**BIDEN CANCELS KEYSTONE XL:
HOW ALBERTA'S LOCAL MEDIA IS FRAMING THE NEWS**

by

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Abstract

Climate change mitigation is frequently presented as a binary trade-off between economic development and environmental protection, particularly in Canadian news. The economic value and “necessity” of the oil sands is often used as a justification for perpetual extractivism and further expansion of energy infrastructure. News media have an important role in delivering information and shaping public opinion on large-scale issues in society, including the issue of climate change.

This Major Research Paper explores Alberta’s local news media’s reaction to the cancellation of the Keystone XL pipeline by examining the narratives used in their reporting of the news. I highlight the importance of studying Canadian local news influence on public perception of issues, as this is often not adequately represented in environmental communications research. I conducted an exploratory content analysis of articles from three local news publications, the *Calgary Herald*, the *Red Deer Advocate*, and the *Lethbridge Herald*. The findings suggest economic arguments that justify oil sands expansion largely overshadow pro-environment representation of the issue. This study also uncovers high use of victim narratives that perpetuate extractivism by using “us versus them” populist rhetoric in storylines.

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Introduction

Highly anticipated by some and relentlessly contested by others, the construction of the Keystone XL Pipeline has been under constant debate between those who claim it is essential to support the Canadian economy and those who view it as utterly destructive towards our climate, water systems, and public health since the early 2010s (Denchak, 2021).

Owned by TC Energy, a Calgary-based energy infrastructure company, the Keystone XL pipeline was a proposed expansion of the already existing Keystone pipeline (Lawlor & Gravelle, 2018). Referred to as “phase 4”, this new project would extend the pipeline further than the 4,324 kilometres that is already built (Lawlor & Gravelle, 2018). The controversial Keystone energy project would have carried bitumen, or crude oil, from Alberta’s oil sands through to the United States, specifically Montana, North and South Dakota, and Nebraska (Lowen-Trudeau, 2021). Canada is currently the United States’ largest oil supplier, and third-largest exporter of oil globally, behind Venezuela and Saudi Arabia (Government of Canada, 2020). In terms of the country’s own consumption habits, approximately 77% of Canada’s end-use energy comes from fossil fuels (Hughes, 2021).

In the latest statistics provided by the Canadian Association of Petroleum Producers, Canada’s oil and gas sector contributed \$105 billion to the country’s GDP in 2020 (Canadian Association of Petroleum Producers, n.d.). Like many other organizations with connections to the oil and gas sector, this group claims pipelines are a large source of jobs for individuals across the country, especially for the people of Alberta, where the oil sands are located (Canadian Association of Petroleum Producers, n.d.). This argument is used as a major justification to expand the industry further (Hughes, 2021). When the news came out about United States

President Joe Biden planning to cancel the Keystone XL project on day one in office, it sparked outrage among industry proponents.

On the other hand, the cancellation of the Keystone XL project is something environmental groups have been repeatedly calling for because of its connection to rapid climate change, its impact on Indigenous rights, and the general threat to the health and safety of both humans and ecosystems. Climate scientists and environmental activists criticize the oil sands because of its role in releasing 26% of Canada's total greenhouse gas (GHG) emissions, which contributes to global warming (Hughes, 2021). In addition to GHG air pollution, the process of oil extraction, refinement, and transport result in damages to various other ecosystems. Forests are removed en masse and the wildlife within are left to seek refuge to make room for this infrastructure (Denchak, 2018). Oceans and groundwater are contaminated due to the toxic fluids expelled from fracking and oil spills, impacting the Earth's food and water systems (Denchak, 2018). Unfortunately, the Canadian Government has been slow to invest in climate change through green infrastructure. While Canada has commitments like reducing the country's carbon emissions by 40 to 45 percent by 2030 and becoming net-zero by 2050 (Taylor, 2021), plans on how the government will achieve these goals are virtually non-existent. Prime Minister Justin Trudeau has been heavily criticized by climate activists for continuing to expand oil and gas infrastructure like pipelines that directly contradict these environmental goals (Noakes, 2021). Historically, corporations and governments both in Canada and around the world have successfully delayed or blocked policies that combat this industry rooted in perpetual extractivism (Hackett & Adams, 2018).

The “Debate” on Economy Versus Environment

There currently exists a binary “debate” on the economic necessity versus the environmental impact of oil extraction that is deeply embedded in Canadian discourse. This issue is commonly framed as a trade-off when communicated by politicians and the media. One cannot exist without the other being negatively affected. Environmental research, however, has continuously proven that this issue should not be a debate at all. For instance, although the economic argument in support of the oil industry is continuously repeated by politicians, corporations, and media across the country, the corporations running the oil and gas sector are actively trying to reduce costs through increased automation technologies, significantly impacting employment in transportation, equipment and drilling operations, and various other job categories within the industry (Hackett & Adams, 2018; Mortlock, 2020). While production is increasing, thousands of jobs are being eliminated because of technology’s ability to streamline the process and achieve maximum efficiency (Hughes, 2021). Since 2014, over 53,000 jobs were removed from the industry largely because of digitalization and other cost-cutting reasons (Hughes, 2021). These are jobs that will never return nor have anything to do with climate change mitigation policies. In addition to this, a 2021 Canadian Centre for Policy Alternatives report found the oil and gas sector currently makes up 9 percent of the country’s GDP, a number they say has been declining over the past couple of decades (Hughes, 2021). This same report found there actually isn’t a need for Keystone XL even with Canada’s increasing exports, as existing pipelines are sufficient enough to handle the supply (Hughes, 2021). When considering these factors, it raises the following questions: why is the “economic necessity” of the oil sands still being framed as an equal to the global issue of saving the planet?

And why is this issue still commonly looked at and referred to as a controversy? These underlying questions inspired the goal of this Major Research Paper.

Researchers look to news media when analyzing the public perception of large-scale issues present in society. News media across the country have a role to play in providing the public with information about complex topics like climate change. They shape public opinion, our understanding of issues, and have the power to influence an individual's political decisions (Hackett & Adams, 2018). Journalists develop storylines using narratives and frame types to provide this information. News framing refers to the ways in which journalists construct a story to enhance audience comprehension (Valkenburg et al, 1999). It is how stories will emphasize specific parts of an issue or event in order to achieve a particular perception of it (Lawlor & Gravelle, 2018). Organizations can pursue different framing strategies to fit their specific goals. The subject of framing arises in a variety of research areas, from studies on news media to science communication, to politics and corporate communications. Canadian news media tends to frame environmental protection and economic growth as something we must choose between; as something that cannot exist simultaneously (Hackett & Adams, 2018). Publications will focus on balanced narration of the issue (Stecula & Merkley, 2019) which can directly influence public perception of the legitimacy of both sides.

In this study, the development of the Keystone XL Pipeline is used as a representative for the debate on the economy versus environment, which, as mentioned, is common in Canadian news media discourse. The objective of this MRP is to highlight the narratives Alberta's local media uses when reacting to the news of the Keystone XL project cancellation. This exploratory content analysis will look at Alberta's local news coverage on the Keystone XL Pipeline from

December 20, 2020, to February 20, 2021, the months before and after President Joe Biden's cancelling of the cross-border pipeline project.

I will present the research on news media influence and why it is critical to study local media's role as a political actor. This study finds that Alberta's local news media uses victim narratives to establish populist rhetoric that supports extractivism, through their framing of the cancellation of the energy project.

Literature Review

A variety of research on news media and environmental communications guided this study. The following literature review aims to uncover the importance of local media in shaping public perception of climate change, as well as the research behind studying frames in news media. In addition to this, this literature review will examine current research on the narratives used in climate change coverage, including the use of victim narratives.

Because of the magnitude of the effects of climate change, the issue impacts a virtually immeasurable number of sectors in human society, including business, politics, global economics, infrastructure, agriculture, social and cultural impacts, etc. This is all in addition to the enormous damage climate change has on the natural world and its ecosystems. Good (2008) calls it the “quintessential environmental story of our time” (p.234). Climate and environmental scientists have proven the legitimacy of the issue, yet there remains a lack of widespread public engagement with it (Gunster, 2011). Researchers thus look at how the information is communicated to the public. Strong research attention is dedicated to the media’s role in reporting the science on climate change, environmental disasters, and communicating the risk of inaction on the issue.

Climate change news coverage exhibits a phenomenon that is not like the media coverage of various other issues. Many researchers including Stecula & Merkley (2019) argue that journalists will often portray a “false balance” in their presentation of the issue of climate change, which means journalists will present both sides of a story or debate, even though the credibility of one side is often illegitimate (p. 4). This occurs quite frequently in coverage of climate change because often a balanced platform is given to oil lobbyists and the fossil fuel industry (Stecula & Merkley, 2019). Climate skeptics are provided a major platform to amplify their opposition, even

when their arguments have been repeatedly discredited by science (Bowden et al., 2018). Gunster (2011) cites this tendency as a contributor to the lack of engagement as well as an influence on climate change skepticism. A general acceptance of the need for climate change mitigation has been slow to arise because the media is often consumed with arguments that deny the reality of the issue (Bolin and Hamilton, 2018). Bolin and Hamilton (2018) argue news media “play a critical role in maintaining the division over anthropogenic climate change” because they often feed into political polarization, presumably for audience viewership or readership (p. 456). Considering the important role media plays in informing the public on pressing societal issues, it is critical to analyze their communication methods.

Researching Environmental News Framing

News media is often the leading source of information for the public when it comes to complex topics like climate change (Stecula & Merkley, 2019). Journalists, media personnel, and communicators at large can strategically shine a light on or avoid discussing certain elements of an event or issue to support their own interests. The frames these actors present help guide the public to understand and construct opinions on issues. They influence our understanding and perception of events, which ultimately motivates actions (Laurie, 2019). Although journalists are mandated or claim to provide objective news, things like word choice or inclusion of quotes can project a certain frame. News framing is influential in garnering support for specific political agendas like expanding energy infrastructure (Dusyk et al., 2018), which is why the topic of framing is often analyzed in fields like environmental communications.

There are many theories and perspectives that guide environmental communication research, which try to explain the importance of news framing and its impact on public engagement. For instance, scholars inspired by critical theory will claim news organizations

frequently communicate information on issues in a way that serves the values of “political and economic elites” (D’Angelo, 2002, p. 876), which in the case of climate change news, will commonly take an economic, free-market angle. These scholars also argue that journalists will intentionally include or neglect certain viewpoints in order to maintain a status quo way of viewing an issue (D’Angelo, 2002). D’Angelo (2002) states a critical approach to framing theory assumes selection of sources perpetuates the status quo perspective presented by media organizations.

Chen (2019) uses a critical lens in his research on tactics used by the *Calgary Herald* to promote arguments supporting the oil sands industry, in which he discusses the concept of legitimization. This refers to the use of power by an individual or group, often a political entity, which is acknowledged and maintained as acceptable by those in which the power is being used over (Chen, 2019). Chen argues that the news media has a role to play in the legitimization process because they shape public perception and what is considered common sense. This creates obedience over a political ideology because of the reproduction and collective acceptance of this “common sense” (p. 258). Framing devices used in news media influence public opinion about issues and shape the status quo.

Alternatively, there are cognitive perspectives of framing theory. This approach suggests journalists do try to offer different viewpoints or frames of an issue by engaging in “pluralistic presentation of information (D’Angelo, 2002, p. 877). These scholars do not necessarily believe individuals will automatically comply with frames presented in the media, but rather these frames are stored away and pulled from when forming opinions on an issue (D’Angelo, 2002). This perspective is interested in examining how the public confronts an issue using the frames that they have interacted with prior (D’Angelo, 2002).

Regardless of theoretical influence, news framing research acknowledges that individuals are sensitive to information provided by news media and use this information to construct opinions and make decisions (D'Angelo, 2002). News frames are capable of persuading an audience to have a particular view on an issue or event (Valkenburg et al., 1999) especially concerning environmental issues or debates, where the media have influential power to shape policy, public opinion, and social acceptance (Dusyk et al., 2018). It is incredibly important to study news frames because of this influence.

News Media Frames Used in Environmental Communication

Environmental news coverage commonly perpetuates this idea that there is a trade-off between economic development and climate change mitigation, especially in Canadian news coverage, as the oil and gas sector is deeply embedded in the country's perspective of the Canadian economy. Expansion of energy infrastructure like pipelines is justified in the media for reasons like job creation and increased export potential (Hackett & Adams, 2018). As discussed, frames used by news media are influential in shaping the public interpretation of an issue or event. Journalists and media outlets try to make environmental issues clear to the public using framing (Dusyk et al., 2018). Previous research has proven that economic consequence frames are more frequently showcased in news on the Alberta oil sands over any other frame like environmental, political, or social angles (Dusyk et al., 2018). Laura Anne Way's (2013) study on Canadian newspaper stories and headlines on the Alberta oil sands, also acknowledges that Canadian newspapers tend to discuss the oil sands using economic angles. More generally, Deacon et al. (2015) confirm this tendency exists in broader Canadian mainstream news coverage. They suggest that mainstream media actively favoured "economic advancement, as

well as concerns about the potential economic consequences of remediative/preventative action...” over environmental concerns (Deacon et al., 2015, p. 426).

Interestingly, Lawlor and Gravelle (2018) discover that local papers in Canada are more likely to focus on employment frames (i.e. jobs, workforce, etc.), than national papers. They conclude that this is due to “proximal considerations” like local job loss (p.671). A potential reasoning for this trend is because these economic consequences often reach and impact the lives of the target audience, so journalists use this tactic to increase relatability (Valkenburg et al., 1999). Increasing personability in a story can add emotion to the news and increase audience attention (Valkenburg et al., 1999). The way a story is shaped or framed has a significant influence on readers' perception of issues (Valkenburg et al., 1999).

Often news publications are more interested in how climate change impacts business and the Canadian political landscape, over the science of the issue (Dusyk et al., 2018). Valkenburg et al. (1999) found that if a story was written with a strong economic consequence frame when discussing a political or economic issue, respondents would have more thoughts on the financial implications of the issue. This research is significant because the widespread use of economic narratives on climate change in the news can cause delays in public acknowledgement and civic action. Since climate change is a pressing and time-sensitive issue with great consequences, lack of public awareness is dangerous.

Conflict frames are also commonly used in political dialogue in news media, where journalists will discuss the winners and losers of a particular issue (Valkenburg et al., 1999). Young and Dugas (2012) analyze the use of political conflict framing in their research on climate change coverage in French and English language in Canada. They found that French media are more likely to use political conflict frames in climate change coverage, meaning there was

language suggesting climate change issues are “directly attributed to political gridlock”, either domestically or internationally (p. 42). In his analysis of the frames presented in the *Calgary Herald*, Chen (2019) also found conflict to be a common theme within the articles. There was talk of a conflict between Alberta and those outside of it, specifically regarding the province's economic growth and claims it is being unfairly attacked.

News media can also choose to leave out certain frames or perspectives. For instance, in Chen's (2019) study, he found no comment on the environmental impact of the oil sands in 2015, the year of his analyzed sample. Journalists can include quotes from certain voices and not others in their pieces to highlight specific narratives they want to extend to their audience. Think tanks and oil industry proponents are often leading voices in news media coverage on the oil sands (Chen, 2019). Along with politicians, corporations, and think tanks, news media play a major role in constructing narratives by disregarding the voices of scientists, environmental actors, and citizens (Chen, 2019).

Economic justification, rationalization of conflict, and strategic inclusion of quotes can all contribute to the overall downplaying of the climate crisis in news media. Deacon et al. (2015), for instance, found that Canadian newspapers tend to minimize environmental threats to marginalized communities because their journalism is so focused on economic and sociopolitical issues. Justification for oil sands and economic development was emphasized while ignoring the implications on the environment and health of Indigenous communities (Deacon et al., 2015). By projecting certain news frames, and neglecting others, news media downplay the legitimacy of climate science and the urgency of the issue.

Accompanying Canadian news media's neglect for pro-environment storylines is the use of victim narratives, which is one of the major themes of this MRP. Scholar Shane Gunster is a

leading voice in research on victim frames used particularly in Alberta news media and political discourse. In a 2021 study, Gunster et al., (2021) examined the history of the use of pro-oil “extractive populism” in politics and corporate communications (p. 60). Here the authors describe a growing political narrative that emerged in the 1970s, between the citizens of Alberta and the elitist federal government, where the oil sector was thought to be under attack by federal policy. These populist narratives have continued to fester in the province as the oil industry fully emerged as an economic driver. They are largely supported under the Conservative political ideology, as this side has historically advocated for the rapid expansion of the oil industry because of the financial gains. Modern political and corporate discourse now describes the oil and gas industry as the victim of “anti-industry government and environmentalist “elites” (p. 61).

Victim framing has infiltrated news media in Alberta. In a 2014 study, Gunster and Surette (2014), analyzed narratives used in the *Calgary Herald*, a local Alberta news publication that is also the focus of this paper. The authors found that the Herald uses forms of storytelling to portray the oil and gas industry as a victim of the actions of environmentalist groups. Their data set included news articles that discussed the topic of extractivism in order to assess the reporting of oil sands by the publication. Gunster & Saurette call out the Herald for the narratives used in their journalism, which attempt to persuade the public towards a favourable perspective on the oil sands. In the articles examined in the study, heavy emphasis was placed on the importance the oil sands have on job creation, government revenue, and economic investment and growth. They found that the Herald exploits the victim narrative by casting oil sands critics in a negative light, framing them as extremists attempting to destroy Alberta’s prosperous industry and economy. For instance, the publication highlights foreign attacks on the province, using “green smears hurt Alberta” as a headline (p. 341). The publication places character roles on the opposition, which

may influence the public to look poorly towards opponents of oil and gas expansion. While some voices of critics were included in the articles examined in the study, Gunster and Saurette found the storylines contained language of victimization and promoted economic prosperity over environmental protection. Emphasis was placed on the oil industry as the victim of climate activism and little space was given to First Nation communities (Gunster & Saurette, 2014), who are cited as the real victims of oil extraction and pipelines in climate change research. The authors also found frames that infer a moral dilemma between elites and the hardworking people of Alberta.

Laura Anne Way (2013) also found victim narrative use in her discourse analysis on *Fort McMurray Today*. The publication advocated that “oil sands plants are the biggest victims” of environmental policy changes that have led to negative economic events, like new taxation or rising costs (Way, 2013, p. 184-185). By playing the victim card, they are ignoring the oil sand’s role in climate change. Chen (2019) states that this practice “effectively undermines the environmental critiques of the industry” (p. 257).

To gain insight into news frames, communication researchers will perform a content analysis in which they assess the language used by journalists in their stories. Kolbe and Burnett (1991) define a content analysis as an “observational research method that is used to systemically evaluate the symbolic content of all forms of recorded communications” (p. 243). Researchers can isolate components of communication that “represent salient concepts” and use the findings to “describe or explain a phenomenon” (Kleinheksel et al., 2020, p. 127). Shane Gunster (2011), for instance, conducted a comparative content analysis of various BC news publications and their framing of climate politics. Content analyses provide a relatively objective way of comparing the language in news articles and allows the researcher to gather an understanding of the types of

frames used in the news coverage of an issue. The goal of this paper is to examine news frames used by local media with issues involving climate change as well as provide a comparative analysis of the similarities across publications, as well as where they diverge. In addition, this study aims to contribute to the lack of information surrounding the use of victim narratives in climate change coverage, particularly because of the tendency for publications to prioritize economics over climate science in their journalism.

Importance of Examining the Role Local News Plays in Influencing Public Perception of Climate Change

Discourse on climate change coverage in Canadian media, and more specifically local Alberta media is particularly limited. Gunster (2011) argues that there is a lack of scholarly coverage on news media's influence on climate change perception at a local level, particularly about the Alberta oil sands. He indicates that major gaps exist in the field because scholars tend to focus on global or national media outlets. He notes that this is also the case for the United Kingdom and the United States. Although some studies have followed Gunster's call for more research attention, the importance of local media remains insufficiently emphasized and recognized. Studies on news media coverage of climate change still often focus on the topic at a national level. In Canada for instance, researchers will commonly study national news sources like the CBC, the Globe and Mail, and the National Post.

Local publications play a pivotal role in shaping public opinion on complex issues. Local media also serves as a link between governments, corporations, or scientists, and the stakeholder communities, where they play their role in passing along the information to advocate for certain interests (Lawlor & Gravelle, 2018). Because of this connection with knowledge from "elites"

and through the use of selected narratives, local news sources undertake the role of a political actor (Bowden et al., 2018).

Climate change predominantly impacts local communities, yet there is a lack of commitment to the issue (Bowden et al., 2021). Local news media often acts as the primary communicator of environmental-related issues for these communities. It is the main source of information for regional environmental events, upcoming infrastructure projects, and any other news that may impact the lives of individuals (Lawlor & Gravelle, 2018). National news can sometimes neglect local angles of an issue. For instance, in Papineau and Deacon's (2017) study, national newspapers rarely discussed the development of the Athabasca oil sands project and its regional economic impact, whereas local news media would repeatedly feature these stories. The authors argue this helps generate support for a particular political discourse and does not provide the public with a balanced perspective of the implications of the oil sands on both a local and national scale.

In their study on how the media influences public engagement towards climate change, Cross, Gunster, Piotrowski, and Daub (2015) confirm that localizing news coverage motivates higher engagement and mobilization towards the issue. If climate change news coverage is produced in a way that is relevant to a local region, the public becomes more engaged as the issue is simpler to digest and becomes relatable (Cross et al., 2015). The public's interest and effort to fight climate change is dependent on their perception of the impact it has on their local environment and the actions they could take within their own surroundings (Gunster, 2011). Cross et al. (2015), also note that narratives presented in these stories influence the perception of climate issues. For instance, stories about successful climate activism and political mobilization inspired the study's participants, which the authors claim will reduce the cynicism surrounding

the issue. A combination of local impact narratives and positive political engagement stories will help eliminate cynicism that inevitably leads to inaction (Cross et al., 2015). By reducing cynicism among a public audience, it develops increased trust and optimism towards climate issues (Cross et al., 2015). To motivate public political action, people need to see themselves at the heart of the solution. When news provides practical information for the public on how to become politically engaged with an issue, they are more likely to become involved (Cross et al., 2015). Localized environmental news often leads to empathy and enthusiasm of a community (Cross et al., 2015) making regional news media an instrumental actor in climate communications. The way local news media communicates an issue can directly influence public participation in politics.

Local news coverage on climate change can also have the reverse effect on public engagement. Gunster (2011) critiques British Columbia's local news media for exacerbating the fear of climate change which ultimately leads to less willingness from the public to commit to action. With the narratives they present, news sources will frame climate change as an unsolvable problem with no conceivable solutions, as the issue is too large (Gunster, 2011). His study's results prove that narratives presented in local journalism have a direct impact on public engagement. Gunster analyzed the narratives used in British Columbia news coverage during a prominent global climate change summit, the 2009 Copenhagen Conference. He found that if news is framed as something outside of our control, it will result in public lack of interest or even denial. However, when climate change is framed as a challenge within our capacity to control, it will inspire innovation brought by individuals and communities. These studies prove the power of framing with its influence on public perception, and how localizing news is an effective way to engage the public.

Research Questions

The literature review identified the importance of researching environmental news coverage as well as acknowledged the gap in research on local news perspectives. In order to address these gaps, as well as add to the existing literature on news framing of climate change, this Major Research Paper will answer the following questions:

RQ 1: What narratives do Alberta's local news media present through the way it covers the construction of the Keystone XL Pipeline?

RQ 2: Does Alberta's local news media adopt a victim narrative that influences support for the oil and gas industry?

I will investigate whether various news sources use narratives in their online news to persuade the public into supporting the oil and gas industry and widespread extractivism.

Methodology

This study is a content analysis of Alberta's local news coverage on the construction of and the politics behind the Keystone XL Pipeline from December 20, 2020, to February 20, 2021. The date range in this study is significant because it encompasses the inauguration of a democratic leader in the United States, President Joe Biden. Biden made a campaign promise to cancel the construction of the Keystone XL Pipeline and rejoin the Paris Agreement on day one of his presidency (Gardner & Lefebvre, 2020). He was able to successfully achieve these goals through an executive order during his first day in office on January 20, 2021. The Keystone Pipeline heavily relies on the United States' involvement, as it is a cross-border pipeline.

The date range for this study includes news coverage from one month before his first day in office, which encompasses any pre-inauguration coverage from the Alberta media on a Joe Biden presidency, and February 20, 2021, which is one month after Biden's first day as President, which will include any post-inauguration coverage by local publications.

The following section will provide a framework of the methodology used in this study to answer the above research questions. First, I describe the data collection approach, implications of the study, and provide an in-depth explanation of exclusions. I then outline the narratives that will guide me through my analysis of Alberta's local news media.

Data Collection Approach

Articles were collected for this study using Nexis Uni by LexisNexis, an academic research database that can filter news articles from specific publications throughout a chosen time period ("About LexisNexis", n.d.). The Nexis Uni database ensures an accurate search of the chosen dates and keywords and is not influenced by location-based or other algorithms,

which would occur if Google News, for instance, was used. The selected publication websites have limited filtering capabilities which is why they were not selected as the basis for the search.

In my Nexis Uni search, I incorporated various filters. This included setting a date range of December 20, 2020, to February 20, 2021; selecting Canada, then Alberta under the *Location by Publication*; and filtering the *News Source* as “The Calgary Herald (Alberta)”, “Red Deer Advocate”, and “The Lethbridge Herald”. I searched for the phrase “Keystone Pipeline Biden”, using this set criteria to narrow down the articles to only what is relevant to my research. I included Biden in my search parameters so that the software would only display articles that discuss the Biden presidency and its implications on the Keystone XL Pipeline.

The corpus is comprised of a total of 54 articles from three different local news media sources in Alberta. This included 28 articles from the *Calgary Herald*, which is owned by Postmedia, 17 articles from the *Red Deer Advocate*, which is owned by Black Press Media, and 9 articles from the *Lethbridge Herald*, which is owned by Alta Newspaper group.

The *Calgary Herald* was selected as an urban news source. It remains a major daily news publication in the province of Alberta, and Postmedia is one of the top news organizations across Canada (Chen, 2019). While Postmedia owns multiple large news publications in Alberta, including the *Edmonton Journal* and the *Edmonton Sun*, the *Calgary Herald* is the most widely consumed publication from this owner in this region (Gunster & Saurette, 2014), which is why it was selected as the urban news source. The *Red Deer Advocate* and the *Lethbridge Herald* were considered as rural, more niche publications in this study. By including both large and small newspapers, I hope to gain a more balanced perspective of local Alberta news coverage. As previously mentioned, there is currently a lack of dedicated attention toward local news influence

on public perception of climate change, particularly in the province of Alberta. This guides my selection of news sources to analyze.

The initial Nexus Uni search consisted of a total of 134 articles. All articles were reviewed to ensure their relevance to the study. Articles that were selected for the corpus substantively discussed the keystone pipeline project and President Joe Biden's cancelling of it. Various types of articles were excluded from the study in order to only analyze those relevant to the research question. For instance, articles that only focused on the stock market impact, the financials or business of oil corporations, or articles that solely discussed investment advice were eliminated. Pieces that strictly discussed American politics and had no relation to Canada or Alberta were also removed. If the main theme of the article was not regarding the pipeline, it was excluded.

The outlier analysis left the corpus with a total of 54 articles. Articles were taken from all sections of the publication, including opinion and columnist pieces. However, interview transcripts, letters to the editors, and any other general public written posts were eliminated from this study. Finally, articles consisting of less than 300 words were excluded because they did not provide substantive content for textual analysis.

Table 1: *Outlier Analysis Results*

Publication	Before Analysis	After Analysis
Calgary Herald	67	28
Red Deer Advocate	50	17
Lethbridge Herald	17	9
Total Articles	134 Articles	54 Articles

This data collection approach contains three possible implications. First, Postmedia, and more specifically the *Calgary Herald*, have been publicly known to have ties with the oil sands industry (Dusyk et al., 2018; Chen, 2019). Although the publication has a mandate to provide an objective analysis of event news to the public (Gunster & Saurette, 2014), it can be assumed that this news source will lean more towards a supportive stance on the oil sands industry and pipeline construction. Second, although the Edmonton Journal and Edmonton Sun are among the top newspapers in Alberta, they were removed from this study because of their ownership. Publications under Postmedia may share information or have the same stories across the papers and therefore would not provide any additional insight to this study (Dusyk et al., 2018). Finally, some articles were authored by the Canadian press, which provides content for a variety of publications all across the country (“Our Story”, n.d.). The publications selected in this study do not employ these journalists, however, they did willingly publish these stories which is why they were included in the content analysis. The goal of this research is to decipher the narratives presented to the public by the three publications as well as if and how these sources differ from each other.

Content Analysis

The development of the codebook for this study was guided by various research that was previously presented in the literature review. This section will provide an in-depth discussion of the categories of frames that were used in the content analysis in order to understand the narratives these publications are presenting to their readers.

After my initial data refinement, I pursued a second content analysis, using the following narratives and content types. Each article was thoroughly examined and coded as “Yes” or “No” for each category. The frame categories include economic risk and benefit frames, environmental

risk and benefit, victim narratives, political conflict frames, health and safety risk frames, moral obligation narratives, and the use of quotations by various stakeholder groups. These categories were developed based on studies from Dusyk et al. (2018), Gunster and Surette (2014), and Young and Dugas (2012). This analysis will assess these various frames used in local media coverage in order to gain some insight into what is being presented to the public.

Economic Risk and Benefit Frames

Guided by the research of Dusyk et al. (2018), this category was divided into two sections: economic benefit and risk. Economic benefit was coded when an article contained discussion on the economic value of the pipeline or its revenue for Canada, the province, and its people. It also included mention of job creation, and discussion regarding international investment in the pipeline, and the economic benefits that come with that.

The second subcategory in the economic frame section consisted of content that discussed economic risk or consequence. This narrative was coded when there was any discussion related to the economic consequences of cancelling the production of the Keystone Pipeline. This included discussion of GDP impact, job cuts, or any other financial implications related to cutting the project. This frame also included discussion of the debt that will be owed or the financial loss of Alberta and its taxpayers.

Environmental Risk and Benefit Frames

This category consisted of two subcategories. First, again guided by the research of Dusyk et al. (2018), was the environmental risk subcategory. This consisted of any reference to the ecological or environmental risk of building the pipeline or oil extraction in general. This also included mention of the harmful impact oil extraction and building pipelines have on the

environment and the ecosystems, including but not limited to air pollution risks, coastal risks, terrestrial risks, risks to species, etc. This discussion must extend beyond simply stating the cancellation occurred because of climate concerns surrounding the oil sands. The goal of this category was to uncover whether climate change and the impacts of the oil sands are widely presented in these local publications.

I extended this section further by incorporating an environmental benefit subcategory, which was for content that mentioned the environmental benefits of building a pipeline or discussion on how the oil sands are environmentally friendly. This section also included discussion on TC Energy's changes to the pipeline that made it more environmentally friendly.

Victim Narratives

I assessed the use of a victim narrative throughout each article in the corpus. Extending off the research of Gunster and Surette (2014), victim narratives include language that suggests Alberta and its citizens are victims of environmentalist groups, politicians, policies, or other actors. It also includes any language that casts environmental advocates as extremists or elitists. It is the discussion of tensions between the province and its citizens, environmental critics, pro-environment politicians, or the "radical left". Finally, this category includes mentioning that these actions are implicating the needs and interests of Alberta's citizens or Canadians at large.

Health and Safety Risk Frames

This frame category consisted of any mention of the health and safety implications oil extraction and the building of the pipeline has on surrounding communities, such as surrounding Indigenous communities. Oil extraction sites are often close to the homes of Indigenous communities across the country (Chen, 2019). Environmental, human, and Indigenous rights

advocates have been sounding the alarm on this practice because of the severe health implications that can arise because of toxic oil extraction (Chen, 2019).

Political Conflict Frame

The next areas of analysis are influenced by the coding strategy used in Young and Dugas' (2012) research on climate change coverage in Canadian English and French print media. I looked at the use of political conflict frames, in which news articles referenced issues related to the pipeline or climate change are attributed to political disagreements or policy tensions in Canadian party politics. It also includes mention of political tensions between Canada and the United States and what implications this type of conflict has.

Moral Obligation Narratives

I explored the use of a moral obligation narrative, which discusses the argument that it is morally wrong not to address climate change (Young & Dugas, 2012). This includes any discussion on moral obligations to future societies, religious obligations, etc.

Use of Quotations

Finally, I examined the use of quotations throughout the stories. This category was divided into three subcategories: Quotations from scientists, environmentalists, or climate experts; quotations from the public sector, which included politicians at all levels of government, or a public servant who represents a governmental department; and finally, quotations from those connected to the oil sands or pipeline industry, such as members of TC Energy, the corporation that currently owns the Keystone pipeline. This did not include former oil industry executives or politicians to only focus on the main stakeholders of the project.

Table 2: *Summary of Coding Guidelines*

Category	Coding Scale	Coder Guidelines
Economic Risk	Y = “Yes” N = “No”	Discussion related to the economic risk or consequences of cancelling the production of the Keystone Pipeline, i.e., GDP, job cuts, provincial debt, or any other financial implications, etc.
Economic Benefit	Y = “Yes” N = “No”	Discussion on economic value or revenue for Canada, the province, and its people, mention of job creation, mention of importance of international investment, etc.
Ecological Risk/Consequence	Y = “Yes” N = “No”	Reference to ecological risk of building the pipeline or oil extraction in general, i.e. harmful impact oil extraction and building pipelines has on the environment and the ecosystems. Including but not limited to air pollution risks, coastal risks, terrestrial risk, risk to species, etc.
Environmental Benefit	Y = “Yes” N = “No”	Reference to the environmental benefits of building a pipeline or the oil sands being environmentally friendly, i.e., safe oil transport, environmentally friendly pipeline, etc.
Victim Frame	Y = “Yes” N = “No”	Language that suggests Alberta and its citizens are victims of the actions of environmentalist groups, lobbies, Canadian politicians, Biden or American politics, policies, or other actors.
Health and Safety Risk	Y = “Yes” N = “No”	Discussion on the health and safety implications of oil extraction and the building of the pipeline has on surrounding communities, including but not limited to Indigenous communities.

Political Conflict Frame	Y = “Yes” N = “No”	Reference issues related to the pipeline or climate change are attributed to political disagreements or policy tensions in Canadian party politics or international conflict, i.e., between the US and Canada, etc.
Moral Obligation Frame	Y = “Yes” N = “No”	Discussion on it being morally wrong not to address climate change, i.e., moral obligations to future societies, religious obligations, etc.
Quotations from Scientists / Environmentalist	Y = “Yes” N = “No”	Includes quotes climate scientists or environmental advocates
Quotations from Public Sector	Y = “Yes” N = “No”	Includes quotes from the public sector, i.e., politicians at all levels of government, anyone who works in the government or represents a governmental department. Includes Indigenous equivalent, such as Chief.
Quotation from Oil Industry	Y = “Yes” N = “No”	Includes quotes from individuals or groups with connection to the oil industry, i.e., TC Energy CEO, lobbyists, other energy corporations, etc.

Findings

This presentation of results aims to answer the question of what narratives are presented in the news coverage of the cancelling of the Keystone XL pipeline. The findings are categorized into frame types. Table 3 summarizes the final results of the content analysis. Economic risk narratives were used most frequently across all publications. Political conflict and victim frames were the second and third most used frame types across the three publications. Health and safety frames and moral obligation narratives were never used in the articles examined. Finally, the majority of quotes within the sampled articles came from public sector figures over scientists or individuals from the oil industry.

Table 3: *Codebook Results*

Framing Type	<i>Calgary Herald</i>	<i>Red Deer Advocate</i>	<i>Lethbridge Herald</i>
Economic Risk	24 of 28 articles 85.7%	12 of 17 articles 70.5%	7 of 9 articles 77.7%
Economic Benefit	14 of 28 articles 50%	5 of 17 articles 29.4%	1 of 9 articles 12.5%
Environmental Risk	1 of 28 articles 0.03%	2 of 17 articles 11.7%	1 of 9 articles 12.5%

Environmental Benefit	11 of 28 articles 39.2%	2 of 17 articles 11.7%	2 of 9 articles 22.2%
Victim Narrative	14 of 28 articles 50%	8 of 17 articles 47%	4 of 9 articles 44.4%
Political Conflict	17 of 28 articles 60.7%	8 of 17 articles 47%	5 of 9 articles 55.5%
Health and Safety	0 of 28 articles 0%	0 of 17 articles 0%	0 of 9 articles 0%
Moral Obligation	0 of 28 articles 0%	0 of 17 articles 0%	0 of 9 articles 0%
Quotes from Scientist/ Environmentalists	0 of 28 articles 0%	2 of 17 articles 11.7%	2 of 9 articles 22.2%
Quotes from Public Sector	22 of 28 articles 78.5%	14 of 17 articles 82.3%	6 of 9 articles 66.6%
Quotes from Oil Industry	6 of 28 articles 21.4%	3 of 17 articles 17.6%	2 of 9 articles 22.2%

Economic Frames

Aligning with the research cited in the literature review, economic narratives were used most frequently in Alberta's local news coverage. These findings were expected because of the province's right leaning political tendencies and because the pipeline and oil extraction is a large piece of Alberta's economy.

Economic risk narratives were consistently used most frequently across all publications, with the *Calgary Herald* using them in 85.7% of articles in the data set, the *Lethbridge Herald* in 77.7% of articles, and the *Red Deer Advocate* in 70.5% of the articles. One *Calgary Herald* writer stated, "with the stroke of Joe Biden's pen, Canada lost billions of dollars that our economy needs now more than ever" (Bloomer, 2021). Comments that discussed job and economic loss occurred repeatedly across all publications, implying that Joe Biden's policies are attacking the industry. Highlighting economic consequences also often led to political conflict discussions, in which blame was placed on relations between Canada and the United States, or the federal government and the province of Alberta. "Politics has long surrounded this project", Chris Varcoe (2021d) writes in a January 20th article for the Herald. Many other sources argued that Prime Minister Justin Trudeau did not do enough to advocate for the industry.

As mentioned earlier, discussing economic consequence frames is a way to personalize stories. Those reading these local publications may have close ties with the industry as it is a major job source in the province. Many articles highlighted the loss of "\$1 billion of taxpayer money" as a result of the blocked pipeline, again personalizing the story (Corbella, 2021). Economic consequence frames were presented so regularly in news, it can be assumed that readers will have a higher likelihood of conceiving the event through this lens. As Valkenburg et

al.'s (1999) study suggests, news frames shape audience thoughts and give them direction on how to perceive events or complex issues.

Past research has found that Canadian media tends to focus on the economic consequences of climate change policy rather than the impacts on the environment. My findings align with the research outlined in the literature review that suggested Canadian media tends to focus on economic risk frames in their coverage of climate change, both locally and nationally. With this being said, emphasis was placed more highly on the negative economic consequences of cancelling the pipeline rather than discussing the positive economic benefits of building it. In comparison, the economic value of the pipeline was mentioned in 12.5% of Lethbridge's articles, 50% of *Calgary Herald*, and 29.4% of *Red Deer Advocate* articles. Most economic benefit narratives were presented as what could have been. For instance, a *Red Deer Advocate* article cited the Progressive Contractors Association of Canada, who claim the pipeline "would have generated as many as 60,000 direct and indirect jobs" (Healing, 2021a). It is likely that less emphasis was given to the economic benefit of the pipeline because of the time frame chosen for this study. Most articles were written as a reaction to the cancellation news, and its negative impact on the economy, which is likely the reasoning for the overall negative tone.

Victim Frames

After my content analysis of the three Alberta publications, the research indicates that victim narratives were frequently used in local news media. Across all publications in the corpus, there was a high use of victim narratives within storylines. In addition, there was a common linkage between economic risk narratives and victim narratives, presumably because of the strong economic tone of the sampled articles. Victim frames were used primarily in response to the believed economic consequences of the pipeline cancellation.

The *Red Deer Advocate* incorporated victim frames in 47% of articles, the *Calgary Herald* included them in 50% of stories, and the *Lethbridge Herald* at 44.4%. These results suggest that there is only a slight difference between publications with the use of victim narratives in their news.

As mentioned in the literature review, Gunster & Saurrette (2014) find that the *Calgary Herald* classified environmental groups as extremists when using victim narratives in their stories. Examples of this classification can be found throughout the articles. For instance, a January 22 *Red Deer Advocate* article recalled Premier Jason Kenney promising to challenge “global foes and environmentalists who seek to undermine Alberta’s oil industry” (The Canadian Press, 2021h). Derek H. Burney from the *Calgary Herald* claims: “Keystone XL has long suffered as the whipping boy for Hollywood celebrities and wealthy environmental zealots”, also known as environmental extremists (Burney, 2021). He also calls Biden’s decision “discriminatory” and “deeply disrespectful, if not insulting, to Canada” (Burney, 2021). Licia Corbella, from the *Calgary Herald* includes a quote from Ron Quintal, President of Form Mckay Metis Group Ltd., in which he states, “Alberta’s oil sands have had a bullseye on their back for a long time now... yet we have one of the best environmental and ethical practices that’s measurable” (Corbella, 2021). He also claims that politically “moderates” like himself have their “voices drowned out by loud populist rhetoric” (Corbella, 2021). Various articles across all publications cited a telling quote from the province’s Premier, Jason Kenney, who calls Biden’s decision to cancel the pipeline a “gut punch” to Alberta’s economy, and states that it is an “insult directed at the United States’ most important ally and trading partner” (Burney, 2021; Hackett, 2021b).

The victimization narratives exhibited in the sample connect to the research of Dusyk et al. (2018), in which they discuss the dramatization of the “us versus them”. In the case of this regional coverage of climate change and pipeline projects, the “us” is Alberta and its economically prosperous oil industry, and “them” as in climate scientists and environmental advocates. The oil industry and Alberta are portrayed as the victim because of language that suggests they are an unjustified target for those outside of the province. For instance, Smith (2021a) of the *Calgary Herald* writes, “as disappointing as U.S. President Joe Biden's decision on Keystone XL was, the bigger disappointment was the collective shrug from the rest of the country over its rejection”. This language emulates the “us versus them” mentality because it casts the rest of Canada as neglecting the people of Alberta. She also states that Alberta can no longer “put up with the apathy from the rest of the country...” in response to deliberation of Alberta separatism from Canada (Smith, 2021a). In his analysis of the cancellation, Braid (2021) makes a comment that suggests an “us versus them” mentality where “them” is both the United States and other Canadian provinces. He ends his article by stating, “Wednesday started with a glorious inauguration and ended with one hard knock for Alberta. Is this the only place on earth that has to pay for Donald Trump's exit?” (Braid, 2021b), implying that a Biden policy is only negatively impacting Alberta. News framing like this establishes a binary perspective of the issue, where readers are subject to narratives that preserve this idea that they are either with us (Alberta) or against us. Here Alberta is portrayed as the victim of the nonconcern from outside provinces and political bodies, where these groups refuse to acknowledge the supposed economic hardship the Albertan public is about to endure.

These narratives contribute to a populist ideological framework, which establishes one side as pure and innocent in the situation, and the other side as “the corrupt elite” (Schmidt,

2020). Populist rhetoric in news media is highly influential on the audience perception of an issue (Schmidt, 2020). It can therefore be assumed that readers may consume the news of the cancellation of Keystone XL through the same lens.

This binary perspective of the issue also links to the debate on the economy versus environment debate that is common in climate change discourse. In the articles examined in this study, an environmental protection policy is implemented at the expense of the economic success of Alberta. Alberta's economy is viewed as the victim of climate change mitigation.

Victimization narratives were commonly linked with economic frames throughout the articles in the corpus. For instance, Chris Varcoe (2021d) explains that the Keystone project became a symbol of “the battle by environments to limit projection growth in the oil sands”. With the very high use of economic frames used throughout each publication, it is expected that all other narratives and storylines will contain an overall economic tone. With this being said, the articles in the sample neglected to discuss alternative economic solutions in response to the decline of the oil and gas sector.

Overall, this study's findings conclude that there is a frequent “us versus them” mentality among coverage of the Keystone project as well as widespread framing of Alberta and its oil sands industry as the victim of outside criticism and policy.

Political Conflict

Continuing onto the other categories of frames that were studied, political conflict frames were used frequently across all publications. The *Lethbridge Herald* used political conflict language in five out of nine stories, or 55.5%. One author stated that Premier Kenney was “upset the U.S. wouldn't consult with Canada first before acting” (Healing, 2021b). The article also discussed the U.S government's unwillingness to converse with the province in order for them to

plead their case (Healing, 2021b). These examples provide insight into the presented storylines that suggest the province of Alberta is unhappy with the political situation between them and the United States. It implies that the lack of dialogue surrounding the cancellation and Alberta's inability to change Biden's mind is likely due to Alberta-U.S. relations, or even the Canada-U.S. partnership at large. The *Calgary Herald* used political conflict narratives in 60.7% of their articles, and the *Red Deer Advocate* in 47%, similarly to that of the *Lethbridge Herald*.

Dissatisfaction with Prime Minister Justin Trudeau's involvement appeared in various articles. For instance, Braid (2021b) paraphrases Premier Kenney who argues that Trudeau is not doing enough to advocate and stand up for the energy industry. Another article in this sample brought up province to province conflict citing that it is "every person and province to themselves" (Smith, 2021a). This was in response to an Angus Reid poll that found a high percentage of the populations from British Columbia, Quebec, and Ontario believe Canada should move on from the Keystone Pipeline (Smith, 2021a).

Valkenburg et al. (1999), confirm in their study that use of conflict narratives can harbour a distrust in the political system. Similarly to what was discussed in the previous section, these frames create this characterization of a victim versus those who are acting against them. In the case of the articles in the corpus, Alberta falls victim to Biden's actions and lack of consultation, to Justin Trudeau's inaction, as well as victim to the ideologies of other populations in this country. A binary perspective is again established throughout news when discussing political conflicts, whether that is with Alberta-US relations, US-Canada relations, or province to province politics, these groups are pitted against each other. These conflict narratives presented in the articles examined imply a lack of care and advocacy for Alberta from these outside groups and are linked to be caused by the politics surrounding the issue.

Research shows that frames shape public opinion, so it is likely the frequent use of political conflict narratives will leave audiences with the understanding that there are opponents to the interests of the people of Alberta. Conflict frames are said to exacerbate cynicism around an issue and can foster a distrust in politics (Valkenburg et al., 1999).

Environmental Frames

Following the analysis, it was discovered that Alberta's local media neglected environmental protection narratives in their journalism. A total of four articles discussed the role oil extraction and pipelines play in exacerbating the climate crisis. Two articles out of the entire sample provided the reader with a climate change statistic. A January 27th *Lethbridge Herald* article and a January 26th *Red Deer Advocate* article included the same quotes, likely because they were written by the Canadian Press or Associated Press. The first stat being from the 2018 U.S. Geological Survey which stated: "Extracting and burning those fuels generates the equivalent of almost 550 million tons (500 million metric tons) of greenhouse gases annually..." ("Biden to Pause Oil", 2021). The article also included a quote from Kieran Suckling, executive director for the Center for Biological Diversity, which read "The fossil fuel industry has inflicted tremendous damage on the planet. The administration's review, if done correctly, will show that filthy fracking and drilling must end for good, everywhere," ("Biden to Pause Oil", 2021). The other two articles that included environmental consequence narratives mentioned the oil sands as "very, very highly pollutant" (Braid, 2021a) and stated that it is "the fossil fuel emissions that are causing climate change" (The Canadian Press, 2021b). Various articles stated that the "climate crisis" was the leading cause of Biden's decision but did not go on further to elaborate as to why.

The results suggest that there is only minor to no differences between publications in their coverage of the environmental impact related to the Keystone XL Pipeline and the Alberta

oil sands. Most articles that discussed environmental risks of oil sands and pipelines or mentioned climate change just scratched the surface of the issue. Climate change dialogue was limited to brief mentions that the pipeline and oil sands don't support the fight against climate change or claims that environmental groups applauded Biden's cancellation, however, no further explanation was given. Neglecting environmental consequence frames gives space for strong economic benefit narratives.

Environmental risk frames were used virtually never in the *Calgary Herald*, only 1 out of 28, or 0.03% of articles. Yet, the environmental benefits of the pipeline were advocated for the most by any publication, at 39.2%. Journalist Derek H. Burney (2021) cited that "studies concluded the pipeline would have no material impact on greenhouse gas emissions". Another columnist from the *Calgary Herald*, Don Braid (2021), cited it as a "responsible project quite in line with the goal of fueling a medium-term green energy transition". Chris Varcoe (2021d) commented that TC Energy is committed to making the "Keystone XL the first pipeline to be fully powered by renewable energy". One article included a quote saying that it was "the greenest pipeline in the world" (Corabella, 2021). Many argue that pipelines are in fact the safest and most environmentally friendly way to transport oil from the oil sands to market, as truck, rail and boat are our only other options in North America (Conca, 2018). This explains why environmental benefit frames were so present in the sample.

While the articles heavily discuss the economic risks of cancelling the pipelines, they fail to consider the economic implications of future climate change related disasters. All across Canada rising temperatures and other climate change effects related to greenhouse gas emissions have led to massive floods and rising sea levels in some provinces, droughts and forest fires in others, heat waves and smog that lead to health complications, and other various disasters that

will continue to impact ecosystems and populations (Government of Canada, n.d.). Climate mitigation efforts are reported to cost Canadian municipalities \$5.3 billion annually (Insurance Bureau of Canada, 2020). It is important the cost of climate change should be considered in Canadian news coverage of the issue.

Health & Safety & Moral Obligation Frames

Health and safety as well as moral obligation frames were completely overlooked in the local news coverage. Both of these frame types were not used in any of the articles examined. While some articles may have briefly mentioned climate change, there was no discussion on the implications the oil sands have on the health of surrounding communities. The health and safety of Indigenous communities that surround these projects was completely neglected by these three publications. Oil sands extraction takes place close to Indigenous communities and exude toxins that affect the health and safety of individuals. Time and time again governments and the oil industry have prioritized profits and corporate interests over treaty rights and the health and safety of the surrounding communities (Huseman & Short, 2012). Past pipeline leaks have contaminated water supplies, soil, and other forms of natural habitats, including those of wildlife (Datta & Hurlbert, 2019). Leaks have been the prominent cause of poor air quality, leading to various long-term health conditions for those individuals in the surrounding communities (Datta & Hurlbert, 2019).

While the articles failed to discuss the health and safety implications of the project, various articles did incorporate discussion on how this will impact Indigenous jobs, as there was an intended collaboration on the project. A *Calgary Herald* article stated, “Indigenous people in Canada have become a \$785-million partner in the project” (Burney, 2021). While this partnership may be economically positive for a particular region, discussion of long-term health

effects on communities that will not be profiting from the project is completely overlooked. This relates to Roberta Laurie's research on Canada framing of "ethical oil", in which online propaganda campaigns have been advocating for Indigenous peoples working in Canada's oil sands, but, First Nations communities have been sounding the alarm on proposed pipelines across this country, including Alberta (Laurie, 2019, p. 175). One journalist from the *Calgary Herald* suggests that it is untrue that Indigenous people do not support the oil sands industry (Cobella, 2021). However, the cross-border pipeline impacts more than one community of people, so it is unfair to generalize the issue by suggesting it is false that Indigenous people do not support the project. This particular narrative can give the audience a false sense of welcoming support from the Indigenous populations of Canada.

The lack of moral obligation discussion is likely attributed to the lack of overall discussion on environmental impact, health and safety concerns, and lack of thorough discussion of climate change issues as a whole. Moral obligation narratives would require acknowledgement of climate change and dialogue that emphasizes the need to tackle the issue in order to protect future generations. Morality conversations will use crisis metaphors (Young and Dugas, 2012), which were absent from the articles in the selected time frame.

Use of Quotations

Examples of frames given throughout this study have been presented by the publications through the form of quotes. I argue the selection of quotes in an article are just as relevant to the research on frames as is the journalists writing. The inclusion of quotations is significant because it lends to this idea that Chen (2019) discusses in his research on the significance of legitimization. News media gives power to these sources and legitimizes their credibility and normalizes their opinions, in which audiences will be persuaded to believe.

Public sector quotes were used most by all publications. The *Calgary Herald* included them in 78.5% of articles, the *Lethbridge Herald* in 66.6%, and the *Red Deer Advocate* with 82.3%. This included quotes from Members of Parliament or the Legislative Assembly, Prime Minister Justin Trudeau, and most frequently Premier Kenney, along with various other public servants. These findings suggest the publications place high importance on the voices of political figures in this country when discussing economic, infrastructure, and climate change issues.

With the assumption that articles would have heavy economic leanings, I suspected there to be a low use of environmentalist or scientist quotes. This was found to be true. The *Calgary Herald* included zero quotes from this group type, the *Lethbridge Herald* included quotes in 22.2% of stories and the *Red Deer Advocate* used them in 11.7%. Conversely, oil industry voices were used in 22.2% of *Lethbridge Herald* articles and 17.6% in *Red Deer Advocate*. The *Calgary Herald* included quotes from oil industry stakeholders in only 21.4% of stories. This finding was rather surprising because of the publications' known ties to the industry.

These findings indicate that economic risk and political conflict frames were used most frequently by local news media in their coverage of President Joe Biden's cancellation of the Keystone XL pipeline. Environmental and economic benefit frames were used moderately across all publications. Finally, there was a low to non-existent use of environmental risk, health and safety, and moral obligation frames. With regards to my second research question, local news media in Alberta frequently employ victim narratives in their framing of the cancellation of the Keystone XL Pipeline.

Discussion

This MRP analyzed Alberta's local news media's presentation of the cancellation of the Keystone XL pipeline. The publications examined in the study act as political actors by presenting specific narratives to the public. This study found great authority is given to economic arguments over environmental science in these local papers. There were no major differences between publications in the overall way they framed the news of the cancellation.

Victim Narratives and Extractive Populism

This study uncovered a connection between the use of victim narratives and themes of extractive populism in Alberta's local media. Gunster et al. (2021), describes the use of contemporary pro-oil extractive populism as narratives that suggest the oil and gas industry serves as a "public good" and must be protected from the environmental elites (p. 61). The articles examined in this MRP perpetuated extractive populism narratives through their use of victim framing when discussing the cancellation of the Keystone XL pipeline. The news media successfully pitted the rest of Canada, and sometimes even the United States, against the wellbeing of Alberta, in the way they shaped the topic. This is a problematic tendency by the media because it neglects the reasoning behind the decision to cancel the pipeline as well as the root cause of the broader issue, that being climate change.

Through victim frame use, as well as high use of political conflict narratives, news coverage established a negative "us versus them" narrative. This will likely contribute to cynicism surrounding the issue of climate change. In his previous research, Gunster illustrated that when news media focuses on the lack of action from governmental bodies, it is more likely for the reader to develop apathy towards the issue (Cross et al., 2015). It can therefore be

assumed that readers will consume a cynical view of the issue because of this overall negative tone. It has also been found that positive political engagement stories lend well to readers (Cross et al., 2015), yet these publications fail to provide alternative local economic solutions to the “problem” of climate change policy impacting Alberta's industry. By showcasing these negative frames so frequently, it can be presumed that this will create mass cynicism and distrust of the government, among the public.

Economy vs Environment

Environmental risk narratives were completely neglected by the publications in the study. The news failed to provide information as to the reasoning behind the criticism of the oil industry, and what ultimately led to Biden’s decision to cancel the energy project. For instance, with the original Keystone pipeline system, tar sands oil has spilled over a dozen times, resulting in enormous costs for the cleanup of different environments (Denchak, 2021). These spills immensely impact water, air, and even agriculture because of the toxic nature of this oil (Denchak, 2021). These are impacts that extend beyond the province of Alberta, impacting particularly Indigenous and marginalized communities. Scientific voices were often ignored by Alberta’s local media in their coverage, as economic or political narratives led the analysis.

The economic narratives presented in the coverage did not provide a nuanced perspective of the issue, as they failed to acknowledge things like already existing job decline. A 2021 National Resource Defense Council report (2021) found that the Keystone project would have only created 2000 construction jobs over two years, which would decline once built. The local news was presenting a vastly different projection of the job creation potential, where they repeatedly suggested it would create 60,000 direct and indirect jobs (Healing, 2021a). Solely

focusing on the economic implication of the cancellation of the province of Alberta is irresponsible, especially when the economic picture of the situation is not entirely accurate.

Canadian news media need to stop perpetuating this false debate on industry versus the environment because one side no longer shares the same validity. As Gunster and Surette (2014) note in their research, news media, specifically the *Calgary Herald*, fail to acknowledge that the oil sands industry has essentially been free to act as they please because of the lack of monitoring of past infrastructure. If we want to see real progress on public engagement with climate change, media like the three examined in this study, must be held accountable for their role in preserving extractivist narratives.

Lack of Indigenous Representation in News Coverage

It is also important to note that there was a lack of representation of Indigenous voices throughout the articles issued by all publications, despite the disproportionate impact the project has on surrounding Indigenous communities. While Indigenous support for the project, and the supposed economic benefits, were discussed throughout various articles, only 2 of the 54 articles examined quoted a member of an Indigenous community. The articles neglected the health implications Indigenous peoples face as a result of the Alberta tar sands, and pipelines in general (Huseman & Short, 2012). This practice by the news media completely ignores the widespread call for ending tar sands expansion because of these negative implications on health and safety. Indigenous communities have been advocating for justice from the actions of Canadian and US governments that endanger their wellbeing (Huseman & Short, 2012). News media act complacent to the issue by underrepresenting Indigenous voices.

Recommendations for Future Research

The way people consume news is rapidly changing, so it is important to also analyze contemporary news platforms' role in supplying information on climate change. Social media is becoming a consistent news source for important regional and global topics (Diehl et al., 2019). It provides a space to share personal political engagement stories, which as research has shown, can influence others to participate in civic action. Social media can reach areas that traditional news tends to neglect (Diehl et al., 2019), and is capable of sharing stories of those most vulnerable to the impacts of climate change. Research attention should be given to journalistic coverage of climate change events through social media platforms, and its impact on public perception of the issue.

Independent, alternative media sources play an important role in offering different perspectives of an issue when mass media seems to be conforming to one ideology. While this may be a difficult task for the province of Alberta because of their media's connection to the oil and gas industry as well as conservative politics, the expansion of alternative media sources may be the solution to this challenge. Studies have found independent alternative media to provide a "much broader and more optimistic account of climate politics" (Gunster, 2011, p. 12). To further expand on Shane Gunster's (2011) work, future studies should also look at the role and influence alternatives sources have on political mobilization.

In addition to this, further research should be dedicated to the news media's role in validating government policies and infrastructure that have proven to have negative environmental consequences. With this, future projects should analyze how news media frames projects like pipelines as "environmentally friendly". As discovered in the sample articles in this MRP, news media will use greenwashing tactics in their coverage of the Keystone XL pipeline

by suggesting it is a beneficial piece of infrastructure for the environment. While strong research attention is given to greenwashing in corporate advertising, there is little dedication to the media's role in perpetuating greenwashing narratives.

Conclusion

The coverage of local media is often neglected in academic discourse on Canada-based environmental subjects. This study attempted to fill the gaps in scholarly literature by focusing solely on local newspapers in the province of Alberta and their journalistic tendencies with their coverage of Keystone XL and climate change at large. The findings of this study confirm that economic narratives are being heavily pushed in the media, even though what is being said may no longer be accurate. This study also found that victim narratives were heavily used to perpetuate an “us versus them” populist mentality that supports widespread extractivism.

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