2022

Framing of the Texas Snowstorm on Twitter

Colton S. Kovach
Georgia Southern University

Framing of the Texas Snowstorm on Twitter

An Honors Thesis submitted in partial fulfillment of the requirements for Honors in *Department of Communication Arts.*

By
Colton Kovach

Under the mentorship of *Professor Jeffrey Riley*

ABSTRACT

This study investigates Framing Theory as it pertains to Twitter as the modern social sphere for communication and acquisition of news. There isn't much work examining how the news frames the cause of global climate change on Twitter. This paper aims to study how five notable news publishers of different media political biases communicate through Twitter about the Texas Snowstorm that occurred in February, 2021. Through a content analysis of 119 tweets regarding a climate change induced storm of record-breaking, freezing temperatures; this study reveals the news's fixation on the effects of the issue instead of the causes.

Thesis Mentor:_____

Dr. *Professor Jeffrey Riley*

Honors Director:_____

Dr. Steven Engel

April 2022
Department of Communication Arts
Honors College
Georgia Southern University

Framing of the Texas Snowstorm on Twitter

Introduction

Climate change is an environmental threat facing the world, and we're already starting to see consequences such as global warming, rising sea levels, and melting glaciers. We're experiencing more natural disasters than ever before ranging from wildfires to hurricanes. According to the World Meteorological Organization, humans have experienced 3,496 natural disasters in the first decade of this century and only 743 in the 1980s, nearly five times less.

In 2020, NASA and the National Oceanic Atmospheric Administration confirmed that 2019 was the second warmest year on record since 1880. The United States produced the second highest amount of carbon dioxide (5.14 billion metric tons) in 2019 alone, and continues to be the second highest producer of carbon dioxide. Carbon emissions need to be reduced if we are to prevent the disastrous consequences that will come from climate change such as rising sea levels, more natural disasters, hotter summers, colder winters, increased pollen and allergies, etc. A study conducted by the Institute for Economics and Peace (2020) found that 1.2 billion people could potentially be displaced due to climate change by 2050 and that "the number of global natural disasters have increased ten-fold since 1960, increasing from 39 incidents in 1960 to 396 in 2019." (p. 49) According to NASA (2020), 97 percent of actively publishing scientists and some of the most influential science organizations agree in the existence of climate change and global warming, in addition to the belief that humans are the cause.

Regardless, even with scientific credibility the topic is highly polarized and is receiving little effort to resolve. Possibilities for our lack of tackling the issue lies in how information is perceived and interpreted by the public which is affected by the way information is manipulated and shared through the news. There are many factors that can determine climate change denialism, but this study focuses on the Framing Theory of messages put out in the media using agenda setting to conform to a specific political bias. Framing Theory is how a topic is discussed and presented to an audience, and the narrative used to tell the story (Arowolo, 2017). Through the media topics are presented in a way that fit their bias and beliefs. This study used content analysis with a developed codebook to investigate the frames used by five news sources. This study examined the potential that media coverage of a climate change-caused disaster reflects climate change denialism, and to see if there's evidence that oil company influence on the discussion is impacting the news coverage. An analysis of different artifacts on Twitter will uncover the understanding others have of the weight of the issue of climate change in relation to the Texas Snow Storm. The results of this study suggest that coverage of a climate change related disaster reflects a culture of denialism, especially in not connecting the disaster to its cause.

Framing influences interpretation and media organizations will encourage some interpretations or views while discouraging others. German philosopher Jurgen Habermas discusses the discourse of social issues in *The Structural Transformation of the Public Sphere (*1990*)* and *1983; Moral Consciousness and Communicative Action (*1983). According to Habermas, in modern capitalist societies, “social institutions that ideally should be communicative in character have come to embody a strategic rationality. Such

institutions are increasingly overrun by economic and bureaucratic forces that are guided not by an ideal of mutual understanding but rather by principles of administrative power and economic efficiency." He talks about various public social areas such as coffee shops being a place for people to freely discuss issues of society and influence political action, as well as the need for rational discourse of ethics in an ideal communicative community. In this case, Twitter is considered to be the modern public sphere. On Twitter you can say whatever you want as long as there is no impersonation, harassment and abusive behavior. The only "power" is in the amount of followers you have, so it should in theory be an equal ground for sharing thoughts.

This study investigated tweets from major news companies about the Texas Snowstorm, a winter snow storm that occurred in Texas in the first quarter of 2021, resulting in major power outages, energy issues, and questions as to how this could have happened. The Texas Snowstorm, referred to as Winter Storm Uri, was a massive winter snow storm that hit Texas on February 13, 2021. Close to 4.5 millions homes and businesses were left without power and more than 110 fatalities were reported. The storm comes from record-breaking cold temperatures many relate to climate change. The resulting coverage differed between blaming the Green New Deal, politics, politicians, wind turbines, etc.. The Governor of Texas himself blames solar and wind powered energy for Texas and warns of the Green New Deal (WFAA News, 2021). Though the Electric Reliability Council of Texas claimed there are no proven links between solar and wind powered energy causing the massive power outage of the energy capital of America (WFAA News, 2021). Texas is the only state with its own power grid due to a decision made in the 1930's the United States Government to allow the Federal Power

Commission to regulate interstate electricity sales (United States, 1934). The electric companies within Texas keep their business within the state to avoid Federal regulation. Many people blame this for the winter storm power outage, since Texas's power grid is almost completely privatized.

This study examined news organizations of different political biases to see how they frame the issue of the Texas Winter Storm.Examining variables in news coverage posted to Twitter can tell you about how the discussion of climate change in relation to the Texas Snowstorm are being framed, with the goal of being able to contribute to our understanding of the framing of climate change in the news. The ideological theory is that a healthy robust public sphere is needed to contribute to stopping of climate change, because it takes vast acknowledgement of the threat to influence action. Since economics are a top priority in our capitalist society, little action is likely to be taken unless there is a wide consensus that it needs to happen. This study revealed that of five news organizations of different political biases, there were few connections between the Texas Snowstorm and climate change in their coverage on Twitter. More coverage was given on the effects of the Snowstorm and assigning blame to others. The news only seems to know how to frame that in the immediate term, rarely discussing what caused the disaster or how to prevent further disasters.

Literature Review

Perception

Perception affects the way we view issues and how to solve them. Perception represents the selection, organization, and interpretation of a message (University of

Minnesota, 2016). In the case of climate change, perception plays a key role in the accuracy and whether or not people believe it to be a real threat. A study of 1071 respondents found that 44% of individuals are “very concerned” about climate change, 30% said “somewhat concerned,” 14% were “not too concerned,” and 9% were “not at all concerned” (Fletcher et al., 2021). The last 4% do not believe in global warming. That study involved conducting a survey collecting both quantitative and qualitative data that tests how people envision the future of the world years down the line in regards to climate change. They were also asked to rank seven global threats including climate change and then they answered a multiple voice question that ranked their concerns for future climate change risks. Climate change was the second overall rated threat behind terrorism. The researchers offered a framework that tried to indirectly test how the distant future could influence perceptions of climate change risk and found that self-reported ability to visualize the distant future and personal optimism were not good predictors of levels of concern about climate change but technological optimism was correlated to climate change concern. They found that people are more likely to predict positive futures as opposed to negative ones. Therefore it’s harder for people to imagine climate change consequences that will negatively impact their life. The findings of another study concluded much about other variables that affect the perception of the existence of global warming and anthropogenic global warming (Shao et al., 2016). In the research they found that long-term trends in summer temperatures influence perceptions of global warming and people who live in areas with long-term warming of summer temperatures that are combined with long-term cooling of spring temperatures are significantly more likely to perceive that global warming exists and is due to human

activity. Increasingly hot summers improve people's perception of the existence of global warming. They also found that your geographic location affects perception. The attitude people have towards science and scientists affects their perception of global warming too, so those that are more trusting of scientists are generally going to believe them when they say that global warming exists and is an anthropogenic issue, while others are less trusting of scientists and find that they do more harm than good. Your religious beliefs and demographic characteristics also affect your perception and researchers found that white Evangelical Christians are less likely to perceive global warming as a threat or anthropogenic issue and older individuals are more skeptical of global warming than younger. Women are more likely to believe there is anthropogenic global warming than men. Socioeconomic characteristics can also affect perception, as researchers found that wealthier people are less likely to perceive global warming as an existing issue let alone an anthropogenic issue generally because they know how expensive it is to try and combat, while those of less wealth perceived global warming as an anthropogenic issue. Global Warming has become highly politicized as researchers also found that political dispositions are one of the strongest factors of perception of global warming and that people rely on their political dispositions when it comes to interpreting global warming. People who don’t like government interference as much tend to perceive global warming as less of a problem because acknowledging global warming would lead to more government spending, a carbon tax, and government regulations. These types of people tend to lean right on the political spectrum. The study also found that Republicans are less likely to perceive anthropogenic global warming. The relationship between perception and this study finds that perception is heavily influenced by framing theory.

Framing theory reveals the frames used by news publishers to influence how people interpret the event. By examining perception, what is being analyzed are the expected perceptions as a result of the frames discovered. Perception aids the study in uncovering the goals of the news publishers in relation to their news coverage of the event.

Framing Theory

How a topic is discussed in the news can determine how it's interpreted, known as Framing Theory. Framing Theory, theorized by sociologist Erving Goffman, argues that people "locate, perceive, identify, and label" experiences in life (1974). A lack of tackling or understanding issues lies in how information is perceived and interpreted by the public which is affected by the way information is manipulated and shared through the news. The politicization of news changes the frame of the subject and has different rhetoric compared to that of scientists, such as misinformation campaigns through political advertisements. The way politicians frame and discuss climate change downplay the severity of the issue. Politicians discuss the judgements and remedies of climate change while scientists focus on emphasizing the problems and causes of it. (Kurtz, 2019). The rhetoric used by politicians spreads misinformation and doubt about climate change. In fact, conservative agents tend to downplay climate change's severity and even doubt its existence (Shao et al., 2016).

In the case of the media, conservatives spread misinformation about climate change that affects the perception of their viewers. (Shao et al., 2016). As in the case of the study by Tandoc (2018), when Pope Francis confirmed climate change's existence and the importance of stopping it, Fox News downplayed climate change while simultaneously praising the Pope. Many conservatives are Catholics, and conservatives

tend to deny climate change according to a study done by the Pew Research Center (2020) that found 45% of conservatives see climate change as a minor threat and 24% don't find it to be a threat at all, so Fox News being a right leaning news outlet framed climate change as nonexistent while providing comforting words about the pope to conform to their audience's views. (Media Bias Chart 7.0) Fox News commentators were able to avoid two conflicting ideologies to cater to their conservative bias and conservative viewers. Political leanings influence how or the extent to which a newspaper covers climate change. Conservative news outlets reduce concern for climate change in the United States (Tandoc, 2018).

The framing of climate change in the news shapes the perception of its audience due to political bias of the news outlet. In Bohr's (2020) research of 78,000 articles he found that topical focus varies by partisan orientation, scale of operation, and climate vulnerability. He effectively concludes that political leaning influences how or the extent to which a newspaper covers climate change. Another finding is that conservative news outlets more often cover topics surrounding corporate activity and how climate change may impact profits, while liberal news outlets more often report the effects of climate change (Bohr, 2020). The limitations to this study are that there have been other platforms for news such as social media and tv so it can't be confirmed that the trends found in traditional newspapers would be the same. The analysis doesn't assess how accurately newspapers reported scientific research on climate change.

In order to understand how the media portrayed the 2015 United Nations Framework Convention on Climate Change Conference of the Parties in Paris, researchers assessed 2,580 articles that appeared during the two weeks November

29th-December 13th, 2015 of the conference in the online versions of the two or three leading print newspapers in four developed countries, six emerging economies, and three developing countries. (Kurtz, 2019). Countries that were chosen reflected a wide range of geographic locations and levels of economic development and were also considered to be "major emitters and significant players" at the conference. Researchers chose the United States, France, UK, Australia, India, China, South Africa, Brazil, Bolivia, Nigeria, United Arab Emirates, Indonesia, and Bangladesh. For each country two to three national, daily newspapers were selected. Their choices were constrained by the strength of each country's media and access to legitimate online newspaper source archives. In addition, the popularity of print news has declined in favor of other types of news delivery such as television or internet-only publications. They found articles using a search of the terms "climate change" and "cop21". The research found that news publications discussed negotiation updates, effects of climate change, civil society engagement, mitigation, and public figures more than any topic, with mitigation being the most prevalent. There was little coverage of adaptation to climate impacts and far higher coverage of emissions reductions (mitigation). Print stories largely were updates on the talks, or focused on activists, the actions of world leaders at the conference, and the environmental effects of climate change. Online coverage by print news organizations was heavily skewed towards the developed world with little discussion of the most vulnerable countries or the issues that are important to them.

These trends highlight the persistence of journalistic norms that seek to emphasize drama, novelty, and balance in news coverage. For each of the news organizations Antilla reviewed the top five overall topics which ended up being negotiation updates, effects of

climate change, civil society engagement, mitigation, and public figures. This article aids my research by providing me with evidence of news outlets reporting poorly on an important event about climate change and how they framed the event. In my study of Texas I will also be looking at how the 2021 Snow Storm event was framed by the media and politicians. Antilla found that journalists emphasized the events and didn't focus on fixing the problem. Instead they published pieces that emphasized dramatics and the quotes of politicians and activists. There are very few studies of Framing Theory in relation to the social sphere of Twitter. This study adds to the understanding of the theory as it pertains to computer-mediated communication via Twitter. According to a survey study done by Twitter, 86% of Twitter users say they use Twitter for news, and 74% use it for news daily (Ivancin, et. al., 2015) The relationship between Framing theory as it applies to TV news and online news can be further investigated.

Media Political Bias

Literature on Framing Theory clearly indicates that political bias within news coverage can alter how that coverage is interpreted. Using the Ad Fontes Media Bias chart mentioned earlier, one can view where each news outlet lies in political bias ranging from "most extreme left" to "most extreme right," with other levels of bias in between

such as hyper-partisan left, center (little to no bias), or skewed right.

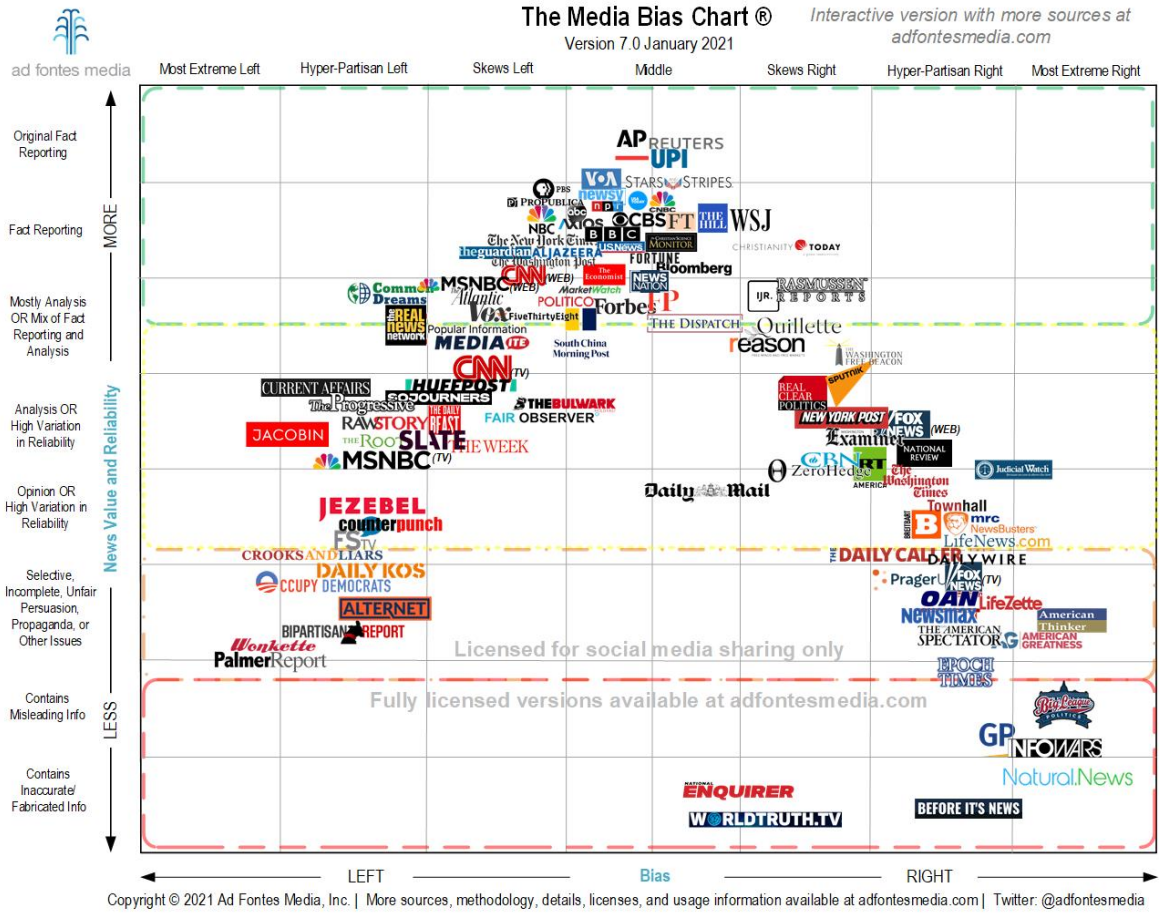

Figure 1: The Media Bias Chart, Ad Fontes Media, Inc.

The chart also ranks the value and reliability of the news outlet, in which factual reporting is important to take into account regardless of political bias. In the study of Fox News Anchors and the way they framed information regarding the Pope's stance on climate change through mass media, researchers found that they maintained the predetermined political bias of Fox News and it's viewers. (Tandoc et al., 2018). Fox News TV lies in the cross section of "hyper-partisan right" political bias and "Selective, Incomplete, Unfair Persuasion, Propaganda or Other Issues" news value and reliability. With that being said, it comes as no surprise that the news anchors avoided the discussion of the Pope and climate change to conform to the political bias of the news channel which

in turn receives viewership from an audience of a similar if not the same political leaning. A study done by Krishna (2021) found that 45.16% of climate change deniers receive their news through broadcast television, 7.74% receive their news through facebook, 14.52% through the radio, and 13.87% through the news online. These numbers show just how much different outlets of news affect the perception of non believers. One study for instance mentioned that "many studies concern how news organizations translate the complexity of climate science to their lay audience." (Bohr, 2020, p. 2). In this study they found that conservative news sources covered news regarding climate change that dealt more with topics of corporations and climate change denialism. While liberal news outlets mentioned more on the topics of the Environmental Protection Agency, the Arctic Region, and ocean and sea levels. More moderate news sources covered energy infrastructure, weather, and ocean and sea levels. In order to be media literate it's important to understand political bias because that bias influences the framing of news topics. Media bias directly affects the goals of the news publishers and is used in this study to select the five Twitter accounts. With concern for media bias, a balanced set of accounts from various political biases prevents the results from being biased. Analyzing multiple biases eliminates concern for skewed results and allows for an interpretation of the accounts separately and as a whole. The results exhibited a connection between framing theory and the political bias of the media accounts.

Research Questions

How does Framing Theory apply to the social sphere of Twitter?

How is a climate-change induced event discussed and described by the media?

Hypothesis

H1) News organizations will frame the Texas Snowstorm as it relates to politics.

H2) More politically conservative news media will contain more aspects of climate change denialism in the framing of coverage of the 2021 Texas winter storms.

H3) Politicians and wind turbines are hypothesized to receive the majority of the blame for the Texas Snowstorm and its effects, more so than other factors such as climate change.

Methodology

For this study, 119 tweets were chosen from five Twitter accounts of different political biases to be analyzed. Before news outlets could be chosen, the political bias had to be taken into consideration. To make this selection I utilized the Media Bias Chart 8.0 (September 2021) which graphs media outlets based in the United States on a static chart determined by their News Value/Reliability and Bias.

Fox News was chosen to represent a media outlet that skews right with its counterpart being CNN which skews left. As noted in the graph, the web version of both consist of a higher variation in Reliability as opposed to the TV versions but are still considered to be slightly biased politically. CBS was chosen to represent a non-biased entity with high reliability of factual reporting. NewsMax will represent the Hyper-Partisan Right, while MSNBC was chosen to represent the Hyper-Partisan Left. This study hopes to speak to the accuracy of the Media Bias Chart by comparing known dynamics among climate change denial and political ideology in news coverage.

Choosing organizations from their respected place on the media bias chart indicates that the frequencies of each variable in the codebook will be different amongst

the news organizations. Different frequencies of variables of each news organization were expected in the outcome of the content analysis. Previous research suggests that political bias influences the framing of stories in the news.

To understand the framing of the respective news outlets, I utilized the quantitative content analysis method. To be as accurate and specific as possible, tweets were selected using Twitter's API search feature from the five news organizations in regards to the topic of the Texas storm now known as the 2021 Texas Power Crisis. In February 2021, the state of Texas suffered a major power crisis, which came about as a result of three severe winter storms on February 10–11, 13–17, and 15–20 which resulted in a shortage of water, food, and heat for many Texas residents. This disaster became a highly controversial topic for politicians, the media, and scientists alike. Key search terms for this method include "Texas Blackout," "Texas Snowstorm," "Texas Power," "Texas Energy," and "Texas Winterstorm."

One-hundred-nineteen tweets were collected using Twitter's API search method in which screen capture was used to choose tweets and included images + links. The oldest collected tweet is dated February 11, 2021 and the youngest Tweet is dated March 25, 2021. The tweets reflect a posted time period of February 11 - March 25, 2021.

Twenty-one variables were chosen to reflect the framing of the Texas Snow storm. This large number of variables were chosen because of the wide range of topics collected in the study. The essence of Framing Theory work is to find out how something is being positioned in the news. In order to discover that framework, a lot of variables were needed. Variables will represent politics, threat level, focus on the snow storm or

changing the topic, and representation of the event. Some of the variables also reflect causes and effects of the event which directly affect the framing of the topic.

Climate change and wind turbines being examples of causal frames, and variables such as *power* to reflect the effect of the event on electricity. The effects of the event are expected to be dramatized. The causes of the event are expected to be framed less often than the effects because the effects are more attractive stories. The results should add to the framing theory and show how the twitter media accounts frame stories in a more dramatic light instead of informing the social sphere of the root causes of the issue.

Variable *photo* represents any tweet that has an attached image. V*ideo* represents any tweet that has an attached video. *Links* represent any tweet with an attached link. *Quotes* represent tweets with quotes of other people. *Personal stories* represent tweets about personal experiences. *Weather* represents tweets mentioning any form of weather. *Climate Change* represents tweets mentioning climate change. *Politician* represents tweets mentioning a politician. *Energy/Energy grid* represents mentions of the energy grid or energy in reference to the grid. *Electric bill* represents stories that mention the effects of the snowstorm on electricity bills. *Politics* represents tweets mentioning any form of politics. *Hero story* represents tweets about heroic deeds. *power grid* represents mentions of the power grid. *Deaths* represent tweets mentioning deaths. *Electric reliability council* represents tweets mentioning the electric reliability council. *Crisis/disaster* represents tweets framing the event as a crisis or disaster. *Power* represents tweets mentioning power outages or electricity issues. *Wind turbine* represents tweets mentioning wind turbines. *covid 19* represents tweets mentioning anything related to the COVID-19 pandemic. *Manmade* represents tweets mentioning the words

"manmade" or associating the event with man made factors. *Clean water* represents tweets with any mentions on the issue of clean water.

All of the variables are coded after using the search terms, "Texas Blackout," "Texas Snowstorm," "Texas Power," "Texas Energy," and "Texas Winterstorm." After creating the codebook, intercoder reliability was tested to check the reliability of the codebook and instructions. Two independent coders were used. A subsample of 13 tweets were selected to represent 10% of the overall sample. The results of intercoder reliability testing showed a percent agreement calculation of greater than 90% for all but one variable: politics, which came in at 84% agreement. Tightening of the language to clarify that the variable was primarily looking at legislative policy and not individual politicians helped bring the percent agreement over 90%.

Percentages were calculated and analyzed to produce the results and discussion. Some tweets weren't counted if they were duplicates in nature.

Results

Of the 119 tweets collected during the specific time frame of the Texas Snowstorm, 32 tweets were from MSNBC, 10 from Fox News, 39 from CNN, 31 from CBS, and 7 from News Max. There was not a specific number of tweets needed from each variable for this analysis and the frequency represents how many times they covered the story.

Climate Change was only mentioned in 8% of all of the tweets combined. This suggests that climate change is rarely connected to the Texas Snowstorm on Twitter via media outlets. Power outages and the weather represented the highest percentage of frames. The weather is mentioned in 75% of total tweets and power is mentioned in 47%

of total tweets, indicating the weather as the most frequent frame. 64% of tweets included visual representation of the event through the addition of a photograph. 24% of tweets include videography of some form and 73% include links to the full news article.

23% of tweets framed the snow storm as a crisis or disaster and 13% of tweets mentioned death. 48% of Crisis/disaster frames are tweets by MSNBC, and 26% are by CNN. 19% of those frames are by CBS and the remaining 7% by Fox News. Newsmax's tweets have zero frames of crises. The framing of death as the topic of the tweet is spread evenly among the news organizations with less than four mentions by each organization. Newsmax is the only news organization to not mention death. 13% of total tweets represented stories of ordinary people doing heroic acts and 15% of total tweets made the focus of the Texas Snow Storm about a person's personal story or struggle.

Only 3% of tweets framed the Texas Snowstorm as a man-made event. Similarly only 2% of tweets framed wind turbines as a possible cause. Instead, of 119 tweets analyzed, results indicate that 31% of tweets referenced a politician, and 20% of tweets framed the snow storm in Texas politically, representing politics in some manner.

The findings indicate that of all five media groups, twenty to thirty percent of the tweets are framed politically by relating the Texas Snowstorm to a politician or political story. The political bias of the framing wasn't examined but implications can be drawn by examining the Ad Fontes Media Bias Chart. At least 50% of tweets by CBS, MSNBC, and Fox News framed the Texas Snow Storm politically, either about politics or a politician.

The Electric Reliability Council were frames of 5% of tweets, however the power grid and energy grid combined represent frames of 15% of the tweets.

There were zero mentions of the Green New Deal so nothing on it was found.

Discussion

The frequency of tweets by the various news accounts represent the attention they want to give to the subject. Fox News and Newsmax have a low number of tweets, less than 10 from each, compared to CBS, CNN, and MSNBC which tweeted about the Texas Snowstorm more than 30 times each. These results indicate that Fox News and Newsmax gave less attention to the event and see it as a less important subject compared to CBS, CNN, and MSNBC. This can be interpreted as a commitment to the importance of publicizing the event from the three sources, and provides an opposing interpretation for Newsmax and Foxnews, that they don't see the event as newsworthy.

In relation, Fox News and Newsmax did less to frame the event as a crisis or disaster compared to the other three News accounts. A total of 23% of tweets includes these frames indicating the extremity of the event. This result is less than the hypothesized expectation of higher frequencies of disaster/crisis frames. This shows that conservatives agents do downplay the severity of the event, partially proving hypothesis 2. Hypothesis 2 isn't completely correct by these results. There's less coverage of the event but nothing specific to climate change denialism.

The variables *clean water, wind turbine, covid-19.* and *manmade,* were much less present as frames than anticipated with each variable appearing as a frame in 5% or less of the total tweets. Wind turbines and man-made features are two of the causes circulating in the media before this analysis was performed, but they were mentioned very little on Twitter. Due to the Texas Snowstorm taking place during the COVID-19

pandemic, COVID-19 frames were expected in the tweets, but the determined frequency does not represent the hypothesized frequency.

Power occurs as a frame far more than expected, in 47% of the total tweets. The variable represents the frequency of tweets that framed the Texas Snowstorm as a power outage crisis. With power outages being a result of the snowstorm, these results show how the most utilized frame has nothing to do with the cause of the storm. As hypothesized, the primary frame is in relation to the immediate effect of the issue.

Death was the frame of 13% of the tweets and isn't surprising since COVID-19 circulated during that time period and some of the deaths could be COVID-19 related.

The power grid, energy grid, and Electric Reliability Council were mentioned in 25% of the tweets. Similarly, this result represents the media picking blame for the event and relates to the frequency of politician frames with politicians featured in 31% of the tweets.

Photos and links were expected in the majority of tweets and this proved to be true. What the photos and links featured could be further studied to add to this content analysis. The use of photos however represents the use of visualization to frame the event for readers to see. Images can produce emotions and tell a story, which can influence a message.

The tweets about personal or hero stories all have attached images to show these people and further insists a relationship between the media and dramatism. The conclusive data represents the difference of priorities between what's interesting or attractive and what's important. The tweets represent little to no frames of the root cause of the issue and climate change is only mentioned in 8% of the tweets. The vast majority

of frames are that of politics, personal/hero stories, weather, and power outages. These frames do little to inform on the extremity of the issue.

The higher frequency of crisis/disaster frames might influence the extremity of the issue but can also be seen as Devil terms used to be attractive to the reader. Though the higher frequency is seen in the left and middle leaning news accounts which is as hypothesized.

Unexpected are zero mentions of the Green New Deal. The Green New Deal circulated television and online news but never reached the Twitter platform of any of the five accounts. Politicians were mentioned, but the frames focused more so on politics within the state of Texas proving hypothesis 1.

Politicians did receive much of the blame, but so did other variables including the Electric Reliability Council. Hypothesis 3 states that politicians and wind turbines would receive the majority of blame, but wind turbines were rarely mentioned so this hypothesis can't be entirely proven.

Based on the collected results and literature review, perceptual views of the event are likely to be limiting in the seriousness of the issue. While the event is frequently framed as a crisis or disaster, the most common frames are dramatized effects or political discourse with no relation to the cause or possible solutions to the issues. During a climate change-caused natural disaster, the news only seems to know how to frame that in the immediate term, rarely discussing what caused the disaster or how to prevent further disasters. With little to no education or information about the causes of the Texas Snowstorm, little action or significant change in perception is expected from the audience. As hypothesized, the event is highly dramatized in an assumed attempt to

provide attractive stories to their specific audiences. The frames discovered show no relation to climate change or how it is in relation to the Texas Snowstorm. The tweets showcase the event as forms of entertainment through the public sphere of Twitter.

Future Implications

The primary implication of a framing study is when news is framed a particular way, that means the audience will interpret it in a different way than "pure neutral." That means coverage that doesn't talk about the cause of a disaster is not informing the audience about how this could be prevented or at least mitigated.

The research reveals the politicization of climate change that reduces the perceived severity of the issue and limits the needed action to address the issue. The framing of the topic of climate change has been shown to consist of a certain rhetoric that doesn't tackle the problem, and examined were the variables that reflect this rhetoric.

Further research can be done to see what people think about the news that they watch. A study about why people like news of different biases would stand to find interesting results that might help discover more about the perception of climate change believers and deniers alike. A study into media literacy of individuals would be a helpful addition to this research.

Twitter is now a prime source of news for a lot of individuals; the modern public sphere. On twitter you can say whatever you want as long as there is no impersonation, harassment and abusive behavior. The only "power" is in the amount of followers you have, so it should in theory be an equal ground for sharing thoughts. Follower count wasn't examined in the conduction of this research. This factor affects the number of

people who actually see the tweet. An account with more followers is more likely to receive more views on their tweets than an account with less followers would.

Further research that surveys which of the examined variables are most important to a test group could expand the concluded results. With a cross-analysis, speculations of the relationship between the media's framing and the subjects important to their audience can be analyzed. While perception is studied in this thesis, the results could be further developed by examining what the perceptual views of the Texas Snowstorm are. This study doesn't account for science-based twitter journalist accounts that might accurately inform the public sphere of Twitter about the Texas Snowstorm. Science-based accounts might be unlikely to frame the event in the same light as the chosen news accounts because they're educational accounts that report on science.

Codebook

Photo	Includes a photo in the tweet
Video	Includes a video in the tweet
Quotes	Quotes someone specifically in the tweet
Personal Story	Tweet includes a story of someone's personal experience
Weather	Mentions the weather
Climate Change	Mentions climate change
Politician	Mentions or quotes a politician
Energy	Mentions energy
Electric Bill	Mentions electric bill effects
Politics	Mentions policy
Hero Story	Mentions a story about someone being a hero
Power Grid	Mentions the power grid
Deaths	Mentions deaths of others during event
Electric Reliability Council	Mentions the Electric reliability council
Crisis/Disaster	Mentions the words crisis or disaster
Power	Mentions power (electricity)
Wind turbines	Mentions wind turbines
Covid-19	Mentions Covid 19
Man-made	Mentions man-made causes
Clean Water	Mentions the effects on water

Bibliography

Antilla, L. (2005). Climate of scepticisms: US newspaper coverage of the science of climate change. *Global Environmental Change.* https://doi.org/10.1016/j.gloenvcha.2005.08.003

Bohr, J. (2020). Reporting on climate change: A computational analysis of U.S. newspapers and sources of bias, 1997–2017. *Global Environment Change*. https://doi.org/10.1016/j.gloenvcha.2020.102038

Cook, J., Oreskes, N., Doran, T. P., Anderegg, L. R. W., Verheggen, B., Maibach, W. E., Carlton, S. J., Lewandowsky, S., Skuce, G. A., Green A. S., Nuccitelli, D., Jacobs, P., Richardson, M., Winkler, B., Painting, R. Rice, K. (2016). Consensus on

consensus: a synthesis of consensus estimates on human-caused global warming. *Environmental Research Letters, 11*(4). 10.1088/1748-9326/11/4/048002

Fletcher, J., Higham, J., & Longnecker, N. (2021). Climate change risk perception in the USA and alignment with sustainable travel behaviours. 10.1371/journal.pone.0244545

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience.* Harvard University Press. 1975-09476-000

Habermas, J. *(*1990*).* The Structural Transformation of the Public Sphere*. American Political Science Review, 84(*967)

Habermas, J. *(*1990*). Moral Consciousness and Communicative Action*. Polity Press.

Institute for Economics & Peace. (2020). Ecological Threat Register 2020: Understanding Ecological Threats, Resilience and Peace. http://visionofhumanity.org/reports

Kennedy, B. (2020). U.S. concern about climate change is rising, but mainly among Democrats. Pew Research Center. https://www.pewresearch.org/?p=319435

Krishna, A. (2021). Understanding the differences between climate change deniers and believers' knowledge, media use, and trust in related information sources. *Public Relations Review*, *47*(1). https://doi.org/10.1016/j.pubrev.2020.101986

Kurtz, D. V. (2019). Politics, Culture, Rhetoric, Global Warming: From Local to Global Realities. *Journal of Globalization Studies*, *10*(1), 3–18. https://doi.org/10.30884/jogs/2019.01.01

Media Bias Chart 7.0. (2021). https://www.adfontesmedia.com/static-mbc/

National Aeronautics and Space Administration. (2020). Scientific Consensus: Earth's Climate is Warming. Scientific Consensus | Facts – Climate Change: Vital Signs of the Planet (nasa.gov)

Shao, W., Garand, J. C., Keim, B. D., & Hamilton, L. C. (2016). Science, Scientists, and Local Weather: Understanding Mass Perceptions of Global Warming*. *Social Science Quarterly (Wiley-Blackwell)*, *97*(5), 1023–1057. https://doi.org/10.1111/ssqu.12317

Tiseo, Ian. (2021). U.S. carbon dioxide emissions 1975-2020**.** Statista • CO2 emissions United States 2020 | Statista

Tandoc Jr., E. C., Takahashi, B., & Thomas, R. J. (2018). BIAS VS. BIAS: How Fox News anchors discussed Pope Francis' stance on climate change. *Journalism Practice*, *12*(7), 834–849. https://doi.org/10.1080/17512786.2017.1343095

Arowolo, S. O. (2017). UNDERSTANDING FRAMING THEORY. Lagos State University. 10.13140/RG.2.2.25800.52482

United States Code: Federal Power Act, 16 U.S.C. §§ 791-825r (Suppl. 2 1934).

WFAA News. (2021). 'Completely unacceptable': Texas Gov. Greg Abbott criticizes ERCOT amid continued power outages - YouTube

WFAA News. (2021). https://youtu.be/x8GOmSx6gyI

University of Minnesota. (2016). Communication in the Real World. *University of Minnesota, Libraries Publishing Edition. (*2.1*).*

Ivancin, M., Kjarval, N., Loker, K., Rosenstiel, B., Sonderman, J. (2015). Twitter and News: How people use the social network to learn about the world. *American*

Press Institute. *Twitter and News: How people use Twitter to get news (americanpressinstitute.org)*