THESIS

I WANT YOU TO PANIC: A DISCOURSE ANALYSIS ON THE WAYS MEMES EXPRESS AFFECTIVE RESPONSES WHEN SHARED TO PROTEST CLIMATE CHANGE

Submitted by

Michael Elizabeth Sakas

Department of Journalism and Media Communication

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Summer 2023

Master's Committee:

Advisor: Michael Humphrey

Joseph Champ
Lynn Badia

ABSTRACT

I WANT YOU TO PANIC: A DISCOURSE ANALYSIS ON THE WAYS MEMES EXPRESS AFFECTIVE RESPONSES WHEN SHARED TO PROTEST CLIMATE CHANGE

This study analyzes how memes express affect when used to protest inaction on climate change. The climate movement is youth-led and young people use Instagram to create and share climate memes. These memes are hashtagged with #ClimateStrike and other similar words that then add these memes to the climate protest conversation. This study on how climate memes express affective responses increases our understanding of what is driving students to join this youth climate strike movement. This study conducted a critical discourse analysis to identify what important themes emerged when protestors used climate change memes to communicate affective responses. In total 400 memes were collected for this research. Half of them are graphic-based climate memes and the other half are protest-based climate memes. The content of these memes were then analyzed to find what affective responses were most often present.

Negative emotions dominated the affective sentiment of both the graphic-based climate memes and the protest-based climate memes. The majority of the 400 memes shared negative emotions associated with feelings like frustration, criticism, fear and helplessness. Positive affective responses were associated with climate solutions, individual action and joining the youth climate movement. When memes share feelings of suffering, fear and despair, those memes call out groups in power who are doing little to halt climate change. If these protestors feel that nothing is being done to save the planet and their future, these negative emotions could be playing a role in their motivation to join the youth climate movement.

ACKNOWLEDGEMENTS

This thesis would not exist without years of guidance, encouragement and patience from Dr. Michael Humphrey. I would like to express my deepest appreciation for his mentorship since my first days at Colorado State University. He saw my potential as a journalist and helped me to believe I could become one. I know I am where I am today because of him. Thank you, Dr. Humphrey, for taking me on as an advisee so I could finish this degree, I am so grateful for your support.

A huge thank you to my committee members Dr. Joseph Champ and Dr. Lynn Badia for their help guiding this research with their expertise and thoughtfulness. I am grateful to both of you for sticking with me and this project over the last several years.

I've been the luckiest to have my partner Dr. Alexander Stevens to encourage me when long research hours, big reporting trips, emergency house renovations and regular life stuff felt like too much. Thank you, Alex, for always reminding me of my strengths, that I'm awesome and that we can get through anything together. I love you.

Finally, I want to thank my family for their love and support. Thank you to my dad and stepmom for always saying how proud you are of me, and for encouraging me to get this degree. Thank you to my mom for modeling perseverance and my stepdad for always being there for me.

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CHAPTER 1. INTRODUCTION

Overviews and Rationales

> **"Rarely, if ever, has the modern world witnessed a youth movement so large and wide, spanning across societies rich and poor, tied together by a common if inchoate sense of rage." - Somini Sengupta, The New York Times, 2019**

In August 2018, a 15-year-old girl started to skip school. Instead she'd spend her days outside of the Swedish Parliament, holding a sign that read "Skolstrejk för klimatet" — school strike for climate. Since Greta Thunberg's solitary act, millions have joined her in protest against government inaction on climate change.

The iconic images of Thunberg— a child with piercing eyes, a stern face and a protest sign— have been shared, imitated and transformed through the internet by hundreds of thousands of users. By Shifman's (2013) definition, Thunberg's original act of protest is now a meme. The creation and participation in this meme by kids and young adults in the years since has helped fuel Thunberg's youth-driven climate strike movement.

Thunberg's "School Strike for Climate" is also known as the "Climate Strike," "Global Climate Strike," "Youth Strike for Climate" and "Fridays For Future." The latter is a reference to the day in which students continue to skip school each week to join a worldwide, youth-led protest. While social movements lead by young people are not new, Sengupta wrote for the New York Times (2019), the modern world has rarely, if ever, witnessed a youth movement like this.

The September 2019 climate strikes brought millions of people out onto the streets around the world, and kids and young adults continue to walk out of class each Friday. Photos and videos of their protests are shared online, with the hashtags #FridaysForFuture, #ClimateStrike and #SchoolStrike4Climate. Thunberg shares her own weekly #FridaysForFuture posts to her more than 14 million Instagram followers, which show her joining strikes in different places.

The COVID-19 pandemic has kept some of these large strikes from happening in person, so #ClimateStrikeOnline has gained popularity as a space for kids and young adults to share their protest signs online each Friday.

There are more than 1.1 million posts on Instagram under #FridaysForFuture alone. The hashtag shows kids and young adults with their protest signs, sharing messages of anger, disgust, sadness, fear and hopelessness. These memes communicate affective responses, which echo how Thunberg herself communicates her concern about climate change. An affective response is the psychological state of a person in reaction to a situation which can include moods and emotions (Ekkekakis and Petruzzello, 2002).

Under the #FridaysForFuture hashtag there are video clips of Thunberg's viral speeches, like the one she gave at the World Economic Forum in 2019. In it she compares climate change to a tangible, terrifying emergency— "Our house is on fire" (Fridays For Future, 2020). She briefly pivots to the science: Global carbon dioxide emissions must be cut in half over the next 10 years to keep the worst effects of climate change at bay. But the emotional side of her argument takes over again, her focus shifts to how the climate emergency affects her and how she wants it to affect others.

> Adults keep saying we owe it to the young people to give them hope. But I don't want your hope, I don't want you to be hopeful. I want you to panic, I want you to feel the fear I feel every day. And then I want you to act, I want you to act as if you would in a crisis. I want you to act as if the house was on fire, because it is (Fridays For Future, 2020).

I noticed these climate memes more often after I started my job as a climate and environmental reporter for Colorado Public Radio in 2019. Instagram's algorithm might have noticed I was reading more climate news with my new reporting beat. The explore page of my

Instagram account started to highlight more climate content, and I eventually discovered influencers and accounts that would frequently share climate memes with hashtags like #FridaysForFuture, #YouthClimateStrike and #SchoolStrike4Climate.

I was struck by how dark these memes were. They were funny, but the humor was sarcastic, dry and sometimes sadistic. It struck me that this was how teens are feeling about climate change, and I wanted to learn more about how they are using memes to communicate about this complicated issue.

In 2020 I wrote a news and radio story titled 'Memes About Climate Change Help Teens Laugh About Their Fears. Can They Also Get Them To Act?' (Sakas, 2020). I spoke with two groups of high school students in school clubs focused on climate and environmental issues. A Palmer High School sophomore named Taylor Saulsbury started her group. But before she did, she created an Instagram account called Palmer Planet, where she made and shared climate memes, "to get at [her] generation."

Another member of the club, sophomore Roxy Houck, said climate memes help get the word out on the issue. They also help her find humor in situations that can otherwise seem frightening.

"It's definitely coping," Roxy said. "It's seeing that like, it's not just me. Or it's not just the people I know. It's like almost all the teenagers I know, know about it and are worried about it."

From reporting that story, I learned that teens like Roxy and Taylor see environment memes as a way to help them have conversations about something that's otherwise tough to talk about. Climate change elicited many different emotions from these kids, and they expressed those emotions in the memes they created and shared. That reporting project led me to his research on how affect-driven memes are connecting young people online to protest inaction on climate change.

The #FridaysForFuture hashtag highlights the different ways youth use social media to share how the existential threat of climate change affects them. There are two ways I highlighted this in this present research: the meme of digital acts of protest that echo Thunberg, which I compare to a broader range of graphic-based climate change-themed memes.

The focus of this study is learn more about what affect responses are expressed in Instagram posts that have been tagged #FridaysForFuture, #ClimateStrike, #ClimateStrikeOnline and #SchoolStrike4Climate. More specifically, what affect responses are regularly used in memes as digital acts of protest, compared to a broader range of climate-change themed memes, and how do they overlap and differ? This is the guiding question of this research.

There's recent findings on the role of memes as user-generated political discourse (Huntington, 2017), and how memes are agents of protest, both on and offline (Mina, 2019). In her book *Memes to Movements*, An Xiao Mina sees memes as an invitation, which signal to other people that this is something you can get involved in— that "you can do this too" (p. 7). That invitation causes memes to "spread across borders and territories to involve much larger groups of people acting in solidarity than might previously have been possible" (p. 6). Mina calls memes the street art of the social web. Like street art, they must "contend with the existing politics of our public spaces," and can "make transformative, positive changes to society" (p. 12).

Heidi Huntington's study *The Affect and Effect of Internet Memes* (2017) looks at how memes influence affect, and she finds that memes with a political theme produce different effects on viewers. Non-political memes were significantly discounted as simple jokes more than political memes, and Huntington's findings suggest that consumers of political memes see them as an attempt to "convey arguments beyond mere jokes" (p. iii). Huntington argues that user-generated media like political internet memes are an important influence in today's media environment and should be studied as a tool for citizens "seeking to participate actively and discursively in a digital public sphere" (p. ii).

Zizi Papacharissi's seminal work on *Affective Publics* (2014) underscores that there's been "a growth of movements using digital means to connect with broader interest groups and express their points of view," and how these movements tend to "share one thing in common: online and offline solidarity shaped around the public display of emotion" (p. 6). This research studies the ways in which climate change memes are public displays of emotion and how this form of political discourse might encourage political action through climate-protest.

Rationale and Significance of Research

Given that the "Fridays for Future" climate strike movement is youth-led, it's important to examine the unique ways in which these networked publics are engaging online. This group is a heavy user of social media, especially Instagram, and memes are woven into the fabric of their digital communication. Memes have been found to be useful for emotional release, and are made or shared to express emotions (Miltner, 2011). Studying how climate memes express affective responses can increase our understanding of what's driving students to join this youth-driven global movement.

This study utilizes critical discourse analysis to study how climate change memes communicate affective responses, to create and engage networked publics around the hashtags #FridaysForFuture, #ClimateStrike, #ClimateStrikeOnline and #SchoolStrike4Climate. Like other movements using digital means to connect interest groups, the youth-driven climate strike movement has produced online and offline solidarity shaped around the public display of emotion, as described by Papacharissi (2014).

For this study, climate memes are the public display of emotion. This study will improve our understanding of what affective responses kids, teens and young adults are utilizing in their storytelling practice of meme-making to facilitate engagement and “find their voice through the soft structures of feeling sustained by societies” (p. 133). This critical discourse analysis produces insights into the way these memes, and the social agents that create them, uphold and/or resist power relations related to the larger political context of climate change.

By comparing memes of digital acts of protest that echo Greta Thunberg to a broader range of climate change-themed memes, this study traces how affect plays similar and different roles in the type of public display of emotion. If a teen takes a selfie with a sign protesting climate change, how is affect expressed? Will the focus of the content be placed more so on how the individual feels? Will humor be used as much as it might be in other types of climate memes? What does a selfie and protest sign try to convey versus a meme about an oil company using Spider-Man? These different types of memes share the same hashtags and reach the same networked publics protesting the government’s inaction on climate change— so how is a protest message framed when its author has included herself or himself in the storytelling with a selfie or photograph, compared to a meme where the author is often unknown?

Summary of Method

I chose Instagram as the social media platform to study because of Greta Thunberg’s large following on the site, and because the app is especially popular with young adults and teens. Over the course of two weeks, I collected 200 protest memes and 200 image-based climate change-themed memes posted on Instagram and tagged with a combination of

#FridaysForFuture, #ClimateStrike, #ClimateStrikeOnline or #SchoolStrike4Climate. I categorized their use of affective responses, which included fear, anger, helplessness, guilt, optimism and uninterestedness. I conducted a critical discourse analysis to produce insights into the way these memes, and the social agents that create them, uphold and/or resist power relations related to the larger political context of climate change.

Goal and Research Questions

The overall goal of this thesis is to increase our understanding of what's driving students to join this unprecedented, youth-driven global movement through studying how climate memes express affect. This was done by studying climate memes as a form of political discourse and how they communicate affective responses. Essentially, how is the climate crisis affecting these kids and young adults? Studying the memes they create around the topic helps us better understand that.

Organization of Proposal

This thesis proposal is organized as follows: Chapter 2 is the literature review which provides the background and history of the climate strike movement and the relevant research needed to study climate memes as affective discourse. Chapter 3 is the methods section, which includes the background of the method, procedures and how the analysis was conducted. Chapter 4 is where the results of the research are presented along with a discussion of the findings. Finally, Chapter 5 provides conclusions, including a discussion of limitations and potential problems that could be encountered. These chapters are followed by a reference section.

CHAPTER 2. LITERATURE REVIEW

Memes as Political Discourse

There's a growing interest in the role of Internet memes in politics and political movements (Huntington, 2017; Ross & Rivers, 2017; Denisova, 2019; Mina, 2019). A meme was first defined by evolutionary biologist Richard Dawkins (1976) as a unit of culture that's shared and passed along by imitation. Defined before the digital era, examples included fashion, songs and catchphrases. True to its nature, the word has evolved to now specially reference a prevalent form of Internet communication.

But those forms are numerous— looping GIFs, still images remixed with various captions, video challenges of different dances or dares and pop culture references. While countless and ever-expanding in style and format, Shifman (2014) defines Internet memes as (a) a group of digital items sharing common characteristics of content, form, and/or stance, (b) that were created with awareness of each other, and (c) were circulated, imitated, and/or transformed via the Internet by many users (p. 7).

Shifman finds this definition useful to analyze Internet memes as "socially constructed public discourse" that represent different perspectives (p. 8). She delves specifically into memes as a form of political participation, both with their creation and consumption. She argues that memes have contributed to broadening political participation outside of traditional forms like voting. For younger individuals, these newer forms of media are seen as a more appealing, convenient and interactive way to get politically active (Coleman, Shifman & Ward, 2007). This point is especially important for the #FridaysForFuture movement, as many of its participants aren't old enough to vote. Greta Thunberg herself just reached the age of 18.

Shifman (2014) uses the Occupy Wallstreet movement as an example— a protest against social and economic injustice in the United States. Memes helped spread the messaging of the movement, both for and against it. Shifman argues that political memes can take on forms of persuasion or political advocacy by using grassroots action, and are modes of expression (p. 123).

Researchers are studying the impact of these memes and their efficacy as a political communication tool. Kulkarni (2017) looks at the impact of the Internet meme as a tool in communicating political satire, and found that they do not have a major impact on some audience behaviors like voting. However, her research did find that memes that use political satire as a discourse strategy improve political engagement of digital natives.

The kids and young adults who are connected online through #FridaysForFuture are digital natives. Through comparing graphic-based climate memes to the protest-based climate memes (which show political engagement) that these publics create in the same network, this study will illuminate to what degree these forms of communication relate. Do climate image-based climate change memes express the same affect that drove an author to make the meme as it did to drive an author to engage and create a meme of digital protest?

Kulkarni studied memes as a tool for communicating political humor and satire. For this research, the interest is in how these climate memes deploy affect and how that discourse strategy feeds and connects to acts of digital protest.

Huntington (2017) study looks at how memes influence a viewer's affect and how that plays a role in the way the meme's information is then processed. Her work aims to increase our understanding of how affect contributes to a memes' potentially persuasive effects, since affect can influence other politically related outcomes such as information seeking, participation and opinion formation (Wyer, 2004). By showing that a meme can influence a person's affect, including their emotions, feelings or attitudes, Huntington makes an important step towards the understanding of the persuasive power of memes.

While Huntington's research focuses on the meme viewer, this research is focused on the authors of memes and the affect frame or frames they chose to include in the meme's creation. How is affect presented in climate memes used as a discourse tool to engage youth in online networked publics around the climate strike movement?

Affective and Networked Publics

Zizi Papacharissi defines *Affective Publics* (2014) as "networked public formations that are mobilized and connected or disconnected through expressions of sentiment" (p. 125). She uses danah boyd's (2010) definition of networked publics as, "publics that are restructured by networked technologies," which is both the space the networked technologies build and the "imagined collective that emerges as a result of the intersection of people, technology and practice" (p. 39).

Papacharissi highlights boyd's four defining affordances of networked publics: Persistence, or how "online expressions" are automatically archived and difficult to remove from the Internet once they're shared. Replicability, or how items can easily be copied, changed and "remixed," making it hard to trace a "bit" back to its source. Scalability, or the chance for a bit to go viral through sharing and remixing. And searchability, which allows users to connect with specific topics and people, helping create networked publics. Papacharissi notes the importance of the act of sharing, which comes from these four affordances but is what makes networked publics engaged and visible.

Papacharissi examines how affect drives networked publics, and how affective attunement allows "people to feel their way into politics" (118). Social media platforms, like Twitter and Instagram, invite actions like sharing, liking, rebroadcasting and remixing, which allows people to affectively attune with an issue. Papacharissi uses memes as a specific example of "civic intensity, and thus a form of engagement" (p. 25), as they are created and shared. These actions let individuals create their own sense of connection within a soft structure of feeling. Papacharissi borrows the term *structures of feeling* (Williams, 1961), which reflects the feeling of a moment in time, and the unrealized potential that exists in the making. She argues that shared memes, and discourse organized around hashtags, both present structures of feeling.

Isbell, Ottati and Burns (2006) examined the influence of affect on judgements, information process and information seeking. They found that the influence could act in different ways depending on the specific affective state and the level of awareness surrounding it. Some studies show that a person's affect state can match how they feel about an object— if they're feeling happy and positive, they feel happy and positive about the political candidate that's featured in a political ad. But the opposite can also happen— that same happy person might dislike something, and that dislike could be driven in part by their positive affective state. When people are in fearful or anxious moods, the information they process is done in a more systematic way than when they're in a happy or angry mood. The latter affective states tend to make a person process information in a more heuristic way. Isbell et al. notes that this finding is interesting in the fact that two negative affect states such as anger and anxiety, can result in very different effects on how they process information.

In his study on the role of affect in the perception of climate change risk, Anthony Leiserowitz (2006) found that American risk perceptions and climate policy support are strongly influenced by experiential factors, including affect, imagery and values. Leiserowitz findings demonstrate that “public responses to climate change are influenced by both psychological and socio-cultural factors” (p. 1). The public's perception of the risks and dangers of global climate change plays a role in the public’s support or opposition to climate policies such as regulations on business and a carbon tax. He cites Solvic (2000)’s research that found risk perceptions are not just influenced by the facts around science, but also by a variety of psychological and social factors like personal experience, affect and emotion, along with imagery, trust, values and worldviews, “dimensions of risk perception that are rarely examined by opinion polls” (p. 2). Leiserowitz cites Epstein (1994), who states that “experientially derived knowledge is often more compelling and more likely to influence behavior than is abstract knowledge” (p. 711). This connects to the current study in that the kids, teens and young adults who are participating in digital forms of a climate strike might not know much about the science of climate change beyond the basics, but their “experientially derived knowledge” gets them involved politically.

Expanding off of this relationship between personal experience, affect and risk perception in the case of climate change, Sander van der Linden (2014) studied how these variables interrelate. He found that affect can be seen as both a post-cognitive process as well as an information processing heuristic that can guide perceptions of risk related to climate change. He finds that his study provides further evidence of dual-processing theories that show the interplay between cognition and emotion (e.g., Loewenstein, G.F., Weber, E.U., Hsee, C.K., & Welch, E, 2001; Sloman, 1996; van der Linden, 2014). Liden argues that his results show that “interactive engagement of both cognitive and emotional processing mechanisms is key to fostering more public involvement with climate change” (p. 226)

In Papacharissi's (2014) study of hashtags that supported the Egyptian uprising that led to the resignation of Hosni Mubarak, she finds that people felt their way into the politics through a Twitter stream of "emotion, drama, opinion and news in a manner that departed from the conventional deliberative logic and aligned with the softer structure of affect worlds" (p. 116). Affect worlds (Berlant, 2011) are public spheres connected by expressions of public feelings.

Affective Frames in Memes

Using Papacharissi's definition of Affective Publics (2014) as "networked public formations that are mobilized and connected or disconnected through expressions of sentiment" (p. 125), the goal of this paper is to examine what common affective states do climate change memes share. Specifically, climate memes tagged #FridaysForFuture, #SchoolStrike4Climate, #ClimateStrike and #ClimateStrikeOnline that adds to the discourse organized around the youth-led climate protest movement's hashtags.

As Shifman notes (2014), while some political memes are framed in a humorous way, they can also be quite serious. Media framing theory examines how the presentation of news influences how individuals might process it (Gamson and Modigliani, 1989). Goffman (1974) argued that people interpret the world using frames as an aid in processing and categorizing new information. When applied to media, a frame is both about what's present and what's absent, related to images, sources of information and sentences (Entman, 1993).

In Ross and Rivers' (2019) research on media frames in Internet memes used in climate change discourse, they note the challenge of classifying social media frames as media frames or individual frames (Qin, 2015). Memes are often anonymously user-generated content, and the frame is created by an individual. They argue that Internet memes could be considered as a type of "user-generated" frame, which could include elements of both traditional and individual frames (p. 5). In their research, Ross and Rivers examine common media frames related to climate change and how they're used in Internet memes. These frames, established by Jang and Hart (2015), include a "real," "hoax," "cause," "impact," and "action" frame. The research presented in this paper is interested in how these Internet climate memes are framed using affect, and how these affective memes are framing the online conversation around the #FridaysForFuture youth-led climate movement.

Youth Attitudes Towards Climate Change

In 2015, an average of 32% of Americans worried a great deal about climate change. By 2019, that number rose to 44%. A 2019 Gallup analysis found that for the first time since 2001, a majority of Americans can be classified as "Concerned Believers" — 51% are those who are "highly worried about global warming, think it will pose a serious threat in their lifetime, believe it's the result of human activity, and think news reports about it are accurate or underestimate the problem" (Gallup, 2019).

This number jumps up dramatically for younger voters— 67% of those ages 18 to 29 are classified as "Concerned Believers." While the issue of climate change is often divided by party lines, Millennial Republicans are more likely to believe that it's happening, that it's human-caused and are worried about it (Ballew, Marlon, Rosenthal, Gustafson, Kotcher, Maibach & Leiserowitz, 2019).

While the above two polls focused on those of voting age, a solid majority of American teenagers are also worried about the harm climate change will cause their generation (Washington Post-Kaiser Family Foundation, 2019). And roughly 1 in 4 of them have participated in a walkout, attended a rally or written to a public official to share their concerns.

The survey focused on teens due to the growing number of students who are skipping school to join Greta Thunberg's #FridaysForFuture climate strike.

The survey asked how climate change made them feel: afraid, motivated, angry, helpless, guilty, optimistic and uninterested. The results listed here are in order of most common affective state, with 57% of teens responding that climate change makes them feel afraid, to 20% of teens responding that climate change makes them feel uninterested. As this current research is interested in how affect is expressed in climate memes, it will include these same seven emotions in a discourse analysis of memes hashtagged #FridaysForFuture, #ClimateStrike, #ClimateStrikeOnline or #SchoolStrike4Climate.

#FridaysForFuture: Youth Activism and Climate Strikes

In September 2019, millions of people took to the streets to join a youth-led protest against climate change. Students around the world walked out of classrooms in solidarity with Greta Thunberg. Just one year before this massive demonstration, Thunberg had started to skip school to protest outside of the Swedish Parliament.

Thunberg and thousands of other students had walked out of school each Friday leading up to this Global Climate Strike. The #FridaysForFuture movement began when Thunberg shared her solitary weekly protests on Twitter and Instagram. Kids, teens and adults from around the world started to join her and share their own climate protests under the #FridaysForFuture hashtags. These smaller yet worldwide demonstrations continue. Thunberg now travels the world to join other students' school strikes for climate, and she shares her whereabouts each week. As of this publication, Thunberg shared her 137th #FridaysForFuture photo on Instagram.

Thunberg has shared how she convinced her own family to go vegan and to stop flying—she "made them feel guilty" (Chiorando, 2019). She first tried to show them "articles and graphs," but it didn't work. So she got emotional, "telling them that they were stealing our future." While Thunberg urges people to listen to the science on climate change, the power of the movement comes from kids and teens sharing how climate change makes them feel.

Connected Youth Publics Through Instagram and Memes

There are nearly a million posts shared on Instagram with the hashtag #FridaysForFuture. The photo and video-sharing social networking app is especially popular with young adults: 75% of 18 to 24 year-olds in the U.S. say they use the platform (Perrin & Anderson, 2019), as do 72% of teens (Anderson & Jiang, 2018). This research will focus on the discourse organized around the youth-led climate protest movement's hashtag on Instagram due to its high usage by this demographic.

In An Xiao Mina's book *Memes To Movements* (2019), she argues that using hashtags on memes becomes a way to participate in a global protest. She uses the example of #HandsUpDontShoot and the killing of 18-year-old Michael Brown, a black U.S. teenager. People around the world took group photos and videos of people with their palms facing the camera as a performative meme, similar to kids and teens posting photos of themselves with their own climate strike signs.

A quick browse of #FridaysForFuture's top posts on Instagram shows photos of young people around the world holding protest signs, just as Greta Thunberg first did in 2018. This in itself is a meme— imitated, remixed and shared to show solidarity with Thunberg and the global climate movement she's helped spur. In Figure 1, kids and teens hold messages like, "We are in a climate crisis. We need system change now! Or are we the last generation?" "You think our future is a joke?" One sign shows a drawing of a polar bear, frowning, holding the Earth engulfed in flames. Another reads, “Together we can save our home,” and the poster itself includes the #FridaysForFuture hashtag.

Figure 1: A collection of three photos from Instagram showing young people holding climate change protest signs.

Some of these climate picket signs can also include references to other Internet memes. In Figure 2, A young protester in Germany holds a sign that reads, “Wo ist mein iglu?” or “Where is my igloo?” It’s painted with an image of Pingu, a stop-animation penguin from the British-Swiss children’s show *Pingu*. The character is now used in memes, including as a reaction GIF and remixed images. In another example, two young women in the UK hold signs featuring memes. One features reaction images of “Kombucha Girl” — stills from a viral video of a woman trying kombucha for the first time. The other sign shows the “Distracted Boyfriend” meme of a man checking out a “hotter” planet. In Norway, two young protestors hold a meme of singers Shawn Mendes and Camila Cabello making out. Mendes is labeled “Me” and Cabello is labeled “Solving climate change.” This image was first shared by Climemechange, an Instagram account dedicated to climate memes with more than 114,000 followers.

Figure 2: A collection of three photos from Instagram that show young people holding protest signs that use memes to protest climate change.

There are many Instagram accounts dedicated to sharing climate and environment-themed memes. Their posts are often hashtagged with #FridaysForFuture or #Fridays4Future, and the messaging often encourages participation in civil disorder. The Instagram bio of YFoEE Memes reads, "Stop liking our memes and start shutting down fossil fuel infrastructure." Figure 3 shows examples of climate memes tagged either #FridaysForFuture of #Fridays4Future.

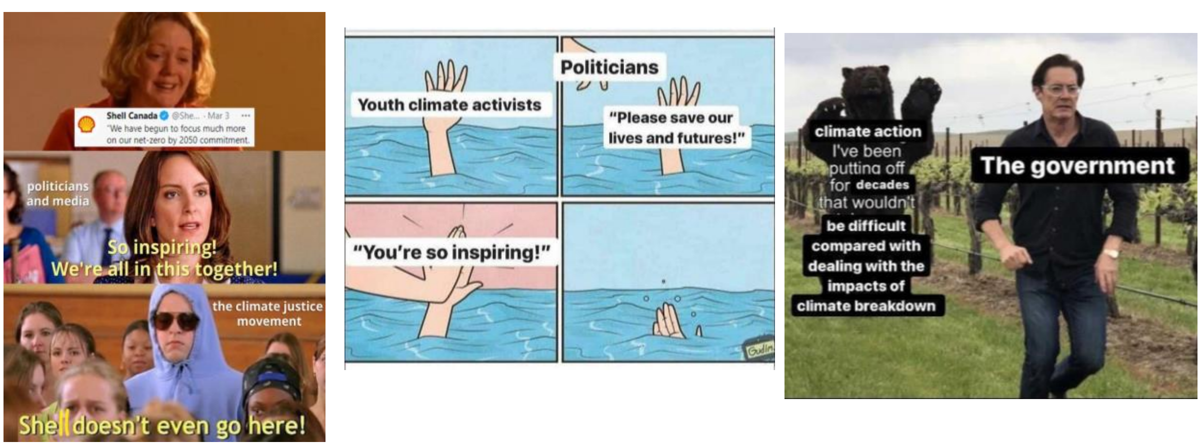

Figure 3: A collection of three graphic-based climate memes.

These examples illustrate how the #FridaysForFuture hashtag on Instagram has created a networked public of youth engaged in climate activism. An essential expression of solidarity used in that space are memes. Those memes are liked, shared, commented on and created as public expressions of feeling, in a space that lets teens share how climate change affects them. This space gives teens a voice on the issue, especially since they can't vote. They find it empowering to connect with other students around the world, and that these climate memes help them cope with their emotions (Sakas, 2020).

Research Questions

(RQ1): How do users of climate change-centric hashtags employ affect responses in memes, including memes of digital displays of protest?

The results of this research will guide discussion on what affect responses drive young adults to create graphic-based memes and how that communication tool might translate to political engagement. For this study, the marker of political engagement for a demographic that can't vote is the creation of dissemination of climate-protest memes.

RQ2: What themes develop when young protesters use Instagram to talk about climate change?

RQ3: What are the differences in the expression of affective states in graphic-based climate memes compared to protest-based climate memes?

These research questions will help drive and direct a critical discourse analysis that will discuss what climate memes studied as political discourse mean in the context of larger discourse around climate change. What forms of affect dominate graphic-based climate change memes versus protest-based memes and how do they relate and differ? Do graphic-based climate change memes express the same affect that drove an author to make an graphic-based climate meme as it did to drive an author to engage politically with a climate-protest meme? Since negative affect has shown to be an important predictor of climate change risk perceptions (e.g., Leiserowitz, 2006; Sundblad, Biel, & Gärling, 2007), will expressions of negative affective states dominate the messaging in climate memes?

CHAPTER 3. METHODS

This qualitative study conducted a critical discourse analysis to find what affective responses are expressed in climate change themed memes and what these memes are communicating in the context of the youth-led climate strike movement. Through critical discourse analysis (Fairclough, 2003) these texts can be interpreted and meaning can be derived through studying the ways the authors of these texts use language to sustain or change ideologies (Eagleton 1991, Larrain 1979, Thompson 1984, Van Dijk 1998). Ideologies "are representations of aspects of the world which can be shown to contribute to establishing, maintaining and changing social relations of power, domination and exploitation" (Fairclough, p. 9).

The aim of this analysis was to better understand what's driving networked affective publics (Papacharissi, 2014) to participate in the storytelling of #FridaysForFuture and #ClimateStrike movement online through the creation of memes. Two categories of memes were analyzed— graphic-based climate memes and memes that echo Greta Thunberg's climate protest with a young person or persons photographed with a protest sign. These memes are referred to as protest-based climate memes, and the former category are referred to as graphic-based climate memes.

Over the course of two weeks, 200 graphic-based and 200 protest-based climate memes posted on Instagram using these hashtags along with #ClimateStrikeOnline and #SchoolStrike4Climate were collected. These memes' use of words and imagery were studied for how they deploy affective reactions like anger, frustration, sadness and hope.

This research is more concerned with better understanding the mindset and intentions and affective state of the author of these memes than the viewers of these memes. Since the author made the decisions on images and language dynamics deployed in these memes, a critical discourse analysis fits the goal of this research.

Framework of the Method

Critical Discourse Analysis

Norman Fairclough's approach to discourse analysis, a version of critical discourse analysis, sees language as an "irreducible part of social life," and language must be taken into account when social analysis and research is done (p. 2). His form of CDA is "quite particular: it is on analyzing text, with a view to their social effects" (p. 11). His method aims to provide a framework to analyze texts as elements in a social process, with an emphasis on grammatical and semantic analysis.

Texts can bring about change to our knowledge, beliefs, attitudes and values which can influence actions, social relations and the material world (p. 8). Ideological representations can be found in texts, and Fairclough's critical view sees ideology as a "modality of power," which can "be shown to contribute to social relations of power and domination" (p. 9). Because of this, he argues that textual analysis should consider "bodies of texts in terms of their effects on power relations."

The social effects of texts depend upon processes of meaning-making, a process which Fairclough separates into three elements: the production of the text, the text itself and the reception of the text (p. 10). This research is interested in the author of climate memes, and the production of these texts puts the focus on the creators and the intentions and identity of the author. Fairclough's CDA "must take into account the institutional position, interest, values, intentions, desires etc. of producers," along with the "relations between elements at different levels in texts; and the institutional positions, knowledge, purposes, values, etc of receivers"

(p. 11). Fairclough argues it's necessary for CDA to analyze texts to "clarify their contribution to processes of meaning-making" (p. 11).

A CDA shouldn't just focus on what's in the text, but it should also try to identify what's excluded from the text and what is implicit and assumed. Fairclough sees textual interpretations as a matter of understanding what text means, but it also requires judgment and evaluation. One example he uses is judging whether someone is saying something sincerely or not (p. 11). And the explanatory elementary to interpretation tries to understand why people write or speak as they do.

Fairclough's approach to text-analysis is more concerned with the production of texts than towards the reception of texts, which is one of the reasons why CDA is appropriate for the research presented here. Fairclough calls them authors, which refers to whoever is understood to have created the text. In the case of this study presented here, the author is the person who created a climate meme. In the samples of protest-based memes, the author has a presence in the text in the form of a selfie or photograph which is included in the analysis of how social agents "texture" texts. Fairclough's interest is in how this texture is created by "setting up relations between their elements" (p.12).

Neyla Koteko and Dimitrinka Atanasova wrote in *Discourse Analysis in Climate Change Communication* (2016) that the method has been increasingly used by climate change communication scholars since the late 1990s because it has the potential to reveal the ideological dimensions of stakeholder beliefs. This type of study not only examines the content of what's being communicated, but also to the linguistic forms and contexts that shape language and interaction. Thus, a discourse analysis can illuminate the moral, ethical and cultural dimensions of the climate change issue.

The results of this study are not a complete and definitive analysis of the text around climate memes shared through hashtags that express political resistance to governments' inaction on climate change. Fairclough acknowledges that "the reality of texts is exhausted by our knowledge about texts" (p. 14). He also sees the approach as inevitably selective since a researcher chooses to ask certain questions about social events and texts. The focus of this research is on what an author's use of affective responses in memes might tell us about why an author has involved themselves in a youth-led political climate change movement.

Critical Discourse Analysis Procedure

The website www.Scribbr.com provides a useful step-by-step on how to conduct a discourse analysis (Lou, 2019). As written on their website:

Step 1: Define the research question and select a range of material that is appropriate to answer it.

Step 2: Gather information and theory on the context to establish the social and historical context in which the material was produced and intended to be received.

Step 3: Analyze the content for themes and patterns by closely examining various elements of the material such as words, sentences, paragraphs and overall structure and relating them to attributes, themes and patterns relevant to the research. That includes analysis for wording and statements that reflect and relate to political ideologies like attitudes toward authority, liberal values and popular opinion.

Step 4: Review the results and draw conclusions to examine the function and meaning of the language used. The analysis will consider the relation to the broader context that is established earlier to draw conclusions that answer the research question.

A Washington Post and Kaiser Family Foundation survey (2019) found that 1 in 4 teens have participated in a climate walkout, attended a climate rally or have written to a public official to share their concerns. The survey also asked how climate change made them feel: afraid, motivated, angry, helpless, guilty, optimistic and uninterested. As this current research is interested in how affect is expressed in climate memes, it includes these same seven emotions in the discourse analysis.

Data Collection

This set of 400 climate memes were collected from Instagram over a two week period. The memes were tagged with one or a combination of the hashtags #FridaysForFuture, #ClimatStrike, #OnlineClimateStrike or #SchoolStrike4Climate.

Sample

The sample for this study includes 400 memes in total. Of those, 200 are protest-based climate memes and 200 are graphic-based climate memes. These were collected over a two week period to ensure that there was enough material for the discourse analysis. The memes were limited to still images.

Data Collection Procedures

Each day for a period of two weeks, the hashtags #FridayForFuture, #ClimateStrike, #OnlineClimateStrike and #SchoolStrike4Climate were browsed on Instagram for protest-based climate memes and graphic-based climate memes. To gather 200 of each of these memes, a minimum of 15 of each of these memes was needed for collection each of the 14 days across these four hashtags.

The Instagram web browser limits the number of hashtagged images that can be seen at one time and only allows a user to browse "Top Posts" instead of the "Most Recent" posts.

Because of this, the data was collected on the app version of Instagram. A screenshot was taken of each meme.

Data Management and Confidentiality

These 400 memes were collected on a combination of a phone and tablet. The screenshot images were stored in a folder on the phone. Once the two weeks were over and the sample collection was complete, these files were shared over email so the images were accessible on a desktop computer.

Each of these memes were then placed in their own row in a spreadsheet data table using Google Sheets. The 200 graphic-based climate memes were organized in their own spreadsheet document as were the protest-based climate memes. This was done to make it easier to compare the final results.

Once the 400 memes were placed in their respective data tables, columns were created where affective responses could be recorded. The content of the memes were analyzed for the expression of nuanced feelings. Once a list of those feelings were detailed, a second column would sum up if that meme was negative, positive or shared both positive and negative emotions. The data tables included other columns to record what was found in the analysis to identify any themes that emerged. Examples include references to government, politicians, voters, environment, etc.

While the data collected is public, individual Instagram handles were not included in the screenshots of each meme for the user's privacy. Comments on the memes are not included either as that data is not pertinent to the research presented here.

Validity/Consistency and Reliability of the Proposed Study

Fairclough doesn't believe that a single analysis of a text can tell us all that there is to be said about it— "there is no such thing as a complete and definitive analysis of text" (p. 14). Critical discourse analysis can increase our scientific knowledge, but Fairclough notes it's "still inevitably partial." It's also selective, since I have chosen to ask certain questions about these memes, which means I have left out other possible questions that could help us understand these texts in a different way.

Fairclough wants us to assume that our knowledge of texts is partial and incomplete. He also wants us to assume that "we are constantly seeking to extend and improve it," through reflection. I reflected critically on my analysis by understanding where I'm socially positioned and where I'm coming from when conducting my research (p. 210).

CHAPTER 4. RESULTS AND DISCUSSION

This chapter begins with the research results and a discussion on the collection of graphic-based climate memes. It then moves into the results and discussion of the protest-based climate memes, which includes a discussion comparing and contrasting the findings of these two sets of data. The results and the discussion are combined as a style choice so that the interpretation of these memes could directly follow the result. The goal of this choice was to aid the reader in better understanding the results with interpretation as the results are first presented.

To increase our understanding of what's driving people to join the youth climate movement, each section describes how these memes express affect. I want to note that included in this discussion are moments of speculation on what the data might mean. Those moments are noted as such.

This thesis investigated the following research questions:

RQ1: How do users of climate change-centric hashtags employ affect responses in memes, including memes of digital displays of protest?

RQ2: What themes develop when young protesters use Instagram to talk about climate change?

RQ3: What are the differences in the expression of affective states in graphic-based climate memes compared to protest-based climate memes?

A critical discourse analysis, in conjunction with elements of quantitative analysis, were used to answer these research questions.

Graphic-Based Climate Memes: Results and Discussion

Affective Responses Present In Climate Memes

After conducting a critical discourse analysis on a set of 200 graphic-based climate memes collected from Instagram, I plugged in the data that was collected and produced a word cloud to show what affective responses were present and how often in graphic-based climate memes. In Figure 4, the larger the word is the more often the affective response is present.

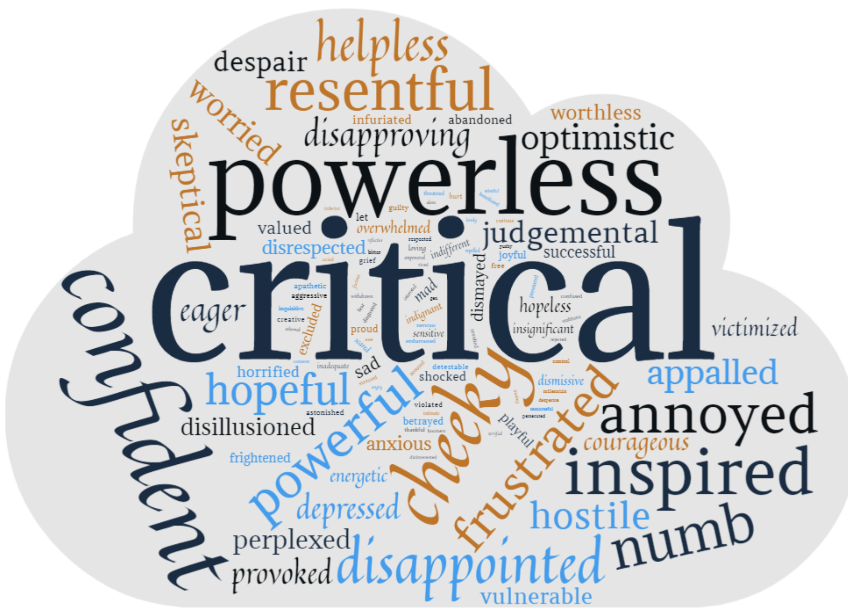

Figure 4: A word cloud of the affective responses that were present in the collection of graphic-based climate memes.

The affective response most common in these memes was ‘critical.’ The messages, images and text of these memes most often included adverse or disapproving judgments related to the issue of climate change. The subject of these criticisms were often directed or related to those who are in power when it comes to causing and addressing climate change— the oil and gas industry, animal agriculture, capitalism, government and politicians and deniers. Criticism was also often directed at people who deny climate change, or those who ignore the problem and remain unmotivated to speak out on issues of climate change, sustainability and environmental health.

‘Cheeky’ was the second most-common affective response found in these memes, which was the term I used when the meme used humor to convey its message. These memes often utilized humor as a tool to communicate emotions and criticisms.

There were near ties for the third, fourth and fifth most common emotion present in these memes. Those pairings are ‘powerful’ and ‘powerless’ for third place, ‘confident’ and ‘frustrated’ for fourth place and ‘hopeful’ and ‘disapproving’ for fifth place. These dichotomies speak to the often-conflicted messaging of these memes.

Overall, negative emotions dominated the affective sentiment of these memes. Of the 200, around 65% were found to be negative, about 24% of them were positive and about 10% of them displayed both positive and negative sentiments.

A Washington Post and Kaiser Family Foundation survey (2019) asked teens how climate change makes them feel: afraid, motivated, angry, helpless, guilty, optimistic and uninterested. That list is in order of how teens responded with 57% saying climate change makes them feel afraid to 20% saying climate change makes them feel uninterested.

I had planned to use these same words to create a comparison in results, but I ended up using a more nuanced list for these feelings. For anger, I instead used the words frustrated, critical, resentful and annoyed. For afraid I used anxious, helpless, threatened, worried and powerless. For motivated I used powerful, eager, hopeful, inspired and confident.

Generally, my results are similar to those found in the Washington Post survey. The most common feelings present in these memes were related to a sense of fear and anger, along with a sense of power to demand or take action on the issue. Naturally there was very little "uninterested" sentiment as these memes are being created by those who care about the issue of climate change.

It seems the most notable difference between the Washington Post poll and my findings is the presence of 'guilt.' I only coded three memes with the emotion of 'guilt' and those memes share the theme of an individual feeling bad about using single-use plastic products instead of reusable items like coffee cups and grocery bags. Figure 5 is an example of a meme that represents why guilt might not be as large of a presence in my data:

Figure 5: A climate change meme that illustrates why guilt wasn't often expressed in the collection of graphic-based climate memes.

These memes often share messages of an individual taking action and/or demanding action from those in power. The creators of these memes are already motivated to add their emotion-driven statements, perspectives and ideas around climate change to an online community of action-oriented members. While these memes often share messages of feeling powerless, few memes express guilt. To speculate on what this might mean, it seems these content creators have pushed aside feelings of climate change-related guilt. The creators of these memes feel they have a part to play in pushing for meaningful action on climate change and don't feel they are to blame for the issue. These memes show that there is recognition that change from the most powerful, not the individual, to actually stave off the worst of the climate crisis. Since the creators of these climate memes have joined in on that conversation, they share a sense of efficacy and less of a sense of guilt.

Below is a table showing the results of this analysis.

Table 1

The number of times certain affective states were present in the set of 200 graphic-based climate memes.

Sentiment	#	Sentiment	#	Sentiment	#	Sentiment	#
Critical	74	Cheeky	61	Powerful	40	Powerless	39
Confident	38	Frustrated	38	Hopeful	32	Disapproving	27
Inspired	26	Annoyed	22	Disappointed	22	Resentful	22
Numb	21	Helpless	19	Hostile	15	Appalled	13
Eager	13	Optimistic	13	Skeptical	13	Depressed	12
Judgmental	12	Provoked	12	Worried	12	Despair	11
Courageous	10	Perplexed	10	Disillusioned	9	Victimized	9
Vulnerable	9	Worthless	8	Anxious	7	Disrespected	7
Energetic	7	Hopeless	7	Sad	7	Valued	7
Dismayed	6	Horrified	6	Mad	6	Overwhelmed	6
Successful	6	Abandoned	5	Dismissive	5	Excluded	5
Frightened	5	Infuriated	5	Insignificant	5	Playful	5
Shocked	5	Betrayed	5	Indifferent	5	Indignant	4
Joyful	4	Proud	4	Sensitive	4	Aggressive	3
Apathetic	3	Astonished	3	Creative	3	Detestable	3
Free	3	Grief	3	Guilty	3	Hurt	3

Inadequate	3	Loving	3	Scared	3	Violated	3
Aroused	2	Bitter	2	Confused	2	Control	2
Curious	2	Disgusted	2	Embarrassed	2	Empowered	2
Fear	2	Furious	2	Inquisitive	2	Interested	2
Intimate	2	Nervous	2	Pressured	2	Repelled	2
Respected	2	Revolted	2	Stressed	2	Thankful	2
Threatened	2	Withdrawn	2	Alone	1	Angry	1
Ashamed	1	Awe	1	Content	1	Desperate	1
Disinterested	1	Excited	1	Humiliated	1	Inferior	1
Lonely	1	Persecuted	1	Pushy	1	Reflective	1
Rejected	1	Remorseful	1	Stubborn	1	Terrified	1
Tired	1	Trusting	1	Wistful	1		

Themes In Graphic-Based Climate Memes

The second guiding research question of this thesis is **what themes develop when young protesters use Instagram to talk about climate change?** This research produced insights into the ways graphic-based climate memes, and the social agents that created them, uphold and/or resist power relations in the context of an engaged, online networked publics created around climate activist hashtags such as #FridaysForFuture, #ClimateStrike and #ClimateAction.

I'll first discuss some general themes that were discovered, which will inform a discussion on a few key themes that provided meaningful insights into this affect-driven networked publics.

Who Is Ultimately In Power?

The content of most of these memes challenge the ideologies around the root causes of climate change. They share an anti-establishment message— to save the earth and secure a livable future, the systems in power need to change or come to an end.

While the creation and existence of these memes represent a way an individual or an organized movement can push for change, it's ultimately capitalism, the wealthy, politicians and governments which continue to hold much of the power in the content of these memes. The mere existence of these memes reminds us that individual people ultimately hold limited influence over the entities that could make the changes needed to stave off the worst of global warming— the ultra-wealthy, politicians, government, the oil and gas industry, adult voters and the silent majority.

Capitalism and the Wealthy

Figure 6: A collection of three memes that share negative feelings related to the message that capitalism is in power when it comes to the outcome of climate change.

One of the themes that emerged from these memes was a sharp criticism of capitalism and the ultra-wealthy for the role they play in the cause and continuance of climate change. These memes were associated with negative feelings of resentment, frustration and disappointment. The messaging of these memes upheld the power dynamic between the 99-percent and the 1-percent, where the individual feels powerless standing up against a system that rewards greed, wealth and an economy that relies on constant consumption. The three memes in Figure 6 show how this theme presented itself.

These three memes in Figure 6 also show an interesting dichotomy that emerged in many of the themes found in these memes. The ultimate message present here is that an individual doesn’t hold the power when it comes to addressing the root causes of climate change. That message plays out in the second meme, where an activist boycotting a company is mocked for how meaningless their efforts are. Yet this meme, like all the other memes in this study, was given some sort of hashtag that reflected its inclusion in an online community of climate protest.

To speculate on what that might mean, it seems the creator of many of these memes feel a sense of powerlessness. But through creating a meme that's critical of those in power, it's that process that gives them a feeling of efficacy. The meme becomes a way for individuals to have their voice heard on the issue of climate change, even if that message is 'I feel powerless.' This analysis gives some clarity as to what I discussed earlier—that the mere existence of these memes remind us of who is actually in power, and it's not the people who are creating these memes.

Related to the theme of capitalism, another theme that emerged in these memes highlighted the influence the ultra-wealthy have on the outcome of climate change. Figure 7 shows a few examples of this theme.

Figure 7: A collection of three memes that share negative feelings related to the message that the ultra-wealthy are in power when it comes to the outcome of climate change.

The theme represented here is that money and the ultra-wealthy are the people who are ultimately at fault for climate change. In the third meme, the wealthy are even controlling the priorities of the government.

These memes express a negative affective sentiment with emotions like powerlessness, frustration and hopelessness. The creators of these memes hold some power because they are spreading a message that might lead others to call for change, but the messaging itself reinforces the power business, money and the rich have on the ultimate outcome of climate change.

Government and Politicians

Figure 8: A collection of three memes that share negative feelings related to the message that governments and politicians are in power when it comes to the outcome of climate change.

As hinted above in the Cheeto-as-a-lock meme, another theme to emerge was overwhelmingly negative feelings related to governments' inaction on climate change. This online community of climate protestors share strong criticisms of the failures of a government, and the memes they create share a message that they do not feel represented by the government on this issue. I cannot guess the age of those who created these memes, but I can speculate that this frustration could be related to how youths, who are leading this online climate movement, are not yet able to vote. Polls have shown (Gallup, 2019) that this group is extremely concerned about climate change and these memes share feelings of hopelessness that the elected adults are or will do anything to address those concerns.

In Figure 8, the first meme captures the feeling that governments worldwide are failing and will continue to fail young people when it comes to climate action. The meme shares sadness that meaningful change is not coming from the top like it needs to, and powerlessness because individuals feel they can't do anything about it. As seen in the second meme, government climate plans make big promises, but the efforts feel like a joke and don't include realistic and transparent steps to get there. And while the government looks idiotic in the third meme, it's because it has gotten itself in that mess. These memes share a message that governments pretend to care about climate change, while in reality they continue to protect fossil fuel companies. In these memes, the government seems to care more about money, economic growth and global power than it does about the future of the people who elected them.

These criticisms show what little faith the younger generation has in the political system, and this theme helps us understand why the youth feel a need to protest inaction on climate change. They want their voices heard and it's clear the feel ignored by a powerful group—politicians.

Figure 9: A collection of three memes that share negative feelings related to the message that politicians are ignoring climate change and the people who care about it.

Related to this theme are memes that reference politicians directly. These memes express feelings of hopelessness when addressing the apathetic behavior politicians share towards climate change. Like in this first meme in Figure 9, memes often express a sense of powerlessness related to politicians' reticence to act. In the first meme, an outstretched hand only results in a high-five. The second meme shows how these memes express frustration even when citizens and voters do try to engage with politics and politicians, because they feel ignored and unheard. It’s clear that these climate protestors that have created these memes don’t feel politicians are taking the issue as seriously as it should be, and instead the issue is treated like a problem for later instead of what it actually is— a problem for right now.

To speculate, it’s understandable as to why kids and young adults would be motivated to protest against such an institution that they feel is utterly failing them. These memes showed very little positive messaging or affect around images related to governments.

There was only one recurring positive imagery of government, and that was memes that included Vermont Democratic Senator Bernie Sanders.

Figure 10: A collection of three memes that show Vermont Democratic Senator Bernie Sanders as a positive political figure.

As seen in Figure 10, images of Senator Sanders were associated with hope, power and a sense of eagerness to make meaningful change happen. Sanders seems to be the only government representative this group believes is taking the issue of climate change seriously, despite the fact that he holds little power to make big changes. Sanders feels like the underdog, and in that way, he connects with and represents the voice of these climate protestors. Sanders is demanding for the change that these young people want to see but are not. This thesis will later discuss how some of these memes are able to take back some of the power that the government and politicians hold in the conversation around climate change.

Oil and Gas Industry

Figure 11: A collection of three memes that share negative feelings related to the message that the oil and gas industry is in power when it comes to the outcome of climate change.

Memes that were related to the oil and gas industry were also often associated with negative affective responses like feeling threatened, helpless and victimized. This theme continues to illustrate how climate protestors feel powerless as individuals, especially when powerful groups overlap, as seen in this first meme in Figure 11. The cop car, representing government and authority, only goes speeding off once it hears that people are protesting an oil and gas project to protect their water. The meme expresses a feeling of victimization related to how oil and gas companies are treated compared to people who are fighting for a livable future.

Earth also feels helpless to the power of fossil fuel companies, as seen in the second meme. In the third meme, we see that protestors feel directly threatened and victimized by oil and gas. This third meme in Figure 11 illustrates who this generation feels most threatened by—the government, climate change deniers and adults who tell them they should stay in school. As this meme shows, members of this youth climate movement feel as if the world is against them in their fight against climate change. Not only are they not getting any help from those who are in power, but the powerful are actively fighting against their calls for solutions.

Generation v. Generation

Figure 12: A collection of three memes that share negative feelings towards climate-denying adults.

Greta Thunberg began protesting inaction on climate change before she reached voting age. It was a way for her to acquire her own political power, and millions around the globe have joined her to amplify the voices of youths. Their aim is to influence the votes of those who have the power to elect political leaders since they cannot vote themselves. Many of the memes in this research reflected this resentment for the power adult voters hold. Memes about the Baby Boomer generation reflected emotions of helplessness, trauma and disappointment.

This theme is reflected in the first meme in Figure 12, as Generation Z panics as a ‘Boomers’ drive unfazed right into a climate apocalypse. All three characters in the car can see what’s coming up ahead, but Gen Z is only along for the ride and can’t do anything about it. Even when parents show up to support kids at a climate protest, they’re portrayed as clowns, as seen in the second meme. These memes show that kids feel unsupported by their parents and older generations, because their actions— like eating meat— make them look like hypocritical fools.

These memes show that young people don't feel adults relate to the struggles of younger generations, which is illustrated in the third meme in Figure 12. In this meme, the American Dream is dead for Generation Z, who has instead gone mad as the world ends. The younger generation doesn't have the means or the mental capacity to care about something as trivial as building wealth in a world that is doomed. Instead, these memes show how younger generations are dealing with multiple traumas at once— one of those being climate change. These memes illustrate that parents and older people don't understand what the kids are going through, who each day are faced with the growing dread of climate catastrophe while they struggle to reach expected milestones like buying a home, getting married and having children. These memes show that it's frustrating and hurtful to these young people when their own parents continue to support the things that could destroy their children's future.

These memes show how cynical youth protestors are towards adults who continue to largely ignore the climate crisis, which is emphasized in the next set of example memes.

Climate Deniers and the Willfully Ignorant

Figure 13: A collection of three memes that share negative feelings towards climate deniers for their role in believing and spreading disinformation.

The science is clear as to what is causing climate change and what needs to be done to stop it. These memes often expressed negative feelings when they addressed people who continue to deny climate change. These are the people who deny human activity as the cause for global warming and the people who elect officials who take the same stance. These memes find deniers at fault for why more isn't being done to address the climate crisis, and they share negative feelings of frustration, resentment and outrage.

The first meme in Figure 13 illustrates just how absurd it is that a large segment of the population somehow continues to convince themselves that their climate theories are sounder than the ever-growing body of peer-reviewed climate research. Memes like this beg the question— how does a teenager convince a person like this to reconsider their beliefs? It shows how frustrated these young people feel as they try to reason with the unreasonable, who continue to ignore the pain and suffering of kids who fear for their future. As the second meme jokes, the world would be a lot cooler if more people believed in climate change.

The last meme shows just how frustrated these young people can feel when trying to communicate with climate deniers. These memes show that protestors often feel despair because their protest efforts can often feel meaningless. The humor and sarcasm in these memes captures just how absurd it is that children are having to convince adults that human-caused climate changes is real and worthy of their attention.

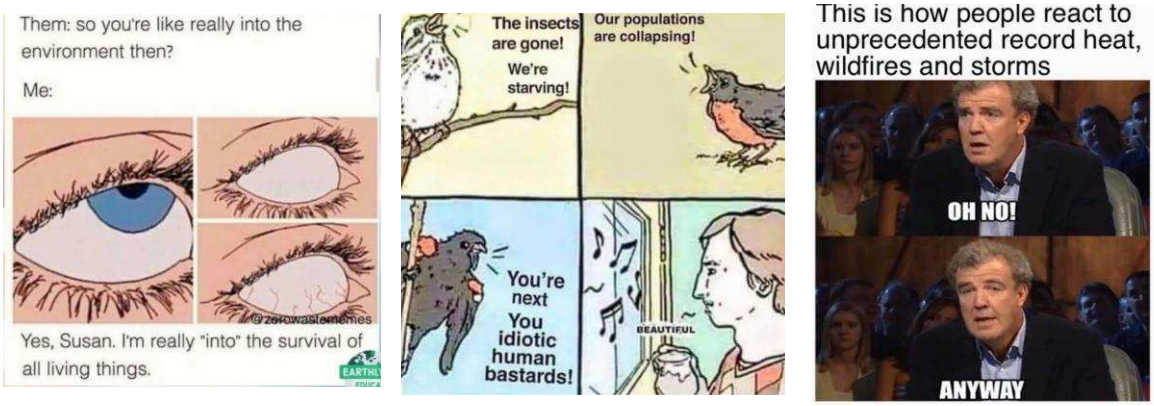

Figure 14: A collection of three memes that share negative feelings towards people who are not taking climate change seriously.

These memes illustrate an even more insidious problem, which are people who accept human-caused climate change but don't seem to care that much about it. One of the protest-based climate memes highlighted later in this thesis includes a quote from environmentalist Robert Swan which reads, "The greatest threat to our planet is the belief that someone else will save it." These memes express feelings of anger, disappointment and frustration aimed at a group of people who have chosen to turn a blind eye to the issue. These memes argue that the climate complacent are just as big of a problem as those who flat out deny its existence.

As seen in the first meme of Figure 14, these kids often don't see themselves as activists. Instead, they feel compelled to act because their lives depend on it. This meme pokes fun at how kids are labeled environmentalists, as if they have a choice to be so, when in reality they feel like their hand is being forced. As seen in the first meme, they ultimately feel they have no choice—they have to get involved, otherwise there is no chance of anything being done to solve the climate crisis. The man in the second meme in Figure 14 only hears beautiful bird songs instead of cries for help, but young people don't have this luxury to simply ignore how serious the climate crisis is. They're surrounded by people like Jeremy Clarkson in the third meme, who have become numb to news and headlines that should instead shock them into action but it doesn't. People like Jeremy would say they care about the climate and are worried about the future, yet they also chose to join the silent majority who hope the issue will be resolved without their participation.

How Youth Reclaim Power Through Memes

The next few sections will discuss how members of this networked affective publics use memes to resist and reclaim power in online conversations around climate change. The following themes were more often related to positive affective responses, more so than the themes that were just discussed which upheld traditional relationships of power.

One theme I'll discuss is how memes share climate solutions and propose different ways the climate crisis could be addressed. Offering and discussing solutions were related to feelings of strength and hope, but conflict arises within the community when it comes to the importance and impact of individual action.

While an individual in these memes often presents as powerless, another theme shows how power can be reclaimed when memes references the youth climate movement and group mobilization. Some of these memes share information on where and when a strike will happen, and they become a tool to organize the online community into action. Voting and other forms of political action were also seen as a way to claim a voice in the conversation around climate change.

Communication through social media is also seen as a helpful tool. Sites like Instagram have become a platform for young people to find and create a community who wants to do something about climate change.

Images of celebrities represent a source of power as well. The creators of these memes often use a glamorous famous person as someone who is taking action against climate change and environmental harm.

Let's Do Something About Climate Change: Solutions

Figure 15: A collection of three memes that share positive feelings related to climate change solutions.

A wide range of solutions were presented in these memes, and they generally related to feelings of hope, inspiration and confidence. In this first example in Figure 15, the ultra-wealthy continue to be framed as a problem in these memes. But in this scenario, the individual feels positive about climate solutions ranging from government policies to Indigenous rights. In this situation, the billionaire is no longer in power. Instead they're viewed as out of touch and worthless. A theme emerged that when a meme shared a tangible climate solution— groups in power no longer felt as powerful.

The second meme shows how climate solutions were portrayed as something physically attractive or worth admiring and lusting over. Climate solutions like wind and solar shown as something this community desires and dreams about, and in these memes were associated with feelings of hope.

The third meme shows TikTok star Khaby Lame making fun of billionaire Elon Musk while he points out how there's already a solution for carbon sequestration— a tree. Musk and his money aren't needed here. An action as simple and ancient as planting a tree can help combat climate change and it's something a single person can do. When addressing individual solutions, often these memes expressed positive feelings.

But some of these solution memes are laced with criticism and frustration when they point out flaws in solutions that seem far-fetched, unhelpful or unrealistic. Despite that, solution memes were one of the only sources of positive affective sentiment. They are associated with hope in an overall hopeless situation, and they illustrate the change and action that kids, teens and young adults are calling for when they hit the streets to protest against inaction on climate change.

One Solution? Individual Action

Figure 16: A collection of three memes that share positive feelings related to the idea that individuals can make a difference when it comes to climate change.

A subset theme within the category of solution memes are memes that discuss how an individual can make an impact. When an individual is represented in these memes, they are often portrayed as hopeless and anxious. But when a meme offered up a way for an individual to take action on their own, those memes were often associated with feelings of confidence, hopefulness and inspiration.

The first meme of Figure 16 presents an individual with something they can do to lower their emissions and help with climate change— they can get rid of their car. This meme also argues this is a way for an individual to save money, making its message a positive win-win for those who want to make a change.

There is ownership and power in these memes, even if the action can feel small, like refilling a reusable water bottle instead of buying a new one, as seen in the second meme. This meme shows how those little actions can make a person feel good and less helpless in the fight for a sustainable future.

These examples highlight how these memes often share positive emotions around individual actions, which, to speculate, is something that's likely needed to keep this community hopeful and motivated in the fight against inaction on climate change. But the opposite message was also present: individual action is a waste of time.

Individual Action Isn't Enough— Conflict Within Activist Community

Figure 17: A collection of three memes that share negative feelings related to the idea that people are wasting their time when trying to make climate change differences on an individual-level.

While some of these memes show how the individual can hold a position of power when they make personal changes like recycling more and eating vegan, there seems to be conflicting messaging within this community on whether or not those actions are worthwhile. The three memes in Figure 17 reinforce how large corporations, world governments and the wealthy are the ones who are ultimately in power. These memes argue that individual action isn't worthwhile, and that people should instead focus on challenging those who are in power if they want to actually create change.

The first meme in Figure 17 is a return to a sense of hopelessness. An individual avoiding meat one day a week will do nothing for issues like species extinction and ecosystem collapse. Instead, as it plays in the second meme, groups like big oil shifting the blame to individuals is only a tactic and a distraction from the real issue. So while a person might feel good about recycling or eating less meat, these memes emphasize how focusing on those actions can shift the blame for climate change away from the groups who are truly at fault.

In the last meme, Batman slaps Robin across the face because Robin is focused on recycling. This meme escalates the tension of this inter-community conflict of the helpfulness of reusable water bottles and taking the bus. The content of this meme suggests that people who focus on individual change are actually wrong and need to be convinced of what sort of actions are actually meaningful.

Memes like this aren't associated with feelings of hope. These memes are critical and negative when they are used to call out members of the climate community who are spending their energy on reusable water bottles and plastic straws rather than actions like calling out oil and gas companies or engaging in acts of political protest. These memes communicate within the community of concerned individuals that they need to be doing more.

Individual Effort That's Worth It: Political Action

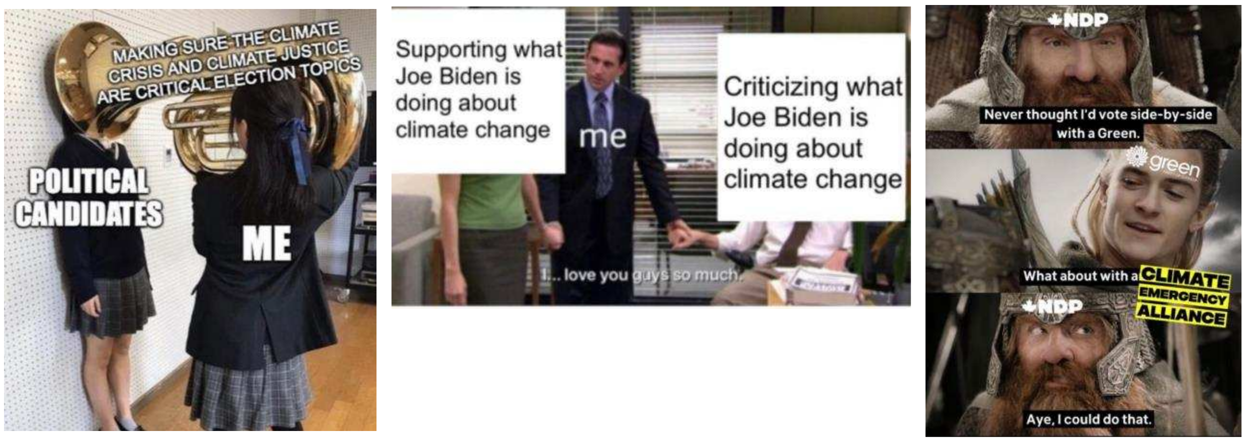

Figure 18: A collection of three memes that share positive feelings related to the idea that people can use political action to make a difference when it comes to climate change.

While there's debate on whether or not an individual should change their lifestyle to try and help with the climate crisis, these memes recognized that getting politically involved is necessary.

As discussed in an earlier section, one of the strongest themes present in these memes is criticism of the government and politicians. These memes show that younger people feel entirely unrepresented and unheard on the issue of climate change. That's partly because many members of this community can't vote yet. But once a person reaches voting age, or if they are already at voting age, memes about voting and other forms of political action were associated with feelings of power, confidence and hope. These memes show that political action is one way members of this networked publics feel they can take action on the issue.

This theme plays out in the first meme of Figure 18, where a young girl will make sure political candidates know where she stands on climate issues. She physically blasts her concerns into the faces of candidates. These memes continue the theme of how young people feel they need to push for change, and they encourage young people to get involved beyond just voting.

This also means holding politicians accountable, like the dynamic that plays out in the second meme. The meme argues that the political work doesn't end once a decent candidate is elected, and young people have to constantly push and advocate for the changes they want to see. From these memes, it seems these young people take the responsibility of voting seriously and understand how their vote is a top tool for real change. The last meme shows how these young voters see climate change policy as the most important issue, and emphasizes the importance of putting political parties aside.

Digital Natives and the Power of Social Media

Figure 19: A collection of three memes that share positive feelings related to the idea that social media is helpful to communicate about climate change issues.

Having social media platforms to communicate fears, worries, desires and hopes around the issue of climate change to a like-minded group was a theme that was associated with feelings of confidence and respect. Social media is a space where kids and young adults are in power. As digital natives, they own this space and speak its language. A platform like Instagram allows them to be in charge of the conversation and gives the youth climate movement strength.

The first two memes in Figure 19 show the joy a climate-conscious person can feel when they post content about topics like fast fashion, deforestation and regenerative agriculture. These memes show that this type of content creation is a source of happiness for them and helps them feel like they have a voice in the conversation.

Greta Thunberg is a major influencer with more than 14 million followers on Instagram. In the third meme in Figure 19, she represents the power online social media content creators can feel. In these meme, Thunberg's influence shows that she and other young people have the power to spread awareness and motivate people to act.

It's not possible for me to assume the ages of the people who've created these memes. But since these memes have been hashtagged items like #YouthClimateStrike, I will speculate that at least some of this content is created and shared by people who are too young to vote. These memes show that they see the internet as a source of power, and a tool for them to amplify their concerns, criticism and hopes on the issue of climate change. In return, social media gives these memes a space to be created and shared, which is how this online networked publics around the climate strike movement is created.

Social media is also a way for youth to share climate change messages that do not come from adults or groups in power. Greta Thunberg's speeches are a good example. These speeches are filled with anger and anxiety, and share an urgency and emotion around the issue of climate change we rarely hear from influential adults. These memes do the same. To speculate, young people feel the need to spread the word on just how bad climate change is and how little meaningful action has been taken to address it, since these memes show they cannot trust adults to do this work themselves.

Celebrity Worship: Power and #Goals

Figure 20: A collection of three memes that share positive feelings when celebrities are pictured as symbols of positive climate action.

One unique way people used memes to communicate about climate change was through the use of celebrity imagery. When memes included images of famous people, those memes were affiliated with positive affective responses like feelings of power, confidence and hopefulness. While most of the themes discussed so far have been somewhat expected, this theme of portraying a segment of the ultra-wealthy as positive and relatable was a bit more surprising. While capitalism, materialism and wealth are often called out as a large contributor to climate change, celebrities seem somewhat immune to this criticism.

Singer Ariana Grande looks beautiful and effortless in the first meme in Figure 20— but the fact that she probably flew in her private jet seven times last month is ignored. She represents who these young people aspire to be and achieve, and in this meme she becomes a metaphor for their hopes and dreams. Instead, their reality is a bad pencil drawing of Grande that they have to settle for. Grande's lifestyle and looks are unattainable by most people, which leaves climate solutions feeling like a pipe dream.

In the second meme of Figure 20, as Lil Nas X goes to submit public comment wearing a glamorous bodysuit, he illustrates the theme that participating in democracy is a source of power and confidence in these memes. The act of submitting public comment can make a person feel as assertive and important as this moment Lil Nas X is walking the red carpet. He is #goals. As is Shawn Mendes and Camila Cabello in the third meme. Not only are Mendes and Cabello themselves idolized as a status to achieve, but their romance and relationship is also desired. There's also a generational divide represented in this meme, as the older woman is shocked by their behavior and she seems to not understand what they're doing. She represents choices made by parents and adults that continue to hurt the earth like eating meat, and the lack of understanding as to why younger people might change their behaviors. This meme also relates to the theme of finding power in individual action like going vegan.

Power in Numbers— Youth Climate Strike Movement

Figure 21: A collection of three memes that share positive feelings when referring to the youth climate movement.

These memes show that an individual can vote, recycle or give up their car to reclaim a sense of power in addressing climate change. And when you get all those individuals to a climate strike, their voice and numbers become a lot harder to ignore. Because all of these 200 memes were hashtagged in ways that would reach and connect to the youth climate movement with hashtags like #FridaysForFuture and #ClimateStrike, they are a digital extension of the protest.

Even if their content didn't directly refer to the protest, they are included in the movement because of their hashtags.

But some of these memes directly referred to the youth climate strike movement. Those memes were affiliated with feelings of power, confidence and hope. The first meme in Figure 21 again uses a celebrity to represent a feeling of power. Drake, a rapper, is promoting #UprootTheSystem which is an extension of #FridaysForFuture and refers to a specific strike in 2021 that focused on demanding intersectional climate justice. These memes show that joining this protest, whether just online or in person, makes an individual feel like they are standing up against inaction and the political leaders who aren't addressing the climate crisis.

The second meme shows how governments can feel nervous when thousands of people hit the streets to demand climate action. Like the first meme, striking is portrayed as a way to get the government to pay attention. And if many of the protestors can't vote, this is one of the only ways they feel like they can have their voice heard.

The third meme is a nice summary of most of the themes discussed so far in this study, as a person moves from a series of steps, from believing in climate change to becoming a political activist around climate change. Learning about climate change is what springboards this individual into action. But the feelings of power, confidence and hope only get stronger as they start to take action on the issue.

Figure 22: A collection of three memes that communicate details about specific climate strikes.

Some of these memes were used as tools to communicate details and information on upcoming strikes, in an attempt to mobilize this online community to take their activism to the streets. As discussed earlier, Bernie Sanders is the one positive image of a government official used in these memes. In the first meme of Figure 22, he's used as a way to raise funds to support climate strikes and spread the word on an upcoming event. The meme even includes a website to communicate specific information about how to get involved. The second meme provides similar information on how a kid can skip school and instead hit the streets to protest. A poster includes information on when the strike is happening in the third meme.

This theme shows how the online community helps to motivate people to get offline and join the youth protest movement. When memes become an actual tool for getting people to protest inaction on climate change, they express positive affective sentiments of hope, power and confidence.

The following section will discuss what themes are found in the protest-based climate memes that this community creates when they hit the streets.

Protest-Based Climate Memes: Results and Discussion

Affective Responses Present In Protest-Based Climate Memes

After conducting a critical discourse analysis on a set of 200 protest-based climate memes collected from Instagram, I plugged in the data that was collected and produced a word cloud to show what affective responses were present and how often in protest-based climate memes. In Figure 23, the larger the word is the more often the affective response is present.

Figure 23: A word cloud of the affective responses that were present in the collection of protest-based climate memes.

The text, images and messaging of the protest signs used to strike against inaction on climate change were most often driven by negative affect responses. The most common affective response found in these memes was ‘critical.’ Like the graphic-based climate memes, the subject of these criticisms is directed at groups in power who are causing climate change and/or aren’t taking action to address the causes of climate change: oil and gas companies, the wealthy, capitalism, government, politicians, voters, adults, climate deniers and the apathetic majority. To compare, ‘critical’ was also the most common affective response found in the graphic-based climate memes.

‘Frustrated’ was the second-most common affective response found in these protest-based memes, followed by ‘powerless,’ ‘anxious,’ ‘victimized,’ ‘annoyed’ and ‘resentful.’ All of these are negative affective responses, as are most of the affective states found in these protest-based memes.

This reveals a strong difference between what was found in the protest-based climate memes versus the graphic-based climate memes. Positive affective responses were found in the graphic-based climate memes much more often than in protest-based climate memes. The protest-memes were overwhelmingly filled with negative affective responses. The only positive affective responses present were ‘powerful’ in 34 of the memes, ‘confident’ in 14 of the memes, ‘hopeful’ in 12 of the memes, ‘inspired’ in 11 of the memes and ‘eager’ seen in 3 of the memes.

Of the 200 memes about 91% were found to be negative, 8% were found to be both positive and negative, and less than 1% were found to be positive. To compare to the 200 graphic-based climate memes, around 65% were found to lean negative, about 24% of them leaned positive and about 10% of them displayed both positive and negative sentiments.

As referenced earlier, a Washington Post and Kaiser Family Foundation survey (2019) asked how climate change made teens feel. The options were afraid, motivated, angry, helpless, guilty, optimistic and uninterested. That list is in order of how teens responded, with 57% saying climate change makes them feel afraid to 20% saying climate change makes them feel uninterested.

As already discussed, I had planned to use these same words to create a comparison in results. But like with the graphic-based climate memes, I ended up using a more nuanced list for these feelings. As examples, for anger I used words like frustrated, provoked and hostile. For afraid I used worried, scared, frightened. For motivated I used confident, powerful and hopeful. For helpless I used victimized, vulnerable and powerless.

As what was found with the graphic-based memes, generally my results are similar to those found in the Washington Post survey. The most common feelings present in these memes were related to a sense of fear and anger. In these protest-based memes, there was a stronger sense of helplessness than was found in the graphic-based memes. This finding will be discussed at greater length, but once kids and young adults actually hit the streets, their affective state is often fear-based.

Naturally, there was very little “uninterested” sentiment as these memes are being created by those who care about the issue of climate change. A feeling or expression of personal guilt for climate change wasn’t present in these protest-based climate memes, but often the messages were crafted to make someone or a group feel guilty about a lack of action or care about climate change. As what was seen in the graphic-based climate memes, the creators of these protest signs are sharing messages of individuals who are taking action and/or are demanding action from those in power. To speculate why this is, this group might feel less guilt about climate change than the general population of surveyed young people, because this group is taking action by hitting the streets in protest in an attempt to be heard and make positive change.

Below is a table showing the results of this analysis.

Table 2

The number of times certain affective states were present in the set of 200 protest-based climate memes.

Sentiment	#	Sentiment	#	Sentiment	#	Sentiment	#
Critical	182	Frustrated	103	Powerless	81	Anxious	48
Victimized	47	Annoyed	36	Resentful	36	Powerful	34
Helpless	23	Provoked	23	Cheeky	21	Worried	20
Hostile	16	Confident	14	Hopeful	12	Inspired	11
Mad	11	Despair	10	Angry	9	Grief	9
Depressed	7	Vulnerable	7	Infuriated	6	Scared	5
Frightened	4	Appalled	3	Eager	3	Disrespected	2
Hopeless	2	Aggressive	1	Disappointed	1	Down	1
Judgemental	2	Numb	1	Panic	1	Sensitive	1

While I found over 100 different affective expressions in the graphic-based climate memes, the list for the protest-based climate memes contains 36.

Themes in Protest-Based Climate Memes

The second guiding research question of this thesis is **what themes develop when young protesters use Instagram to talk about climate change?** Using the methods as described earlier, the research produced insights into the ways protest-based climate memes, and the social agents that created them, uphold and/or resist power relations in the context of an engaged, online networked publics created around climate activist hashtags such as #FridaysForFuture, #ClimateStrike and #ClimateAction.

This section will first discuss general themes that were discovered, which will inform a discussion on a few key themes that provided meaningful insights on what feelings and emotions are playing a role in motivating young people to hit the streets and protest inaction on climate change.

This section will also further answer this study's final research question of, **what are the differences in the expression of affective states in graphic-based climate memes compared to protest-based climate memes?** Noteworthy similarities and differences found while researching the two different sets of memes will be discussed throughout the following section.

Young Women Are Showing Out

Figure 24: A collection of five protest-based climate memes featuring young women holding signs at climate protests.

About 76 percent of the people pictured holding climate protest signs appeared to be women as seen in Figure 24, about 22 percent appeared to be male and less than 2 percent were unknown. I didn’t become aware of this pronounced theme until I had all of the climate-based memes together in a single document for analysis. Once I could easily scroll through them, the absence of men was somewhat striking. While groups of women were often seen protesting together, men are often pictured alone, or with a spouse or other female friends. I believe only two of the 200 climate-based protest memes pictured two or more men without a female or child companion.

I think the theme is notable because of the person who is leading this movement— Greta Thunberg. To speculate on what this means, it’s possible that the initial image of Thunberg, a young woman standing up to power with a protest sign in her hand, has resonated more with young women who also want to share their protest messages, and thus have propelled Thunberg's initial protest into meme-status.

It could also be possible that women feel more comfortable sharing their feelings of fear, pain, frustration and anger in public than men do. Thunberg's messaging often revolves around emotion and thus why this research is studying displays of affect in climate memes. To continue to speculate, maybe young women, who often joined the protest with groups of friends, feel more secure in this space.

Women's issues were also a stronger theme in the protest memes compared to the graphic memes, and this will be discussed in greater depth later on in this section.

Who Is Ultimately In Power?

Once a person has grown concerned enough with climate change to join a protest, their protest efforts remind us who is actually in power— and it's not the individual people holding the signs. Their protest messages are often pleas for help from those who are causing the most harm while not doing enough to address the issue: oil and gas companies, government, capitalism and the silent majority.

But because many of the young people holding these signs aren't yet old enough to vote, the protest is how they regain some of their power. As hundreds of thousands of people join the youth climate movement, their numbers act as a reminder to those in power that this is the next generation of leaders, voters and consumers, and this generation wants things done differently.

Some of these protest signs include a stark message that puts the powerful in their place— "if you don't stop climate change, you'll go down with us. Mother nature and climate change are actually the ones in power, and our protest is here to remind you of that."

People In Power: Please Help Us!

Figure 25: A collection of three protest-based climate memes that share a theme of young people crying out for help.

When these young people are protesting inaction on climate change, often their messages call out for help from others who they perceive to be in power in this situation. All three of these memes express feelings of anxiety, fear and powerlessness as an individual, but it’s not clear who these messages for help are directed at. As seen in Figure 25, these messages feel like an attempt to shout from the top of a mountain— these young people want anyone and everyone to hear their pleas for help. This messaging shows that the source for climate solutions is outside of the people pictured here, who are only able to express their worries about what’s happening and what’s to come. They don’t hold the power— the power is in the hands of the people who can respond to these cries for help.

Memes like this uphold the traditional power dynamic between the haves and the have nots, the people and the government, the climate believers vs. the deniers. In the third meme, a woman holds a sign that says “Everything we love is dying.” Her face looks strained and stressed. A message like that shows she wants someone with power to see her pain, to feel her fear, desperation and worry in hopes of it leading to change. It doesn't feel like she alone can do much more than that.

To compare this with the graphic-based climate memes, this general cry out for help seems unique to the protest-based climate memes. The graphic-based climate memes shared online were more focused on spreading awareness, creating community and possibly capturing young people's attention in hopes of inspiring them to act on their emotions. It seems that once kids and young adults are actually hitting the streets to protest inaction on climate change, their message turns to more desperate pleas for help and attention.

Capitalism and the Wealthy

Figure 26: A collection of three protest-based climate memes that share a theme of young people calling out capitalism and wealth as a cause for climate change.

Other protest messages are more direct, and these memes often call out capitalism and extreme wealth for its role in creating climate change. These types of memes also uphold traditional power structures, but the creator is taking some of that power back by calling out specific businesses and displays of greed. Messages like "eat the rich" or as seen in Figure 26, "The wrong Amazon is burning" show anger and hostility and a desire for accountability. As the last meme illustrates in Figure 26, young people are questioning the priorities of government and private spending in the face of the climate crisis, and their criticisms displayed in public and in great numbers is a way young people can share feelings of disgust, anger and pain while directing those emotions towards a specific group of people.

The theme of calling out capitalism and extreme wealth was also present in the graphic-based climate memes, but the messaging in the protest memes seem more irritated and fed-up. These protest signs, filled with rage and annoyance, are directed at the ultra-wealthy. They call out those who have gained their wealth by a system of oppression through knowingly hurting people and the planet.

Government And Politicians

Figure 27: A collection of three protest-based climate memes that share a theme of young people calling out governments and politicians for their inaction on climate change.

When addressing government inaction on climate change, protestors expressed feelings of frustration, criticism, anger and, as the first meme spells out for us, fear. These protest memes, like those seen in Figure 27, call out politicians directly for things they've done to mock the reality of climate change, like when former Australian Prime Minister Scott Morrison brought a lump of coal to parliament as seen in the first meme. These memes are also direct messages to politicians like President Joe Biden for the actions they have promised to take but haven't, like declaring a climate emergency or ending fossil fuel projects, as seen in the last meme in Figure 27.

Many of these young protestors can't vote, so these climate strikes are a platform for them to share and feel heard on how they feel about the current and looming crisis. Without the ability to participate in an election, status-quo politicians who won't act on climate change continue to stay in power. However, these memes show that young people have a message they want made loud and clear— "we're angry, and we're ready to make changes with our vote as soon as we are allowed."

The graphic-based climate memes called out politicians and government inaction on climate change more directly than the protest memes. This might be because there were many protest signs with messages like 'S.O.S' and 'HELP US,' which are more generally directed at groups in power which include political leaders. This difference continues to highlight how the graphic-based memes seem to try to educate an online audience about specific news events, politicians and government happenings in hopes of getting more people to care about climate change. Those memes are used to share knowledge, where the protest memes and their public forum feels like the place where that knowledge is used to then demand change and call out for help.

Oil and Gas Industry

Figure 28: A collection of three protest-based climate memes that share a theme of young people calling out oil and gas companies for their role in causing and perpetuating climate change.

When addressing oil and gas companies and their emissions, protestors expressed feelings of victimization, anger and criticism. As seen in Figure 28, when these protest memes called out oil and gas companies for their role in climate change, the messages were strongly worded and often felt like a provoked response. The role of capitalism and wealth in climate change overlap with this theme, and these protest signs are calling for accountability from these companies. While these memes are an attempt to put public pressure on these polluters, it’s clear that the mega-wealthy producers of oil and gas continue to hold their position of power.

The graphic-based climate memes also reflected a feeling of victimization when addressing oil and gas companies.

Climate Deniers and the Willfully Ignorant

Figure 29: A collection of three protest-based climate memes that share a theme of young people calling out people who deny the existence of climate change.

Many of these protest memes, as seen in Figure 29, are directed at people who either don’t believe in climate change or who are choosing to stay uninterested, neutral or quiet on the issue. Climate change matters to these young protestors, and their memes express despair and anger when addressing adults who aren't sharing this same sense of panic.

These angry and resentful young protestors are spending much of their energy on trying to convince adults that they should listen to the kids, and their protest memes show they are hurting over the uncertainty and inaction on climate change. As the third meme shows, scientific consensus should be taken seriously on this issue. When adults vote for politicians who continue to deny that climate change is human-caused, I’ll speculate that it shows these kids that their parents, teachers, leaders and community members are not taking this issue seriously. Young protestors express feelings of hurt, disappointment and frustration related to older generations and their inaction on climate change through these memes.

This theme was also present in the graphic-based climate memes, where the messages often used humor to discredit those who continue to ignore the severity of the issue of climate change. As discussed in earlier comparisons, the protest memes are more action-oriented. These protest memes call out climate deniers in hopes of a result— accountability.

Generation v. Generation

Figure 30: A collection of three protest-based climate memes that share a theme of young people calling adults for acting like children.

Despite the fact that many of these climate protesters appear too young to vote, many of the memes they create, as seen in Figure 30, share the message that protestors are acting more like adults than adults are. After all, it is adults who are in power at the oil companies and in government, and adults are the wealthy ones running big business, and it’s the adults who aren’t voting with the climate in mind. When addressing older generations, young protestors expressed fed-up feelings of annoyance and anger.

I speculate that these kids don’t feel heard or represented, and it’s their frustration that is leading them to create protest memes to share in public on the streets and then share them again online, in this case on Instagram. In this way, these young people are able to establish some sense of power over adults who don’t have the same social media skill set and knowledge as these young digital natives do.

These youth-led climate protests happen around the world in different places on different days, where students "skip lessons to teach you one," as written in the third meme example here. But that doesn't matter much— these kids are able to share their feelings of pain, outrage and sadness, on a platform like Instagram, with other kids who are feeling hopeless, anxious and afraid about climate change. It's a space these young protestors have created and space they can control, and this is where they hold more power than adults.

When this group connects and grows their numbers through sharing their emotions, that's when their movement begins to hold its own power.

How Youth Reclaim Power Through Protest Memes

The next few sections will discuss how members of this networked affective publics resist and reclaim power through public protest and online conversations around climate change. The following themes were more often related to positive affective responses than the memes which upheld traditional relationships of power.

We Are The Solution

Figure 31: A collection of three protest-based climate memes that share a theme of young people pointing to themselves and the youth climate movement as a solution to climate change.

The organized youth climate strike movement itself, connected through the sharing of feelings and emotions online and in public, has allowed students and young adults to reclaim power in the climate change conversation. This movement and its memes have created spaces, both online and in the streets, where young people are the dominant voice on the issue of climate change. Members of this networked affective publics use protest-based memes, as well as graphic-based memes, to add their voice, perspectives, emotions and feelings to the climate change conversation. The climate strike movement and its memes that have given the youth a voice, especially since they are unable to vote. Protest-based memes, shared online and in the public square, help connect this network of affective publics through amplifying voices of concerned young people like Greta Thunberg, who otherwise would be largely ignored.

As seen in Figure 31, the youth climate movement itself makes these young protestors feel a sense of power. Oftentimes these climate strike memes point out that source of power through not only the act of protesting, but through the messages written on a protest sign. These signs might simply say 'Youth Strike for Climate,' or make the case that young people themselves are the solution to climate change. This type of messaging was one of the only subsets of protest memes that seemed to capture feelings of hope, confidence and inspiration. The message of these example protest signs is that the youth climate movement itself is something to fear, and that message empowers these young people.

Many of these messages are shared at public protests, but the last meme in Figure 31 shows how they are sometimes only shared through social media. These digital displays of protest spread the word of the youth climate movement through the act of protest and also through the written message shared in the protest meme. The creation of this networked affective publics provides a way for its members to resist and reclaim power in online conversations around climate change.

This messaging was also present in the graphic-based climate memes, especially because they were hashtagged in ways that would reach and connect to those interested in the youth climate movement with hashtags like #FridaysForFuture and #ClimateStrike. The memes themselves are a product of a community of people who have connected over social media on platforms like Instagram. This community has formed and mobilized through expression of sentiment shared in these memes, and this affect-driven networked publics (Papacharissi, 2014) have found a voice and a power in numbers.

Let's Do Something About Climate Change: Solutions

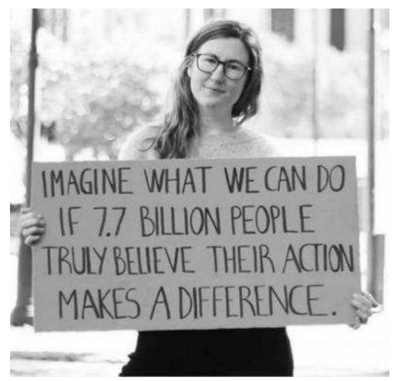

Figure 32: A collection of three protest-based climate memes that share a theme of highlighting ways an individual can combat climate change.

Another source of hope, confidence and more positive affective states were protest memes that referenced climate solutions that an individual can participate in. As seen in Figure 32, these messages help young people feel like they do have power to do something about climate change by going vegan, living more sustainably or simply being reminded that their small actions can make a difference— like protesting. While choosing to participate in the individual action of protest, which this group ultimately hopes will lead to change, the memes they create in the process are also encouraging additional action for people to take. This theme was also present in the graphic-based climate memes.

Unique Themes Found In Protest-Based Climate Memes

The themes discussed so far were found in both the graphic-based climate memes and the protest-based climate memes. The following analysis will highlight themes that were unique to the protest-based climate memes, and I will note some interesting contrasting themes between the two data sets.

'I'm With Her' — Women's Issues Presented In Climate Protest Memes

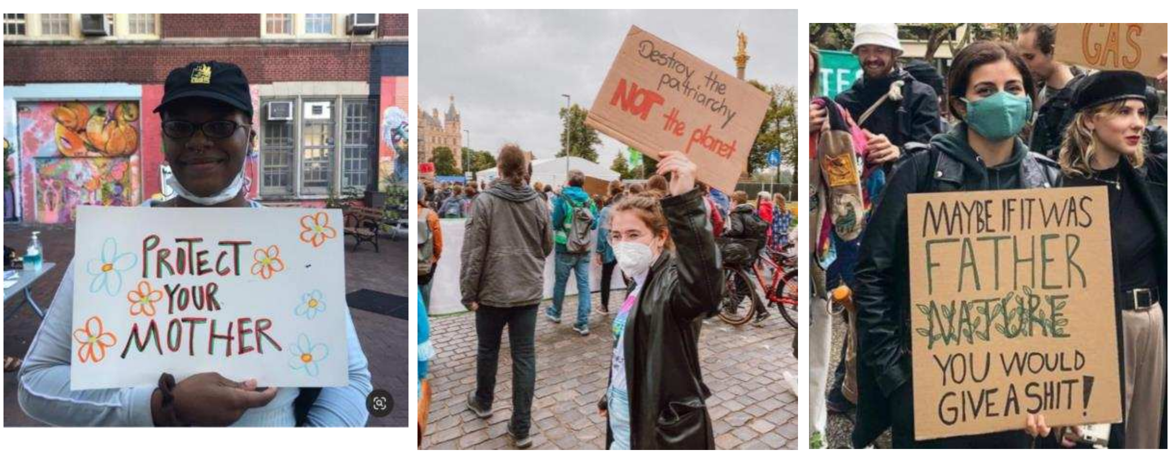

Figure 33: A collection of three protest-based climate memes that share a theme of framing the plight of earth as a feminist issue.

Some of these protest memes framed the climate movement as a feminist issue, as seen in Figure 33, where the poor treatment of earth and nature was often compared to the inadequate ways society treats women. As mentioned earlier, a majority of the creators of these protest memes appear to be women. These women have found commonality and identity with how the planet is abused, mistreated and without a way to defend itself against the power structures that perpetuate this violence. "Maybe more people would care about the problem if Mother Earth was actually Father Earth," as seen expressed in the third meme example included here, but instead the patriarchy persists. "Mother Earth needs people to stand up to power to protect her and make her feel heard and seen, and big societal changes are needed to make that the norm." These memes show feelings of frustration, anger and criticism. To speculate, this can give us an understanding as to why young women, including Greta Thunberg, might identify with the climate movement and the fight against environmental injustices.

This theme is unique to the protest-based memes as it did not seem present in the graphic-based climate memes. Because of that different, the public protest space and the creation of these protest signs seems to present an opportunity for young women to share how they feel about issues that impact their lives. Climate change is the focus, but there is overlap in how the same power structures that have caused climate change have also created misogyny, inequality and violence against minority groups.

A Dichotomy: Nature is Helpless But Ultimately In Power

Figure 34: A collection of three protest-based climate memes that share a theme of young people crying out for help.

Nature, the planet and its animal inhabitants are often portrayed in these memes as in pain, defenseless and scared. While a tree can't scream, as pictured in the first meme of Figure

34, and it might be hard to tell the emotional state of a seal as seen in the second meme, what this imagery shows is how these young protestors are feeling about climate change and the future of their home. Their protest is meant to give the voiceless a voice, whether that's young people who cannot vote or a forest that is on fire. Much of the imagery used in these protest memes is bleak, reminding us that the earth and its creatures need our help — people are in power and we can be the ones to save the planet from ourselves.

But there was an opposing theme in these memes that point to climate change and nature as the ultimate source of power as seen in the meme examples included below.

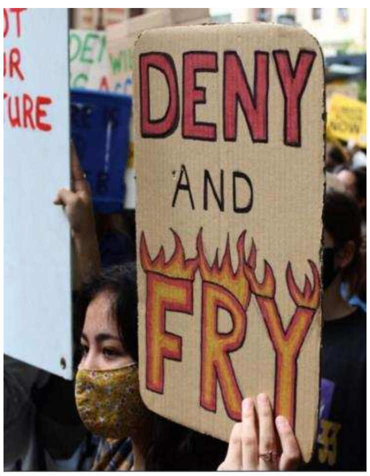

Figure 35: A collection of three protest-based climate memes that share a theme that nature is ultimately in power and that climate change will impact the wealthy and poor.

The memes in Figure 35 share the idea that humans might think that they are the ones in control, but that's not the reality. "Money, wealth, materialism, capitalism or celebrity won't matter much when there's no healthy air to breathe or clean water to drink." While climate change might impact the wealthy to a lesser degree, it will greatly disrupt global economies, food chains, supply chains and environmental health. These memes, which express feelings of anger, hostility and criticism, take a different stance on the power of Mother Nature. "At the end of the day, floods, fires, droughts and extreme heat will impact all of us— the wealthy oil company executives, the politicians who continue to deny the reality of climate change and the leaders of the 100 companies responsible for most of the global emissions." The ultra-wealthy might feel like they can conquer nature, but as the planet grows more volatile with climate change these memes stand as a reminder that eventually everyone will lose.

Glitzy Celebrities No Longer In Power

Figure 36: A collection of three protest-based climate memes that share a theme of young people expressing concern that the world is getting hotter than their favorite celebrities.

In the graphic-based climate memes, specifically in Figure 20, images of celebrities were often associated with affective responses like powerfulness, confidence and hopefulness. The theme was somewhat surprising since capitalism and the ultra-wealthy are often portrayed in these memes as the reason why climate change exists and why little action has been taken to stop it. To speculate, it seems these young protestors don't see celebrities as part of the problem, but instead idolize singers and actors for their good looks, status and materialistic habits. Unlike with other power structures, these memes don't try to challenge the power dynamic between a celebrity and the attachment and worship of fans— these memes only highlight it. While a young protestor might be quick to call out some card-carrying members of the 1% like a politician or

CEO, there isn't the same criticism in these memes for Taylor Swift's regular usage of her private jet. Figures like that are instead looked up to in these memes and idolized.

These protest memes show that young protestors identify with these celebrities and want to be them, date them or befriend them. They see Timothee Chalamet and Taylor Swift as the people who have made it in life, and their idolization makes these celebrities almost untouchable. But in these protest memes, as seen in Figure 36, even celebrities are powerless to climate change. "The world is now getting hotter than Timothee Chalamet, Taylor Swift and the entire cast of the hit sitcom 'Friends.'" These protest memes are supposed to be humorous— "what could possibly get hotter than all six of the hottest celebrities from the 1990s? There's only one thing, and that's rising temperatures from climate change." Even Rachel, Phoebe, Chandler, Joey, Monica and Ross, as seen in the third meme example here, don't stand a chance unless we do something to stop global warming.

In these protest memes in Figure 36, celebrities are seen as a casualty to our continued inaction on the crisis. They are no longer associated with feelings of power, but instead feelings of frustration, woe and irk. And if Chalamet's beauty will fall to climate change, what hope do any of us have?

A Generational Alliance

Figure 37: A collection of three protest-based climate memes that share a theme of people of an older generation joining young people in protest.

It wasn't common to see people who appeared over the age of 30 pictured alone in these protest memes. Whenever they did appear, they were usually accompanied by a young person or young people who don't appear old enough to vote. Without the ability to vote, a protest and a cardboard sign is their way to share their feelings of fear and frustration around climate change. Ultimately the hope of their strike is to gain the attention of those who are able to vote, like the adults who are pictured alongside them in these memes. As seen in Figure 37, it might be grandpa or dad who is taking notice of how their daughter or grandson is feeling about the uncertain future of earth. To speculate, it seems this has created an alliance between different generations— the young people who have the most to lose with climate change, and the adults who can change their vote and their habits to help make sure there is a future for the children they care about.

Hashtags on Protest Signs

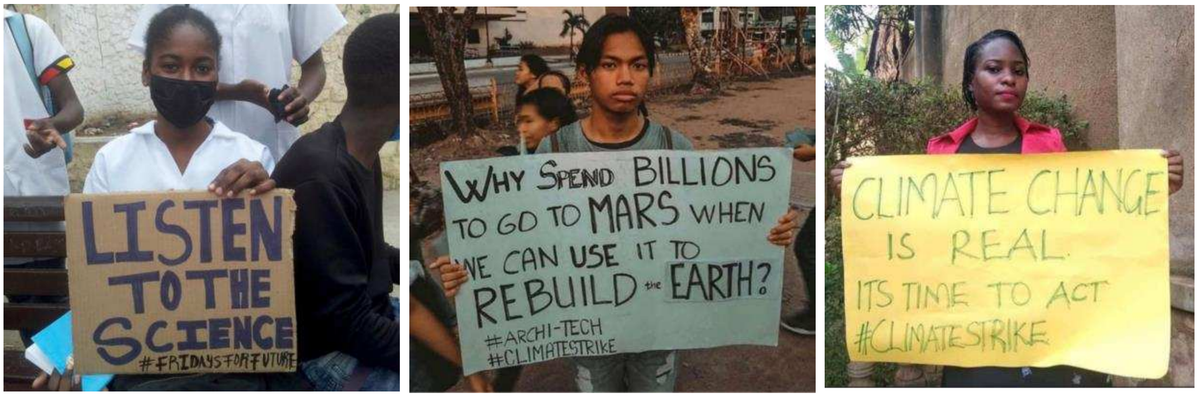

Figure 38: A collection of three protest-based climate memes that share a theme of containing hashtags written out on protest signs.

As a final observation and a good opportunity to bring this research full circle, I thought it would be noteworthy to highlight how some of these protest memes included written hashtags. When these protest messages were first shared in a public space, their hashtags of #FridaysForFutre and #ClimateStrike nodded to the online networked publics that this youth drive movement has created. As seen in Figure 38, when these protest memes were eventually shared on social media, they were given the same hashtags that were physically written on the signs. These are the same hashtags that the graphic-based climate memes shared.

This ever-growing collection of climate protest content is driven by affective attunement, which has allowed “people to feel their way into [the] politics” (Papacharissi, 118) of climate change. It is those emotions that young people want validated in hopes of inspiring action against climate change.

CHAPTER 5. CONCLUSION

This study conducted a critical discourse analysis to identify what themes emerged when protestors used climate change memes to communicate affective responses when using #FridaysForFuture, #ClimateStrike, #ClimateStrikeOnline and #SchoolStrike4Climate and similar climate protest-related hashtags. More specifically, the research analyzed what affective responses and themes appear in memes as digital acts of protest compared to a broader range of graphic-based climate change themed memes and how they overlap and differ.

The aim of this research was to gain a better understanding of what might be driving students to join the youth-driven global climate movement by examining the ways in which these networked publics engage online using climate memes. The fact that a majority of these memes shared negative emotions associated with feelings like frustration, criticism, fear and helplessness, could represent a range of possible emergent meanings.

For one, climate change is an alarming phenomenon and the negative affect is a natural outcome of that reality. These climate memes are a vehicle for sharing those negative emotions, which are often associated with a sense of helplessness in the face of such an issue as climate change. But when these affect-driven memes are shared at protests, or alongside protest-related hashtags online, it allows the creator to express these dark and overwhelming feelings with a sense of hope. By sharing these negative and heavy feelings through memes, there's opportunity for connection, community and change.

By channeling those negative emotions into protest memes, there are communicative advantages of this kind of affect. The collection of memes presented in this study shows how people are suffering because of climate change. The majority of them share a similar affect. This speaks to why the creators of these climate memes want things to change and why the youth-driven climate movement has seen a global spread. This was especially apparent in the protest-based climate memes, where more than 90 percent were found to share a negative affective state. That's compared to 65 percent of the graphic-based climate memes. This shows that fear, anger, frustration and other negative feelings are contributing to emotional states that drive young people to participate in action against climate change. Once young people hit the streets, they want the people in power to know their generation is not happy and that they want things to change.

The graphic-based climate memes express a greater mix of affective states. My interpretation of this is that these graphic-based climate memes serve a greater range of purposes. Some spread awareness about climate change, like facts about emissions, green energy and other solutions. Others encourage individuals to take individual action through voting or recycling.

These graphic-based memes also shared a sense of gallows humor. Matt Schimkowitz, the senior editor at Know Your Meme, is quoted in the article I wrote (Sakas, 2020) that these memes are often jokes "about how there isn't going to be a planet for them to grow old into, which is obviously very sad." This shared dark humor is part of what connects this community of people who use these memes as a way to cope with the hopelessness climate change makes them feel. But through sharing this humor and sharing that pain, they can find comfort in knowing they aren't alone in those feelings.

The protest-based climate memes are created mostly as a tool to express anger and other negative affective states, but that isn't the case for the graphic-based climate memes. Graphic-based memes hold space to invite people into the conversation, to encourage people to care about the issue through connection with humor, hope and inspiration for creating change. The protest-based memes play a more specific role of expressing negative emotions to propel that change forward.

Inspiration For This Research

This research was inspired by a news story I reported for Colorado Public Radio with the headline, “Memes about climate change help teens laugh about their fears. Can they also get them to act?” (Sakas, 2020). I spoke with several high school students about how they use memes to talk about climate change. Ivan Tochimani-Hernandez, a high school senior, said memes and social media give kids a voice, especially since they can’t vote.

“Connecting with others from others, schools, other states, other countries. It's an amazing feeling to have,” he said. For students like Tochimani-Hernandez, climate memes are no joke. They create an online community of young people who are concerned about their future, and their collective voice has sparked a movement of youth-led climate activism (Sakas, 2020).

To look back at the quote supplied at the start of this proposal, New York Times journalist Somini Sengupta writes that the modern world has likely never seen a youth movement so large, and that it’s tied together “by a common if inchoate sense of rage” (Segnupta, 2019). Because this group is tied together by an affective response like rage, or hopelessness or worry or sadness, the memes they shared on Instagram were studied through the lens of networked affective publics (Papacharissi, 2014). Because this is a youth-led movement, its unique digital footprint on Instagram includes memes— a form of discourse woven into daily online communication for kids, teens and young adults. Through these memes, this demographic is expressing affective responses to the climate crisis. Through a critical discourse analysis, this form of communication was analyzed to inform a discussion on what might be driving these students to get involved in the climate conversation through this type of discourse.

When protestors share feelings of suffering, fear and despair, those memes are focused on calling out groups in power who are doing nothing to stop climate change. If these protestors feel that nothing is being done to save the planet and their future, these negative emotions could be playing a role in their motivation to join the youth climate movement. The protestors shared positive emotions when the memes included references to the youth climate movement itself, which shows being a part of the movement might be helping these young people feel they can make a difference.

Data Sampling and Analysis Limitations

This research used critical discourse analysis, and Fairclough (2003) acknowledges there are limitations to this type of research. For intercoder reliability, my advisor Dr. Michael Humphrey reviewed the 400 memes I had collected for this research. After placing all of those memes in a spreadsheet and analyzing them for themes and affective states and responses, Dr. Humphrey reviewed the various analyses and found similar themes to emerge from the data. When I identified these themes and presented various collections of memes to support the theme, Dr. Humphrey reviewed the various analysis and agreed that these themes were present in the data.

The results of this study are not a complete and definitive analysis of the text around climate memes shared through hashtags that express political resistance to governments' inaction on climate change. As Fairclough writes, "the reality of texts is exhausted by our knowledge about texts" (p. 14). He also sees the approach as inevitably selective since I as the researcher chose to ask certain questions about social events and texts.

Memes that were presented in other languages other than English were excluded from this study due to a lack of resources to accurately translate these memes to a language the researcher understands. This could limit the understanding of how youths around the globe are expressing affective responses in their climate meme communication.

I collected graphic-based memes that I could recognize as a meme, which means that some memes may be left out due to my lack of knowledge on the nature and origin of the meme. This narrowed knowledge will lead to some memes not being included in the sampling.

It was also impossible to discern the differences of the performance of the protest-based memes and what audience the original protest sign was created for. As in, was the person actually at a protest? If they posted a selfie with their protest sign, had they just come from a protest or were about to head to a protest? Or was the photo only ever posted online?

Future Research

Research that could build off of the study could include qualitative or quantitative projects that would continue to grow and understanding of why youth are driven to get involved in the politics of climate change. Focus groups with young people could help verify or disestablish the findings from this critical discourse analysis. Research could be done on how these memes affect a viewer, echoing the work of Huntington (2017) to answer questions on how these forms of political discourse might be impacting other youths to get involved in the issue. Studies could focus on different emerging social media platforms like TikTok where youth are the dominant voice to an extreme degree to see if these memes share different affective responses. Climate change themed meme videos could also be analyzed since this study focuses on memes that are still images. Studying the use of video could add to the findings of this research. Zizi Papacharissi’s research could be further applied to research how affect plays a role in pre-discursive bodily charge that leads to a person creating a meme to engage online.

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