMurray, a city's people await a battle. *The National Post*. n.p.
- Cosh, C. (2016b, May 7). Fort McMurray is nature taking its revenge on man. *The National Post*. n.p.
- Cross, P. (2016, May 25). The elitists exploiting Fort Mac. The National Post. p. FP9.
- Finch, D. (2016, May 11). Fort McMurray's silver lining. The Globe and Mail. p. A13.
- Flannigan, M. & Wotton, M. (2016, Jun 1). We can learn to live with the threat of forest fires. *Edmonton Journal*, p. A8.
- Gerson, J. (2016, May 5). Fort Mac isn't karma any blame is shared by all of us. *The National Post*. n.p.
- Gurney, M. (2016, May 6). Fort McMurray shows us why we need to be prepared for Disasters. *The National Post*. n.p.
- Hirsch, T. (2016, May 5). Lost homes show what "the economy" is really about. *The Globe and Mail*. p. A15.
- Homer-Dixon, T. (2016, Aug 8). How Alberta could champion a new energy source. *The Globe and Mail*. p. A9.
- Lederman, M. (2016, May 7). In times of crisis, Canada truly comes together like one big small town. *The Globe and Mail*. p. A2.
- Mason, G. (2016, May 6). Notley's first year: Cool, calm, collected. The Globe and Mail. p. A11.
- Mason, G. (2016b, May 13). After the fire, a frank talk is needed. The Globe and Mail. p. A11.
- Manning, P. (2016, May 23). Fort Mac claims its rightful pride of place. The Globe and Mail. p. A9.
- Morgan, G. (2016, May 30). Tying an extreme weather event to atmospheric carbon Dioxide simply isn't credible. *The Globe and Mail*. p. B8.
- Nelson, C. (2016, May 7). Government cynicism exposed by tragedy. Calgary Herald, p. N6.
- Saunders, D. (2016, May 7). A world ill-prepared for warming. The Globe and Mail. p. F7.
- Smith, R. (2016, May 14). Dipping into heritage fund cost Alberta financial security. *Edmonton Journal*, p. A14.
- Steelman, T. (2016, May 13). Time to use our wildfire strategy. The Globe and Mail. p. A12.
- Thomson, G. (2016a, Jun 18). Some bad news with the good from Ottawa. Calgary Herald, p. A14.