Higher Further Faster: Social Media Discourses of Feminism, Misogyny, and *Captain Marvel*

by

Philippa R. Adams

MA, Simon Fraser University, 2016

BA (Hons), Simon Fraser University, 2012

BA, University of Victoria, 2009

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Declaration of Committee

Name:	**Philippa R. Adams**
Degree:	**Doctor of Philosophy (Communication)**
Title:	**Higher Further Faster: Social Media Discourses of Feminism, Misogyny, and *Captain Marvel***
Committee:	**Chair: Richard Smith** Professor, Communication
	Peter Chow-White Supervisor Professor, Communication
	Frédérik Lesage Committee Member Associate Professor, Communication
	Wendy Hui Kyong Chun Committee Member Professor, Communication
	Victoria E. Thomas Examiner Assistant Professor, Communication
	Sarah Banet-Weiser External Examiner Professor, Annenberg School for Communication University of Pennsylvania

Abstract

On International Women's Day in March 2019, Marvel Studios released *Captain Marvel*, the first film in the expansive Marvel Cinematic Universe to have a female superhero in the solo lead role. *Captain Marvel* (2019) joined other recent women-led franchise films in serving as catalysts for controversy on social media. Films such as the all-female *Ghostbusters* (2016), *the Force Awakens* (2015), *the Last Jedi* (2017), and *Mad Max: Fury Road* (2015) were all accompanied, following their releases, by vitriolic sexism and criticism by so-called "fans."

This dissertation explores questions of social media's function as a technology of gender, as well as articulation of discourses of gender through social media posts. Twitter, as a social media platform, is a space where users use discourse to socially shape culture and technology. Conversations about gender on social media are necessarily intertwined with how we socially shape technology, how technology is us, how struggles with technology are struggles with ourselves in our society. Twitter users influence sentiment about women-led media texts on social media. In this dissertation, I conduct an expansive discourse analysis on a dataset of tweets during March 6–7, 2019, when *Captain Marvel was* released. I also conduct a quantitative, computer-assisted sentiment analysis measuring the amount of discourse that was positive, negative, or neutral, as well as a qualitative framing analysis that further explored the ways through which the positive and negative sentiments about the film's release were articulated.

Through this work, I argue social media platforms are spaces where user discourse socially shapes culture, and that the technology itself contributes to the social shaping of culture and discourse. In this dissertation, I bring together analyses of gender, discourse analysis, critical data studies, and a communication-focused analysis of technology. In this way, "media discourse" encompasses not only the discourse within a media text but also the wider discourse outside a media text, in different venues and platforms, not just a cinema, television screen, or laptop window.

Keywords: Sentiment analysis, discourse analysis, popular culture, frame analysis, feminist media studies, data feminism, social media

How do you dedicate years of work?

The dedication was in the writing. And in myself.

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After the start of the pandemic, I wrote this dissertation primarily on unceded lək̓ʷəŋən lands of the Songhees, Esquimalt and W̱SÁNEĆ. In particular, Si•čə’nəł (Sitchanalth), or Willows Beach, where the waves lodge driftwood in the sand, and the nearby purple camas meadows of Uplands Park, was where I spent a lot of time thinking while walking with Peri daily through the 3 years of drafting this dissertation.

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List of Acronyms

CTDA	Critical Technocultural Discourse Analysis
DCEU	DC Extended Universe
FCDA	Feminist Critical Discourse Analysis
MCU	Marvel Cinematic Universe
SJW	Social Justice Warrior

Chapter 1. Introduction

> *Have you ever seen a little girl run so fast she falls down? There's an instant, a fraction of a second before the world catches hold of her again. . . . A moment when she's outrun every doubt and fear she's ever had about herself and she flies. In that one moment, every little girl flies. I need to find that again. Like taking a car out into the desert to see how fast it can go, I need to find the edge of me. . . . And maybe, if I fly far enough, I'll be able to turn around and look at the world. . . . And see where I belong.*
>
> *(DeConnick & Soy, 2012)*

The release of *Captain Marvel* on International Women's Day in 2019 was a perfect storm of corporate feminism, fan demand, and backlash stemming from years and years of prioritizing the stories of male superheroes in the Marvel Cinematic Universe (MCU). For my friends and I, it was a culmination of years of experiences at comic conventions, meeting comic writers and creators for niche characters in the behemoth of Marvel. I did not get into comics until watching the first Avengers movie in 2012, and luckily this coincided with a revitalization of and focus on female characters in these spaces. The world of comics is, like many "nerdy" spaces, mostly male, and, partially as a result, the glut of superheroes over the past decade have mainly featured male superheroes. From the online reactions to the release of the *Captain Marvel* film, Marvel's first to solely highlight a female superhero, many comics fans wanted to keep the status quo and continue to watch film after film starring white guys named Chris.

Recent large, women-led franchise films have been catalysts for controversial, gendered online discourse. The online discourse about *Captain Marvel* is one of a series of similar discourses to emerge from other popular film and television releases over the past few years. Films such as the all-female *Ghostbusters* (2016), *Star Wars: The Force Awakens* (2015), *Star Wars: The Last Jedi* (2017), and *Mad Max: Fury Road* (2015) were all, following their releases, accompanied by racist and misogynistic social media discourses or "fan backlash" (Scott, 2019; Woo, 2018). Experiencing this social media discourse firsthand in 2019 during the lead-up to *Captain Marvel*'s release inspired me to delve deeper into what I observed and see what conclusions there were to be drawn from these gendered social media discourses about popular culture media texts.

The relationship of social media to gendered discourse is a pressing issue. It has become clear over the last few years that social media platforms are home to what Sarah Banet-Weiser (2018) calls *popular misogyny*. Banet-Weiser (2018) details the use of social media as tools to shame and belittle women, whether they are well-known women on social media, average users, or women in popular culture franchises. Women working in technology fields, including women visible on social media platforms, have experienced sexual harassment and been targeted with threats of violence (Banet-Weiser, 2018; Consalvo, 2012; Scott, 2019; Wachter-Boettcher, 2017). Online gendered discourses are also linked to larger societal problems, from domestic violence to more widespread misogyny and violence. There is even research connecting "digital hate speech" and misogyny on social media platforms to physical violence, including a mass shooting in Isla Vista, California, in 2014 and the van attack in Toronto, Ontario, in 2018 (Regehr, 2020). The discussions sparked by popular culture texts like women-led superhero films are places where representation in media meets confrontational battles of gendered discourse. With this dissertation, I critically examine the interactions and the discourses surrounding the release of *Captain Marvel*.

1.1. About This Study

I position this dissertation as feminist media study, as well as a computational communication project within a cultural study. My theoretical foundations are in feminist studies of legacy and social media, from which I consider social media and gender as co-constructed technologies to be examined. Through feminist discourse analysis (Lazar, 2007, 2014) and critical technocultural discourse analysis (Brock, 2018), I examine gendered discourses on the social media platform Twitter, using women-led superhero films as a way to examine the relationship between society, gender, and media, enabled by technologies. Technology, gender, and culture are elements people have an active role in creating and shaping.

Twitter, a social media platform that is accessible to a large, popular audience—and that has been examined by researchers using many different methods—is my site of study. Chow-White et al. (2018) argue "Twitter is an efficient opportunity for sampling the public discourse and the [construction of] meanings" (p. 451). Twitter, as a social media platform, is a space where users use discourse to socially shape culture and technology. Discourses about gender on social media are necessarily intertwined with how we

socially shape technology, how technology is us, and how struggles on or with technology are struggles with ourselves in our society. Therefore, Twitter users shape sentiment about women-led media texts on social media.

For this project, both quantitative and qualitative analyses are important to obtaining a full understanding of the nature of the object of study. Thus, I conduct a quantitative content analysis and qualitative frame analysis on a dataset of tweets from the release of *Captain Marvel* in North American theatres. For my quantitative content analysis, I use the programming language Python to conduct a computer-assisted sentiment analysis to measure the positive and negative sentiments present in the dataset. I supplement this with manual quantitative sentiment analysis. The qualitative frame analysis further explores the cultural and gendered discourses present in the dataset, including how those frames align with positive and negative sentiments. The cultural frames are coded inductively from the dataset, whereas the gendered frames are coded deductively based on Sarah Banet-Weiser's (2018) concepts of popular feminism and popular misogyny. Through this work, I argue social media platforms are spaces where user discourse socially shapes culture, and the technology itself contributes to the social shaping of culture and discourse. My dissertation brings together analyses of gender, discourse analysis, critical data studies, and a communication-focused analysis of technology. This dissertation will advance knowledge in these areas by connecting threads of theory and research in gender discrimination, popular culture, and social media discourses. Given the prevalence of all three, this research is urgently needed.

1.2. Why Captain Marvel?

In all kinds of media and popular culture, different female characters are understood, discussed, and judged on a whole host of factors. In superhero films, and comics in particular, there are a few elements at play. First of all, there is a long history of comics and comics fandom prioritizing and welcoming an audience or readership that is traditionally white, heterosexual, and male (Scott, 2019). This manifests in which characters are supported and prioritized by the big publishing houses, Marvel and DC, as well as who is welcome into brick-and-mortar comic shops (Woo, 2018). To go into a comic shop as a woman, especially one who does not have friends who go to comic shops, or is just starting out, can be very intimidating. When I was first getting into

comics, I would research online ahead of time which comics I wanted to find, when they would be released, and where they were likely to be filed under. When I would walk into a comic shop, it felt like there was a big spotlight centered on me as that little bell on the door rang as I pushed it open—and then there would be comics on the shelves, where, if there were women on the covers, they would be drawn in the "broke back pose" (Cocca, 2014), which means their skin-tight superhero outfits would be drawn in a way that made sure to highlight (in defiance of physics, anatomy, and gravity) both their chests and backsides. Like a litany. These books are not for you to look at. These books are not for you to read. It is not your eyes that matter here. Ten years later, while I no longer care about the metaphorical spotlight, I am often ignored by shop staff, or, when I phone ahead to pre-order a specific book, they will sell it to someone else if I do not pick it up in whatever they decide is enough time, without telling me what that is.

The comics themselves are a matrix of different considerations. It is not my intention to offer a complete history of Captain Marvel here, as other scholars have offered such histories in other work (Cocca, 2016; Kent, 2021b). However, there are some key elements that a solid understanding of will help with understanding why this character, and this film, are such a good location from which to examine gendered social media discourses about popular culture. The character has a history dating back in the comics to 1977, with the introduction of Ms. Marvel, a Carol Danvers who worked at a feminist women's magazine in the 1970s (Curtis & Cardo, 2018). Scholars have argued this character has an "embedded feminism" (Cocca, 2016; Kent, 2021a; Taylor & Glitsos, 2021), unlike other early female comics characters such as Wonder Woman or the Cat, and this sets her up for a different trajectory in comics fandom and popular culture discourses. However, others argue Ms. Marvel, "After much early promise . . . was given a generally shoddy treatment by later writers, including an infamous rape story in issue 200 of *The Avengers*" (Curtis & Cardo, 2018, p. 389). This is a similar trajectory to other female characters in comics and superhero films. Over the past four decades, Carol Danvers has been written in line with many of the classic female superhero tropes.

The established, big-name female characters in comics like Wonder Woman, Black Widow, and Captain Marvel each have a long-storied history. The context in which they were created, who has told their stories since, and who has been in charge of one of the big houses all contribute to this history. However, Curtis and Cardo (2018) talk

about a “noticeable change in superhero comics over the last five to ten years that has done a great deal to address their notoriously poor record on representation” (p. 381). They further talk about,

> the increase in female characters, a rise in the number of female-led titles . . . the gender-swapping of traditionally male characters to female, and a significant increase in the number of women writing and drawing the comics have all been recent developments in this area. (Curtis & Cardo, 2018, p. 381)

In the long history of comics, 5 to 10 years is a drop in the bucket. If you ask a casual comics reader to identify a female superhero, the biggest player is Wonder Woman, and although she disrupts some patriarchal conventions of the comics world, more (serious) comics fans and scholars would disagree with her “feminist” positionality. Curtis and Cardo (2018) describe Wonder Woman as a founding female figure in the genre, not the first female superhero, but the most consistently written since she was introduced in 1941. A female role model perhaps, but not a feminist role model (Curtis & Cardo, 2018), someone who has not challenged long-standing ideals of white femininity. They reference Tim Hanley’s (2014) assertion that Wonder Woman’s status as a feminist icon began and finished in 1972 with her appearance on the cover of *Ms. Magazine* (Curtis & Cardo, 2018).

The 2019 *Captain Marvel* film, while drawing on the existing storylines and continuity of the MCU, is largely based on the 2012 run of the comics, written by Kelly Sue DeConnick. Curtis and Cardo (2018) argue the character’s history and treatment in the comics up until this point set her up as the perfect character to be reimagined at this time. In 2012 DeConnick, an established comics writer, convinced Marvel Comics and artist Jamie McKelvie to take a chance on a redesign of the character, including her costume, an “aviator-style jumpsuit, rather than a leotard and thigh-length boots” (Curtis & Cardo, 2018, p. 390). On rebranding from Ms. Marvel to Captain Marvel, Curtis and Cardo highlight Carol’s context as a figure who makes intergenerational connections between women. The theme of solidarity a prominent one throughout this storyline.

> The point here is that she does what she does only because inspirational women have gone before her and broken the limits previously set for women. She takes the name not because Captain America conferred it upon her, but because her hero has shown her not to wait for permission from men. (Curtis & Cardo, 2018, p. 389–390)

This message is made implicitly and explicitly in the DeConnick comics. A major example of this is the four-issue “Captain Marvel and the Carol Corps” special event that essentially wrote the Captain Marvel comics’ dedicated, and largely female, fanbase into the narrative.

Every scholar who has written about this character after 2012 has talked about the DeConnick run as a pivotal moment in the character’s history, in the history of Marvel Comics, and in comics in general at this time. Miriam Kent (2021a) argues Captain Marvel is an example of Marvel using feminist discourses to win over readers and audiences, which Marvel uses to position itself as a more inclusive and welcoming franchise. For Kent, this is an example of postfeminism. I argue it is representative of Banet-Weiser’s popular feminism as well. But Carol Danvers is not the only character to don the “Captain Marvel” name, nor is she the first. In the early comics, when Carol was Ms. Marvel, her mentor was Mar-Vell, later named Captain Marvel. This moniker was repurposed by the DeConnick comics. Indeed, a Black woman, Monica Rambeau[1] was the first woman to take the mantle of Captain Marvel in the comics (Taylor & Glitsos, 2021). For scholars such as Charlotte Taylor Ashfield (2015), the focus on Carol Danvers’s Captain Marvel in the 2012 comics series is an example of the “faux feminism” of Marvel Comics.

This context illustrates the character is a contested one among comics fans, and this translates into the social media discourse around the film. As Curtis and Cardo (2018) highlight, “the great advances made by the women currently working in superhero comics is positive for both the genre and, one hopes, the advance of feminism. This being said, the challenge faced is still a very difficult one” (p. 392). The *Captain Marve*l film also makes a few key changes to the plotline from the DeConnick comics, though these are not necessarily visible or noticeable before the film’s release because they are not clear from the trailer alone. Because my dataset is from the film’s release, these

[1] Monica Rambeau appears in the 2019 *Captain Marvel* film as a young child. Because my dataset is from the opening weekend of the film, not many people at this time knew Monica had a role in the film as it was not made clear from the trailers. Since then, the character has appeared in Marvel’s Disney+ series *Wandavision* (2021) as an adult and is soon to appear in the second Captain Marvel film, *the Marvels*, in 2023. *The Marvels* is being directed by Nia DaCosta, who is the youngest director and first Black woman to direct a Marvel film. The film will also include the character Kamala Khan as the teenage Ms. Marvel (Vary, 2020).

changes do not necessarily factor into the discourse; many of the more polarizing discourses come from users who have not yet seen the film.

1.3. Outline of the Dissertation

Throughout this dissertation, I investigate the interactions among audiences, users, media texts, and social media discourse and examine their relationships to online misogyny. I do this through an examination of social media sentiments, as well as cultural and gendered discourses about the 2019 Captain Marvel film. In many ways, this particular moment is a perfect storm of popular culture, feminism, and misogyny, ideal for exactly this type of analysis. The social media discourse surrounding the release of the movie, the storylines in the popular press leading up to it, and the way the creators, actors, and studio position the character and the film all align to spotlight how social media platforms enable, constrain, shape, and allow for gendered discourses that reflect and influence our society. Through my theoretical background, methodology, and analysis in this dissertation, I illustrate how these pieces work together and separately to do so.

Chapter two is a literature review that brings together feminist ways of studying legacy media, as well as new and social media, where I address ideas of audiences, users, popular culture, participation, fans, and gendered online spaces. These elements all address different aspects of my research approach and site of study, and together they are a comprehensive and solid multifaceted foundation to my dissertation project.

Chapter three details my methodology for this study. Starting with three perspectives on discourse and content analysis, I then detail the computer-assisted and manual sentiment analysis strategies and the manual framing analysis strategies I used with my social media dataset. I illustrate how these specific methodologies apply to this type of dataset and this type of inquiry, including how they can be used to better understand the data and the affordances and constraints they offer as methodologies.

Chapter four examines the cultural context and qualitative frames present within the *Captain Marvel* dataset. Some frames are supportive and effusive, whereas others are confrontational and antagonistic. Through my qualitative frame analysis on the dataset, I describe the two major themes when it comes to cultural understandings of the

movie within the social media discourses: hype and anti-fans. The discursive frames within the hype theme are composed of reactions to the film, anticipation of the film, marketing of the film, tweets supportive of the main actors, and tweets that defend the film from others who did not like it. In contrast, the frames within the anti-fan theme include a focus on denying the film was reviewed accurately, tweets disparaging the main actors, tweets unfavourably comparing the film to other films in the genre, and a movement pushing for moviegoers to boycott the film.

In chapter five, I present the gendered frames I identified within the dataset. The conceptualizations of the gendered frames are drawn from Sarah Banet-Weiser's (2018) concepts of popular feminism and popular misogyny, and I illustrate how both of these are articulated within tweets about *Captain Marvel*. I describe the ways the gendered discourses illustrate these concepts and how they interact and align with the cultural frames in the previous chapter.

Chapter six is an examination of the role of computational methods in communication research. I use my experience of learning to use Python for my computational sentiment analysis to examine the affordances and constraints of this methodology in cultural communication research.

Chapter seven concludes the dissertation, discusses limitations, and sets the stage for future research in this area.

Chapter 2. Literature Review

Feminist communication research considers gender and power as key lenses from which to examine the issues and topics of concern to communication scholars. Theories of technology and society illustrate the ways technology, such as social media platforms, can enable and constrain cultural discourses. In this dissertation, my aim is to bring together theories concerning the mediation of gender through legacy media platforms such as film, as well as gendered social media discourses, drawing from communication studies of technology. Through this project, I connect concepts by bringing together culture, media, and social media through a feminist lens. These elements are connected in the ways people experience popular culture, discourse, gender, and each other in society. They are interconnected through the cultural functions of media.

This literature review situates my research within feminist media studies, drawing from scholarship on legacy and social media. First, I highlight the different ways scholars have situated people in relation to popular culture in a shifting media landscape through theories of publics, audiences, and fans. Second, I situate my understanding of social media platforms through three stages of conceptualizations, addressing the shift in culture when communication itself changes with the development of social media. The accessibility of social media adds an additional layer to communication, popular culture, and mediation that changes the nature of discourse in and about media texts. Third, I then bring in theories regarding the co-construction of social media and gender in terms of our relationship to technology as an enabling and constraining layer of mediation. The entirety of this work is done within a feminist lens; thus, feminist studies and theories are highlighted throughout.

2.1. Feminist Media Studies

In the field of communication, one of the primary ways researchers deal with gender is its mediation. Therefore, traditional feminist media studies, or feminist studies of legacy media such as “television, film, music, and advertising” (Powers, 2022, p. 1) focus on the mediation of gender as a function of culture. These studies of gender, or

studies of media from feminist perspectives, examine all aspects of “the media,” including popular culture. For van Zoonen, “the media have always been at the centre of feminist critique” (van Zoonen, 1994, p. 11). Media is one of the primary ways ideas circulate throughout society. Feminist considerations of media, therefore, are key to understanding the circulation of gendered discourses and ideas.

In the field of communication, researchers have historically investigated media, including in studies of media content, media production, and media interpretation or influence by and on audiences. Audiences interact with all kinds of media, mass audiences and niche audiences, mass culture, niche culture, and popular culture. These are all places through which gender and discourses about gender are mediated. However, as van Zoonen argues, echoing S. Franklin et al. (1991), “not all feminist studies are cultural studies and not all cultural studies are feminist studies” (van Zoonen, 1994, p. 7). Van Zoonen’s work on feminist media studies is a primary influence on my research, highlighting that the feminist research process is politicized and questioning of power.

> This is the backdrop against which to understand the specific epistemological and methodological requirements of feminist research vis-a-vis the respective elements of the research cycle: concepts, design and operationalization, data gathering and analysis, quality control, and reporting. (van Zoonen, 1994, p. 130)

Every element of a feminist study of media then requires complex thought about questions and flows of power, in this case through popular culture, media texts, and discourse. Communication through mass media can be ritual, play a bardic or poetic role through culture, and help construct our social reality (van Zoonen, 1994).

Researchers such as Liesbet van Zoonen and Ien Ang (1991) have offered feminist media studies of culture, including television and film (hooks, 1996; Radway, 1984). Van Zoonen is present throughout the theoretical scaffolding of my dissertation through her focus on how media function as technologies of gender, and that the media, varied as that word is, play a role in the “ongoing construction of gender discourse” (Van Zoonen, 1994, p. 41). With *Watching Dallas*, Ang (1982) considers popularity, the soap opera format, audiences (feminized audiences), and the social context that all contributed to the *Dallas* phenomenon. Julie D’Acci (1994) studies the meaning-making process by producers of television. D’Acci pays specific attention to the cultural meaning

for and about women and femininity in American television culture. Other foundational works of feminist media studies for this dissertation include Rosalind Gill (2007), who emphasizes that feminist media studies "have been animated by the desire to understand how images and cultural constructions are connected to patterns of inequality, domination, and oppression" (p. 7). Gill argues feminism is now a part of mainstream culture, unlike previous decades, and that "for the majority of people, their experience of feminism is an entirely mediated one" (p. 40). This means it is important for media scholars to take the time to analyze what audiences are seeing and how they understand it.

Alison Harvey's (2020) *Feminist Media Studies* seeks to update van Zoonen's work through using current digital media technologies and practices and emphasizing intersectionality in feminist media studies. As Harvey (2020) argues,

> feminist media studies is as much about ways of understanding how media are used, consumed, and produced in a manner marked by gendered subjectivities as it is about imagining the potential for media to contribute to a more just and equal world for those excluded within hegemonic systems of power. (p. 5)

This understanding of feminist research as both recognizing the power and potential is important when it comes to building upon previous feminist research. For Harvey, the current characterization of "fourth wave feminism" is not about a linear progression between waves but the ways people use digital media practices and new technologies as locations and tools of feminist action and critique. Feminist media studies must be intersectional in their inclusion not just of examinations of gender and gender relations but also in considerations of various axes of oppression such as race, class, language, sexuality, age, disability, and others.

2.2. The Shifting Terrain of Popular Culture

Popular culture holds a unique space within media studies, communication, and cultural studies. Although popular culture used to be synonymous with ideas of low culture, and it stands in contrast to high culture, this is no longer necessarily the case. Prior (2005) argues Bourdieu's distinctions between high and low culture are increasingly blurred and no longer clearly divided by questions of class. Popular culture is also big business. Many pieces of the puzzle of popular culture exist to be sold and

consumed as part of our economic system, but that is not the only role it can play. Popular culture is an important way our society negotiates identity. It is a place that reflects how our world operates and one that suggests or explores new options. As with many elements of society, popular culture has also gone through expansive transformations with shifts in the tools and technologies of mediation, as well as the rise in importance of networks and networked society.

Devon Powers (2022) contextualizes various understandings of popular culture, drawing from Raymond Williams's (1985) definition of popular culture as culture that belongs to the people, moving to understandings of folklore and vernacular culture from Levine (1990, 1992). Through study and time, Powers argues, popular culture became synonymous with mass culture. However, this has shifted once again, as

> Contemporary popular culture is less what is dominant, widely shared, and democratic than complicated, nebulous, and networked sub-, counter-, and inter-cultures that combine and converge but do not necessarily cohere into an intelligible whole. (Powers, 2022, p. 1)

Mass culture is no longer as simple as experiencing television at the discretion of a few dominant networks or films released solely into theatres. Popular culture today is more niche and distributed because the barriers to producing media texts, of producing content, have expanded through social media and networked cultures. Popular culture surrounds us. The amount of wealth, the number of jobs, and impact the creative industries have on people is stunning. There are people who make films and television shows, people who market them, people who review them, and people who make websites that facilitate the circulation of ideas around them. The buzz around a film or TV show is not just a water cooler conversation at work or around the dinner table of family or roommates. People have access to the opinions of others like them, and unalike them, around the world.

2.2.1. Publics

For Stuart Hall, popular culture is tied to the struggle of people with and against the powerful, arguing "there is no whole, authentic, autonomous 'popular culture' which lies outside the field of force of the relations of cultural power and domination" (Hall, 1981, p. 512). A key figure in British cultural studies, Hall argues,

> Popular culture is one of the sites where this struggle for and against a culture of the powerful is engaged: it is also the stake to be won or lost in that struggle. It is the arena of consent and resistance. It is partly where hegemony arises, and where it is secured. (Hall, 1981, p. 518)

According to Hall's view of hegemony, popular culture is a place of struggle, consent, and resistance, and it is related to the way cultural, and pop cultural discourses [of gender] are shaped and influenced.

Media, including television, film, and now social media, serve cultural functions. They circulate ideas, and they convey meaning. Our culture itself is the meanings, messages, the content being mediated and circulated. This relationship between media, society, and meaning has been conceptualized as a form of what Habermas (1989) calls a public sphere.

> The public sphere is not just a 'marketplace of ideas' or an 'information exchange depot', but also a major societal mechanism for the production and circulation of culture, which frames and gives meaning to our identities. (Dahlgren, 1995, p. 23)

In this context, the circulation and production of culture is through media like television, and later there is an increase in the intensity of the relationships or theorized relationships through the emergence of new and social media. Social media has allowed the circulation of culture to become more rapid and have a wider, more porous reach. Beer (2013) also writes about the role of popular culture as a circulator of political meaning, including on new social media platforms.

Popular culture also holds a gendered role regarding the concept of publics or public spheres. Historically, society has associated popular culture with frivolity, feminized interests, and the private sphere of the home. It has been understood in contrast to the political, rational realm of things like news media. However, this has been changing as public and private spheres converge (Papacharissi, 2010). Popular culture can also be a political realm. As Sreberny and van Zoonen (2000) argue,

> The supposed antithesis of women and politics is a familiar and powerful theme in traditional gender discourse. . . . As core intermediaries in contemporary politics, the media are deeply implicated in this process of definition and framing because they represent and reconstruct the contrast between femininity and politics, in popular culture as well as in serious political reporting. (p. 2)

Many feminist scholars have critiqued conceptions of the public sphere, referencing particularly the overemphasis on masculine rationality and debate, and how it ignores the historically femininized private sphere of the home (Gill, 2007).

One of the ways one can see the popular as political the most clearly is in spontaneous discussions of popular culture texts on online platforms—this greatly expanded local and global conversation. Twitter, and other social media platforms, are in some ways a collection of people shouting, either at each other, or into the void. But in any controversial conversation on social media platforms, you can see different opinions, beliefs, and understandings of the world. There are women, people of colour, queer people, all using social media platforms to educate, to call out harmful behaviour and beliefs, to demand more of their media. In the same places, there are people with racist, misogynistic, and homophobic beliefs using social media platforms to advocate against and dehumanize others. Both groups use anything as a starting point, including popular culture media texts. If there are even boundaries between these parts of people's lives, there is much more overlap than many would assume. Popular culture cannot be separated from the industry that creates it, from the money, or from the structures of power. Popular culture and art and industry and advertisement, they are all intermingled. They are all political; they are all intellectual; they are all labour; and they are all entertainment. Studying the popular and how people talk about it is about studying how people make meaning and act on the meanings they make.

With all this in mind, I am reminded of a succinct definition of *popular* in the context of culture. In May 2019, I attended the International Communication Association Conference in Washington, DC, and attended a panel titled "Against Popcomm: Exploring the Boundaries of Popular Communication" in the Popular Communication stream. Devon Powers presented an essay, "Not Really Popular," offering definitions of the popular as, "What circulates is popular" and "What people think is popular, is popular." Digital culture allows people to access a wide-range of media and culture in new ways, but it is not new to say power operates through popular culture. Therefore, "popularity is always about showing who we agree with and why" (Powers, 2019). This discussion has really stuck with me over the last few years, and I think it allows a basis of understanding from which to discuss the "popular" cultural frames in my dataset.

2.2.2. Audiences

The ways communication researchers understand people when they interact with popular culture are as numerous as the definitions for popular culture itself. The words used to describe or categorize people frame the way they are understood. The same people can be positioned as audiences, and the most extreme of these are positioned as fans. Individuals are users when they create content for the corporations that own the media platforms that collect their data. Consumers buy movie tickets, TV memorabilia, video games, Netflix subscriptions, smartphones, and smart TVs rather than enjoy them or make meaning from them. When people interact with popular culture, whether as audiences, as fans, as users, or as consumers, they are considered different from the citizens they also are. Citizens participate actively in the governing of society, and, as active publics, they rationally discuss the issues of the day with other citizens. Many scholars touch on this difference, either implicitly or explicitly.

Audiences are often conceptualized as passive—they simply watch. A more positive understanding of audiences argues that even engagement with the most mass-produced forms of popular culture is participatory, and thus it has public resonance (Fiske, 1987; Radway, 1984). In that way, audiences also act in culturally significant ways, using their knowledge to adapt cultural forms and performances in meaningful, even potentially subversive and critical ways (Meinhof, p. 115). Meinhof's examples from Radway and Fiske's work acknowledge the problem of conceptualizing audience engagements with mass-produced cultural products as public or political in any way. When media products or platforms are designed to be engaged with or participated in, how much impact can individuals' interactions with media have? I think this point of public resonance is well taken. One individual's participation with a cultural or media product, if it resonates with others, can be meaningful rather than simply passive, or merely profitable.

Van Zoonen (2004) is one scholar who asks whether the difference between audiences and publics is a fundamental one. These words are different ways to understand the same people, as individuals can be both part of an audience (or many audiences) and part of a public. One of the potential key differences for van Zoonen is the object of attention. If publics comprise citizens and are produced by politics, and audiences are composed of fans and produced by television, then the object of attention

is also the key force that creates the difference. I would argue the gap between television and politics is not as wide as many people think it to be. In many ways contemporary is a spectacle, a spectacle that creates and holds the attention of audiences, rather than publics. If audiences can be public ones, can publics be created by television? Or other popular cultural texts?

Sonia Livingstone's (2005) book endeavours to answer many questions about the relationship between publics and audiences. Audiences and publics are composed of, or at least potentially composed of, the same people. These words are frames that position them differently. Livingstone's work explores the question, "When is an audience a public and when is a public an audience?" (Livingstone, 2005, p. 9). But she also asks, "How does it come about and with what consequences that publics are mediated or that audiences participate as a public?" (Livingstone, 2005, p. 9). In today's political landscape publics are rarely unmediated. Even events like town halls or protests are often broadcast, recorded, live tweeted, or reported on by journalists.

One of the answers Livingstone finds is in "audiencing" as a negotiation of meaning between what is presented and what is already understood by the audience. She argues a small portion of any given audience seeks to negotiate with media texts, but the "renegotiation is stimulated not by formal membership of an a priori public but by a conflict between the cultural claims of the text and the lived experiences of the audience" (Livingstone, 2005, p. 31). Naturally some of this renegotiation either takes more work in specific circumstances or is undertaken with more seriousness by individuals with identities that affect the way they interact with media to some degree. Livingstone goes on to suggest some audiences and some publics could be rebranded or re-understood as "citizen-viewers" or "the civic," rather than allowing audiences to become publics and publics to have a degree of audiencing.

Dahlgren (1995) addresses similar questions about the differences between audiences and citizens. The same people fulfill different roles and therefore are considered differently by scholars, politicians, artists, producers, and even themselves. He characterizes the difference as one of agency and relationships.

> This is because the notion of audience and the discourses in which it operates tend to frame our understanding of reception in terms of people's relationship to television. In this media-centric perception, the larger

> horizons remain largely scenic. 'Audiences' certainly exist in the phenomenal world, even if they are far from fixed, and the experience of 'audiencing' is not always a consistent one. But as I have discussed, the public sphere requires 'publics', in the sense of interacting social agents. The category of audience becomes too constricted in this regard. We need to move, in our theoretic vistas, from audience members to citizens. (Dahlgren, 1995, p. 120)

For Dahlgren it seems, television and its audiences are fairly static. The television creates an audience, briefly or more steadily, and the relationship moves in one direction, from the television to the viewer. Publics are interactive, agentic, and somehow more than audiences. Dahlgren then argues we must move from thinking of ourselves as audiences and become "producers - of political talk and action" (Dahlgren, 1995, p. 122). Dahlgren, writing in 1995, is perhaps dealing with a different kind of, or more static, audience than today. Not that audiences today are made up of fundamentally different people, but that audiences today are interactive in a way they were not 25 years ago. Would Dahlgren consider today's active audiences as not audiences at all, but publics? Dahlgren (1995) also addresses the tension between consumers and publics. In the last chapter, *Democratic Mediations*, Dahlgren addresses the tension between consumership and citizenship in the ways researchers think about society or the audience. He emphasizes that television is an industry and therefore not intrinsically designed to be a public sphere. For Dahlgren, television provides "raw materials" (p. 148) that people experience and reflect upon to varying degrees, and these are combined with people's experiences in their everyday lives.

Drotner (2005), in Livingstone's edited collection, describes *public* as a much narrower term than *audience*. Publics only exist within or in relation to the public sphere. A public "conducts itself through abstract debate, and aims at reaching collective and consensual social action" (Drotner, 2005, p. 191). In opposition to publics, Drotner describes audiences as "constituted through their meaning-making processes, that can be individual as well as collective, and that can take place in the privacy of the home or on the job, as well as in public spaces" (Drotner, 2005, p. 191). For Drotner, it is not just the object of attention but the spatiality of audiences and publics that work to separate the two from each other. These separations in social life whether symbolically or literally are "tied to specific locations. The public sphere, thus, only exists as a meeting ground because public and private domains of life are segregated" (Drotner, 2005, p. 191). The public sphere is by necessity outside of the home, tied to public life, whereas audiencing

is traditionally a private activity, or at least television audiencing is. Theatres or films, in contrast, are traditionally public places where people go. Private lives are not so private anymore though. As people audience in public now, instead of in private, the public sphere ceases to be incredibly important as the meeting place between public and private. Public and private meet in more places now. Or, maybe much more of the experiences of people, as audiences, are taking place on that meeting place, therefore becoming the public sphere.

2.2.3. Fans and Anti-Fans

Fans are a particular type of audience, social media user, and public. From "fanatic," fans are dedicated, opinionated, fierce audiences. Nancy Baym differentiates fans from audiences by characterizing their level of feeling about a media text, "fans feel for feeling's own sake" (Baym, 2018, p. 81). This level of depth of feeling, of emotion, of meaning-making, creates a unique type of media viewer. Baym goes on to point out that, in the latter half of the 20th century, fandoms were sites of changing gender dynamics, with more women moving into previously male-dominated spaces (Baym, 2018; Reagin & Rubenstein, 2011). Because this study deals with discourses of women in superhero films, fan studies is an important layer of theorizing to include. Henry Jenkins defines fan studies as "a field of scholarly research focused on media fans and fan cultures" (Jenkins, 2012). In defining fan studies, Jenkins goes on to trace a pathway from the tradition of Birmingham cultural studies, focused on audience reception, which eventually morphed into a focus not just on audience or fan reception of media but also on what the fans do with that media, what they produce. Early conceptualizations of fans and fandoms emerged in relation to fans of the *Star Trek* original series, and since then researchers have studied fans of myriad media texts (film, television, comics, books, games, etc.), from many perspectives.

Participation is a key element of studying fans because often there is an element to performing fandom, of being seen having opinions and engaging in activities or collections. The relationship of social media platforms to fandoms is one that is intertwined.

> On all sides and at every level, the term *participation* has emerged as a governing concept, albeit one surrounded by conflicting expectations. Corporations imagine participation as something they can start and stop,

> channel and reroute, commodify and market. The prohibitionists are trying to shut down unauthorized participation; the collaborationists are trying to win grassroots creators over to their side. Consumers, on the other side, are asserting a right to participate in the culture, on their own terms, when and where they wish. This empowered consumer faces a series of struggles to preserve and broaden this perceived right to participate. (Jenkins, 2006, p. 175)

Some online spaces are more clearly defined, so traditionally a fan message board, or fansite, or communities on places like LiveJournal or Tumblr, Fanfiction.net, or other fandom-specific sites would have been more insular or separate from the larger online discourse. However, in some online spaces, this is more open or porous. For example, Twitter is a social media platform where fans, general audiences, media producers, authors, actors, and others are more likely to be visible to each other, and their voices are amplified to larger user groups through elements like trending topics (Jenkins et al., 2013; Scott, 2019).

Nancy Baym argues the relationship between fans and media texts imbues the texts with the importance of carrying cultural meaning. However, the relationship is also a complicated one. Fans understand they are being sold a product, and they understand there are power differentials.

> Thus, just as fandom is often characterized by the interplay between fascination and frustration with media objects, Leia protest posters at the Women's March were polysemic: they expressed solidarity with a female-led resistance movement and mourned the passing of a popular feminist icon, but they also bore the marks of fannish frustration with both a media object and surrounding (fan) culture that has historically privileged and empowered white men at all levels of its production, textuality, and consumption. (Scott, 2019, p. 26)

This interplay of fascination and frustration with media texts opens a discussion on what it means to be a fan whose interactions with a media text or property are more negative than positive. Some fannish actions do not easily fit into the feelings traditionally associated with fans. Scholars have sought to conceptualize and define these individuals or groups as anti-fans (Gray, 2005). The behaviour of anti-fans, while of a very different sentiment, tenor, and mission, shares many common factors with fan behaviour. Anti-fans are fixated on a specific media and spend lots of time engaging with it, talking about it, and interacting with and participating in discourse about it. They form bonds with each other over it and have the same engagement with feelings that fans do.

However, this type of definition does not cover all the elements of anti-fandom specific to this research project. Suzanne Scott (2019) offers a definition of anti-fans as

> Fans who direct their animosity not towards a particular media property, celebrity, or genre but rather towards other fans they deem undesirable based on their own fannish self-identification and valuation of fan culture. (p. 90)

Scott's (2019) definition works to capture an element of the gendered nature of some anti-fandom. In many cases, whether it be sports fandom or comics fandom, many male-dominated fan communities exclude women as being "undesirable" fans in the space. Fans directing animosity toward other fans, deemed lesser than the predominantly male fans traditionally a part of these networks, results in a devaluing or animosity toward media properties, genres, or celebrities who invite audiences of undesirable fans. Stanfill (2020) suggests "reactionary fandom" as an alternative to anti-fans.

Both fans and anti-fans use social media platforms, and many have similar relationships with media texts and producers. They might express frustration with what writers, producers, or corporations have done to a media text—or how it does not align with their own understandings of the same source material. There are subsections of fans who, for example, express frustration with a lack of representation, and others who think increased representation of women and minorities in traditionally white and male-dominated media properties is the problem.

> The 2010s saw a rise in aggressive anti-fandoms using social media to organize harassment campaigns, some of which forced their targets – women, and women of color specifically – to flee social media and even their homes. (Blodgett, 2020, p. 184)

These aggressive anti-fandoms are a driving force of fan discourses on social media. They can be antagonists, rallying points, or a thorn in a fandom's side, and they can drive discourse and media attention toward a specific media text or franchise.

2.3. A Conceptual History of Twitter

Popular culture is no longer mediated solely through the media texts people experience, some would say passively, as audience members. As a result of what

Rainie and Wellman (2012) describe as a “Triple Revolution,” consisting of a social network revolution, internet revolution, and mobile revolution, there is a new social operating system when it comes to how people connect to one another. There is an additional layer of mediation, interaction, and interpretation through platforms such as social media sites. At their best, they enable connection, activism, and creativity, and at their worst they can highlight and encourage divisions, drive wedges, and fuel misinformation (Marwick, 2013a). For communication scholars, technology is intricately tied to media production, reception, and discussion. When researchers study platforms, it is not necessarily media content but rather what media content is enabled, constrained, or created by the technical and social parameters of any given platform.

When talking about social media platforms, researchers often characterize people’s interactions with these platforms as “use.” Dobson and Knezevic (2018) argue “social media platforms have also redefined audiences as users who are no longer passive consumers of media content, but active producers and distributors of it” (p. 383). But are we users? Sherry Turkle (1995) points out the word “user” is most strongly associated with computers and drugs. This connotation allows for a reliance on the narrative of “addiction” to technology, which does not acknowledge the larger context of the role technology plays in our society. As Van Dijck et al. (2018) argue,

> Theoretically, users can decide at any moment - individually or collectively - to opt out of Google, Facebook, Apple, Microsoft, and Amazon services; in practice, opting out is hardly an option for users who want to participate in society or who simply need to make a living. (p. 149)

People use social media sites, like Facebook, Instagram, Twitter, and others, for many different reasons, to do many different things. Social media users may also be audiences, publics, fans, or producers and creators of content.

Social media platforms work by encouraging user-generated content, interaction, and participation. Social media can enable people to connect across geographic space, interests, and experiences, but it can also constrain people into silos or echo chambers, where they are continually exposed to opinions and experiences that reinforce their own understandings. Social media then can intensify communication by exposing and highlighting points of difference and disagreement (Vaidhyanathan, 2018). For this dissertation, one of these points of difference and disagreement centres on gender and its mediation through popular culture and technology. Social media changes the

mediation of gender through culture and popular culture. Popular culture audiences who are also social media users have an increased, amplified, or sped-up ability to be involved in gendered discourses on these platforms. This makes social media a rich site of study in this area.

The functions and uses of social media are constructed not just by the designers of the technology but also by the users of the platforms as well. To understand the current social media context, several major stages over the past decade have shaped how society interacts with social media and how social media interacts with society. Although this is not a complete history of social media, it is a discussion of many of the key defining points along the history of this era of the internet.

2.3.1. Optimism

The first stage along Twitter's development story is the Web 2.0 stage. Discussions of the Web 2.0 era were characterized by optimism and potential for this new type of engagement, of platform, to radically change the way people related to each other—for the better (Dobson & Knezevic, 2018; Jenkins, 2006; Shirky, 2008; Tapscott & Williams, 2006). For Marwick,

> Web 2.0 was a moment in technology innovation sandwiched between the dot-com bust and the App store. It wasn't just a set of technologies (APIs, Ajax, client-side browser-based software, mashups), or a group of websites (Flickr, del.icio.us, Twitter, MySpace, YouTube), but a collection of ideals (transparency, participation, and openness) as well. (Marwick, 2013b, p. 6)

These ideals were a part of the optimistic and enabling discourse of social media users and research at the time. Web 2.0 was characterized by an emphasis on connection, participation, and an almost forgone conclusion that the crowd would curve toward progress. Social networking sites were seen as places of positive civic engagement, with scholars and activists alike pointing to Barack Obama's 2008 campaign for president as a shift in how politicians sought office (Johnson et al., 2011; Kaye, 2011).

For many, it is agency that is at the centre of the debates around the differences between legacy media audiences and the new ways to conceptualize people's interactions with social media. The historic passivity associated with any given television audience is what keeps them from being engaged publics—in the same way that citizens

who engage with each other and with important social issues are when they form publics. The agency of the audience is in question. Scholars have worked to explain the ways today's audiences do interact with the media they view or consume, depending on your point of view. One of the key ways scholars understand this new (or perceived as new) interactivity is in the concept of "participation." Both Schafer (2011) and van Zoonen (2004) use the concept of participation to characterize audiences that are engaging with media texts in limited or prescribed ways. Participation is a way of understanding the primarily narrow ways audiences are told by media producers to interact with media texts.

Van Zoonen (2004) uses participation to characterize audience engagement with shows like *Big Brother* and *Pop Idol* in the UK. In this article, however, she extends the metaphor of participation further, using the voting activities in these reality shows as a potential model for increasing citizen engagement with political voting, looking for a direct link from voting in a pop culture context to a formal political context of national or local elections. Van Zoonen (2004) uses this piece to compare fan activities around television programs to citizens' activities around formal politics. Using reality shows like *Big Brother* and *Pop Idol*, she compares the engagement and voting activities of citizens and audiences. She explicitly states her research goal of taking issue "with the common understanding of television as a medium detrimental to the maintenance and encouragement of political citizenship" (p. 39) and applying it directly to formal political engagement, like those of a public.

The connection van Zoonen (2004) draws between formal political engagement and the voting model of pop culture reality TV shows is a really interesting one. It is almost as if she sets up reality television shows that require audience participation as training grounds for citizens who have to be taught how to vote by their lowbrow culture guilty pleasure—from deciding who should leave the Big Brother House or who should win the recording contract to "more important" things like voting on who should be on the local city council or represent their voices in parliament. It thus sets up television as remedial instruction for common folk who do not understand the role politics or governments play in their lives. I do not believe this to be the case. Audiences are capable of engaging with social or political ideas in reaction to television without the benefit of a "model" by which to practice their engagement. Democratic society is more than exercising one's right to vote.

Schafer (2011) uses participatory culture as a promise of social progress, or potential for public movement, but not as a guarantee. The concept of participatory culture can be applied to many different aspects of popular texts, from television to film to social media platforms. Schafer (2011) writes,

> Participation is part of a discourse that advocates social progress through technological development as well as aims to create expectations and understanding for technology. This discourse is related to the struggle against exclusion from political decision-making processes, as well as exclusion from ownership of the means of production and the creation of media content. (p. 13)

All at once, participation is set up as a way for the historically disenfranchised to have an increased say in societal decision-making, from voting to discussing social issues, citizen to citizen or citizen to decision maker. Technology is positioned as a revolutionary force that can deliver political engagement. However, Schafer (2011) goes on to warn of the “intellectual short cut that far too readily perceives increased user activity as a fundamental shift in power structures within the cultural industries” (p. 13). Schafer argues scholars often oversell accounts of user participation or look at it without the necessary critical lens that would allow them to see the extent of user capacity for action. I see this as an aspect of the study of audiences as a political endeavour. Users’ actions can be of consequence, and they can have an impact, but they are not necessarily going to do either of these things. Audiences can interact with popular cultural texts in progressive or regressive ways; they can be significant or largely insignificant; and audiences can be right, and audiences can be wrong. Audiences are human and contain human limitations and human flaws.

Henry Jenkins (2006) also writes about participation as a guiding concept of audience interaction with media texts, albeit one with conflicting expectations, depending on your vantage point. Jenkins (2006) writes,

> Corporations imagine participation as something they can start and stop, channel and reroute, commodify and market. The prohibitionists are trying to shut down unauthorized participation; the collaborationists are trying to win grassroots creators over to their side. Consumers, on the other side, are asserting a right to participate in the culture, on their own terms, when and where they wish. This empowered consumer faces a series of struggles to preserve and broaden this perceived right to participate. (p. 175)

Jenkins enthusiastically uses the term *participation* in a way that colours his readers' impressions of how involved all fans—all audiences—are or have to be to be considered participants in culture. This is an outlying group of people who offer some insight but are not the rule for how audiences or publics interact with media texts. Even within fan groups, there are differences based on age, location, political leanings, influence of big-name fans, and the ever-present discourse of what's right and what's wrong. Corporations look to participation as a goal for converting casual audiences into active consumers.

While many arguments were being made as to social media's potential for activism and civic participation, often online political action is dismissed as "slacktivism" or "clicktivism" (Tufekci, 2017). Tufekci argues social movements that are organized on social media platforms are often seen to be held together only by weak ties between individuals, rather than close ties between people who previously protested together or engaged in political action "in the real world." Tufekci sees value in online political action, what she terms "Networked Protest," arguing the online world should not necessarily be seen as disconnected from the offline one. For Tufekci, the efficacy of symbolic action online depends on the context of that action. For example, users changing a profile picture on Facebook can send "a cultural signal to their social networks" (Tufekci, 2017, p. xxvi), which she characterizes as an essential part of cultural change over long periods of time. Clicktivism, or hashtag activism are still largely seen as the bare minimum in terms of political engagement, different from "real protest." But there are connections between online activism and "real world protest" discussed in the literature.

Within the academic literature, the Arab Spring in 2011 was the culmination of the optimism and democratizing potential of Web 2.0 social media. Throughout the literature, there is an acknowledgement that mainstream understandings of the events of the Arab Spring are subject to an intense amount of hype—and, especially following January 2011, a lack of critical analysis. However, Nick Couldry (2012) notes the following:

> Yet, hype or no hype, we must acknowledge that the internet is potentially a major source of institutional innovation because digital communication practices, just like the newspaper two centuries ago, constitute resources with the force of institutions. The events of the 2011 Arab Spring bring such debates into particular focus. (p. 109)

The events of the Arab Spring illustrate many aspects of networked protest, political engagement, and real-world activism. Tufekci (2017) argues social media technologies are vital to the action and sometimes success of various real-world social movements, including the Arab Spring and Occupy Wall Street, both of which are sometimes referred to by their Twitter hashtags, #Jan25 and #ows. Tufekci further highlights that activists' use of Twitter for tasks like organization, circumventing censorship attempts, getting messages out, and figuring out how to work together would not have been possible in the same way with previous technologies.

So much of the popular discourse around the Arab Spring afforded Facebook, Twitter, and other social media sites causal weight when it comes to how the protests happened. The same popular discourse derided Occupy Wall Street's decentralized, distributed network protests. Tufekci's work complicates both of these narratives; instead she talks about protest as community, including networked protests, lending weight to claims about the community-building potential of social media technologies. Sometimes protesters from different parts of the world and different causes share tactics and remedies with each other on social media platforms. In their biography of Twitter, Jean Burgess and Nancy Baym (2020) argue the story of Twitter's "growing up" is a change from Web 2.0 to "advertising-driven web paradigms" (p. 11). Web 2.0 did not stay as the dominant ethos of social media platforms for long because larger corporations stepped in to meet the increased demands for these types of platforms by monetizing them through advertising.

2.3.2. Warning Signals

There are helpful conceptualizations of social media platforms as versions of contemporary public spheres. For example, danah boyd (2014) argues networked publics can act as voices for the voiceless and that highlighting marginalized groups' voices on social media platforms is an important function of the public sphere. However, this can cause problems when this visibility becomes a spotlight or a type of surveillance (Banet-Weiser, 2018; Consalvo, 2012; Watcher-Boettcher, 2017). Social media can be beneficial to democratic movements and political protests in different parts of the world, and the belief in this is what characterized the first period of optimism and participation. In this second era, it is clear that optimism does not tell the whole story, and the use of social media is not limited to progressive movements. This second period of social

media is transitional in that there are warning signals and the literature complicates the relationships among social media, possibility, discourse, and politics.

Baym and boyd (2012) conceptualize socially mediated publicness as "social media complicate what it means to be public, to address audiences, and to build publics and counterpublics" (Baym & boyd, 2012, p. 320). Socially mediated publicness brings together ideas about how social media can be public or not, depending on the type of or ownership structure of the platform or the user settings.

> Networked technologies are reconfiguring many aspects of everyday life, complicating social dynamics, and raising significant questions about society writ large. As people engage in and reshape social media, they construct new types of publicness that echo but redefine publicness as it was known in unmediated and broadcast contexts. (Baym & boyd, 2012, p. 328)

Our reliance on networked technologies like social media platforms does result in a visibility and accessibility of other people, their opinions, and their experiences. This is a kind of publicness that some scholars describe as a hashtag public (Harvey, 2020; Rambukkana, 2015).

In 2014 two key examples of social movements that leveraged social media to their advantage in pursuit of very different goals stand out. The first is the Black Lives Matter (#BLM) movement, which began in 2012 after the murder of Trayvon Martin, which only received widespread media attention because of online activism (Tufekci, 2017). In the summer of 2014, the #BLM movement grew in prominence and scope after the murder of Michael Brown in Ferguson, Missouri. Protests in Ferguson were amplified to national and international attention when "journalists and residents started tweeting images showing the massive police force that had been arrayed against the protestors" (Tufekci, 2017, p. 207). Through the use of social media, the Black Lives Matter movement formed chapters around the world (Tynes et al., 2016).

In stark contrast to Black Lives Matter, another social media movement also emerged in summer 2014. Nominally about "ethics in video game journalism," #GamerGate, illustrates the disconnect between how one group of users experiences video games and social media platforms (women) and how the dominant groups on the platform and running the platforms experience the same events. GamerGate "was a sustained, months-long harassment campaign . . . a mob of thousands spewing rape

and death threats at a series of women involved in video games" (Wachter-Boettcher, 2017, p. 157), primarily on Twitter. Wachter-Boettcher and others (Burgess & Matamoros-Fernandez, 2016; Curtis, 2020; Harvey, 2020; Salter, 2018; Scott, 2019) detail the ways that Twitter as a company ignored and played down the severity of this situation. The prevalence and severity of the online misogyny on social media platforms at this time illustrate the cracks in the system, and the disparities between groups when it comes to whose voices are amplified or buried in the social internet.

As Blodgett (2020) argues, "While #GamerGate participants claimed its goal was to improve the ethics of games journalism, the campaign began with a post on the website 4chan by an angry ex-boyfriend seeking to defame a female game developer" (p. 184–185). #GamerGate opened the floodgates of online misogyny. But the failure of social media companies to listen to harassment victims or to deal with any of the outcomes of #GamerGate made this sexism and acceptable status quo on social media platforms like Twitter a key location for the campaign.

Online misogyny is wielded through social media at pop culture media texts featuring women, as well as the women who work on these texts, enjoy them, or simply post about them. When media texts featuring women, or media texts specifically made for women, are targeted by sexist social media storms, they are not just disagreements over films or other popular culture franchises. It is not simply a matter of taste. These controversies, for lack of a better term, are indicative of widespread misogyny seeping through media texts and social media discourses. Wachter-Boettcher (2017) argues social media platforms in general, and Twitter specifically, are at their core, about "updates" (p. 157). Because the original and guiding ideas behind such platforms are not about community, rather active interactions with the platform, that privileges controversy, with more eyeballs being more profit for social media companies.

These online gendered discourses are linked to current societal problems, from domestic violence to the attempted curtailing of women's rights and social supports across North America, and popular culture discourse on social media is a site of societal meaning-making in a political way. Social media enable a greater number of people and a larger set of stakeholders to engage with discourse concerning popular culture, including women's representation and involvement in many media texts.

> Both popular feminism and popular misogyny are networked continuums, with a variety of nodes that are triggered depending on historical context, power relations, and neoliberal markets. So, toxic geek masculinity is validated by a broader context of white masculine fragility, one that extends historically to the civil rights era. #GamerGate occurs at a particular historical moment because of an increasing visibility of female gamers and game developers, and a gradual decreasing set of barriers to entry for women using their technological skills. (Banet-Weiser, 2018, p. 169)

#GamerGate was successful in part because of its supporters' use of Web 2.0 tools, which were once the source of so much optimism, to spread messages of hate and discrimination. Popular culture is where audiences, users, people work out issues and ideas as a society. In a period of increased challenges to women's rights, xenophobia, and police violence against people of colour, popular culture is a reflection of us, as are our social media.

2.3.3. Shatter

The last key moment in the history of social media platforms I want to draw attention to here is 2016. Many academics in the field have written about the ways the events of 2016, namely Brexit and the 2016 US presidential election, illustrated a fracturing or shattering of many of the popular narratives around the role of social media in society and democracy (Banet-Weiser, 2018; Vaidhyanathan, 2018). Vaidhyanathan (2018) writes about the problems of echo chambers, filter bubbles, and custom audiences that have come to be understood as major aspects of social media. These aspects have affected the relationship of social media to democracy. One of the most important points Vaidhyanathan makes is that the same things celebrated for Barack Obama's victories in 2008 and 2012 are aspects of social media scholars should have been worried about all along.

Obama targeted voters and potential supporters using software that ran outside of Facebook. It was a problem then. It is a problem now. However, back in 2012, the Obama story was one of hope continued, and his campaign's tech-savvy ways were the subject of admiration. So academic critics' concerns fell silent (Vaidhyanathan, 2018, p. 159–160). The problematic elements of micro-targeting advertisements on social media based on their own data would not be widely recognized until the Cambridge Analytica scandal was brought to light in 2018. Vaidhyanathan writes about the use of "hypermedia" campaigns in which governments are managers of citizens, manipulating

and targeting information and propaganda. In hypermedia, citizens are not treated as publics but as tribes to be divided for political ends through social media, and he argues it works far too well.

Social media is not the only technology implicated in the state of democracy, as it is now intimately connected with algorithms and big data. The evolution of social media platforms as intrinsically tied to algorithms has implications for what content users see and who they interact with on our various platforms. For example, Tufekci (2017) writes about the problems algorithmic filter bubbles can contribute when it comes to political polarization through social media platforms:

> Algorithmic filtering can produce complex effects. It can result in more polarization and at the same time deepen the filter bubble. The bias toward "Like" on Facebook promotes the echo-chamber effect, making it more likely that one sees posts one already agrees with. Of course, this builds upon the pre-existing human tendency to gravitate toward topics and positions one already agrees with — confirmation bias— which is well demonstrated in social science research. Facebook's own studies show that the algorithm contributes to this bias by making the feed somewhat more tilted toward one's existing views, reinforcing the echo chamber. (p. 160–161)

The filter bubble, the opinion silos, the echo-chambers, this element of reinforcing what people already understand to be true or valid intensifies some of these problems with social media. John Cheney-Lippold (2017) also drew attention to the integration of algorithms into many of our technologies in *We Are Data*, using Kranzberg's (1986) work to problematize the proliferation of algorithms and the expanded collection of user data.

The internet, increasingly synonymous with social media, is much more complex and has many more problems than in previous iterations, though maybe it is that these complexities are just more visible than they were before. Kranzberg's first law of technology, arguing that technology is not good, not bad, and not neutral, puts the onus on human agency as the primary motivator of what technology does. Technology is not blindly good. Nor is it blindly bad. But it is also not neutral. Judy Wajcman (1991) reminds us that thinking of technology as neutral is "robbing us of any power to affect its direction" (p. 163). Understanding technology as not neutral demands our attention and demands human action to decide what is to be done with technology. It demands people to consider how they want technology to relate to their social and physical world. The world of humanity and of technology is complicated. But the relationships of technology

to identity, political action, and datafication that boyd and Crawford (2012), Castells (1996), Cheney-Lippold (2017), and Tufekci (2017) examine can give us some idea of how to make sense of it all.

One of the key aspects of the shattering of confidence in social media platforms like Twitter is how online sexism and misogyny have become more visible and more accepted on these platforms. The interconnections among society, gender, and technology are in many ways about power. Sarah Banet-Weiser's (2018) book *Empowered* connects these ideas to popular culture and popular online versions of feminism and misogyny. Banet-Weiser's (2018) argument is "the struggle, the response and call between and within popular feminism and popular misogyny . . . is a struggle over power, meaning, and identity" (p. 170). Her argument encompasses many aspects of the relationship of power to gender and technology. Empowerment itself is a buzzword of popular feminism, offering individual answers to structural problems in society. Empowerment, like "girl power," can be bought, advertisements would have us know, through the right makeup, hairstyle, shoes, and exercise classes. For Banet-Weiser, networked culture has provided space for popular feminism to grow into something that has "allowed us to imagine a culture in which feminism, in every form, doesn't have to be defended; it is accessible, even admired" (p. 1). But networked culture has also provided context for a reaction against popular feminism in the form of a popular misogyny that has been able to "twist and distort the popular in ways that seem new to the contemporary era" (Banet-Weiser, 2018, p. 3).

Prominent hashtag feminist movements like #TimesUp and #MeToo have also developed within this moment of shattering, bringing into sharp contrast these different ways in which misogyny and sexism operate in the world and online (Boling, 2020; Harvey, 2020; Linabary et al., 2020; Mendes et al., 2018). This shattering of belief in the democratic potential of the internet allows for a better understanding of Harvey's (2020) argument that "gender- and race-based violence and discrimination have been a feature of networking communication from the earliest days of the internet" (p. 121). Harvey goes on to explain that whatever freedoms the internet appeared to offer rely on capitalism rather than altruism, and therefore power imbalances are embedded into online experiences.

2.4. The Co-Construction of Social Media and Gender

Judy Wajcman's (2004) *Technofeminism* offers a lens from which to study these technological inequalities. Blending insights from cyberfeminism and the social shaping theory of technology, Wajcman conceptualizes "a mutually shaping relationship between gender and technology, in which technology is both a source and a consequence of gender relations" (p. 7). Wajcman further details how "gender relations can be thought of as materialized in technology, and [how] masculinity and femininity in turn acquire their meaning and character through their enrolment and embeddedness in working machines" (p. 107). In *Technofeminism*, Wajcman sets up some of the inherent contradictions in the way scholars (and advocates) theorize new technologies as disruptive. New media information technologies have the potential for social change; however, inequalities and existing biases operate through new technologies, just as they do in other parts of the social world. In the same ways that technologies like the internet or social media can enable progressive social thought and action, they also can, and do, enable movements like the alt-right and the other more regressive types of social relations that have always been present. The internet is not a new utopia; it is us, our society, as we have ever been.

It can be easy to forget sometimes that the material and immaterial tools, items, and systems used in people's everyday lives are designed and produced by people. Technologies carry with them the biases and failings of the people who designed them. For Wajcman (2004), technology is part of society's social fabric, "it is never merely technical or social. Rather, technology is always a sociomaterial product – a seamless web or network combining artefacts, people, organizations, cultural meanings and knowledge" (p. 106). Ursula Franklin (1992), similarly conceptualizes technology as practice, writing,

> Technology is not the sum of the artifacts, of the wheels and gears, of the rails and electronic transmitters. Technology is a system. It entails far more than its individual material components. Technology involves organization, procedures, symbols, new words, equations and most of all, a mindset. (p. 12)

In both U. Franklin's and Wajcman's view, technology is not just something people use but also something people do—whether as users or as producers (designers) of that technology. Understanding the intersecting roles of gender and technology, which are

both built in to our daily lives in our work, leisure, domestic, and public and private lives, is a complex but vital task. Part of this puzzle is studying the impact of the inequalities in the technology industry. Currently, this work is specifically important to understanding the ways social media platforms operate and serve to magnify societal inequalities in online spaces.

Applying a technofeminist lens on these phenomena allows researchers to consider the complex balancing act between technophilia and technophobia that is at work in conversations about the role of social media and the role of social media as public sphere. Returning to this idea that technology is not without bias is not the utopian ideal that will allow us to throw off existing social divisions but instead a complex recreation of inequalities and oppressions, as well as a renegotiation between different social groups as to the use and purpose of these types of technologies. Alice Marwick (2013a) offers another observation that can bring some insight here, “Although the technologies are the same, the norms and mores of the people using them differ. This suggests that gender is experienced differently both on and within different social media sites” (p. 67).

Gender and technology are both enmeshed in society. Structure and human agency are both vital elements at play in this question of the design and use of new technologies. Early utopian rhetoric about the internet argued online identity would not have to matter as much as identity in the physical world (Nakamura & Chow-White, 2011; Turkle, 1995). Analyzing these types of claims is a longstanding tradition in the gender and technology literature. Of course, there is exciting progressive potential in new technologies, but, as Wajcman and others point out, success is not guaranteed. More research is needed to examine how to get from radical potential to a truly inclusive technology, where power is distributed.

Anne Balsamo (1996) and Judy Wajcman (1991) both write about the reproduction of identity as a key aspect of the ways the design and production of technology operate. Design has a relationship with audience. For Balsamo (1996), “Cyberspace offers white men an enticing retreat from the burdens of their cultural identities” (p. 131). Writing about virtual reality, Balsamo further argues that “despite the fact that VR technologies offer a new stage for the construction and performance of body-based identities, it is likely that old identities will continue to be more comfortable,

and thus more frequently reproduced” (p. 131). Similarly, Wajcman (1991) argues gender is reproduced by the organization of the labour force.

Humans are the ones who program the machines, the algorithms, and the systems. Societal biases will absolutely translate into technological biases if they are not actively confronted and addressed. Technology is not neutral—because people are not neutral. That the tech industry is lacking diversity does not automatically mean specific things will be overlooked; however, less diverse teams are less likely to have to think critically about some of the biases they are reinscribing into their technology. A lack of consideration for the intersectional relationships among oppressions in society will serve to reinscribe the same biases over and over again (Crenshaw, 1989; Noble & Tynes, 2016). Patterns of inequality will be repeated if we do not work actively to change them as a society. Social media is another example of media information technologies in which there is a lack of representation of various social groups in the design process. This in turn plays out in the interactions of users on various platforms. Researchers can examine online communication as gendered and identify patterns regarding which types of communication are encouraged and which are discouraged.

The function of encouraging or highlighting—and discouraging or burying—different types of communication on social media platforms is particularly important in terms of the contested role social media has as an online public sphere. In their work in *Gender, Politics, and Communication*, Sreberny and van Zoonen (2000) emphasize Habermas’s focus on conversation as a key element of the public sphere. Although they noted Habermas resists the idea of transplanting the concept of the public sphere out of the original time and space in which he conceptualized the concept, Sreberny and van Zoonen argue political conversation can happen in an expanded conceptualization of the public sphere, which for them includes popular culture (p. 10). I apply this argument to the current role of social media. Sreberny and van Zoonen go on to address Nancy Fraser’s (1992) critique of Habermas, noting,

> Fraser contends that for a public sphere to work democratically it is imperative that everyone has access to it, regardless of backgrounds or identities. Yet if we look only at the unequal and prejudiced representation and construction of gender, ethnicity, class, and sexuality in the media as core institutions of the public sphere, it is obvious that the public sphere at present is far from ideal. (p. 7)

This critique is vital to understanding the problems in social media's version of the public sphere. Another example is how Banet-Weiser refers to the use of social media by men's rights activists, who use social media as a tool to shame women's bodies, among other functions. Banet-Weiser (2018) also refers to Lisa Nakamura's arguments that online racism is often "dismissed as a 'glitch'" despite social media being the context in which racist and sexist memes become easily spreadable (p. 127). Similarly, Dodge (2016) writes about the damaging effects of the spreadability of photographs of sexual assaults online, paying particular attention to the way it serves to normalize and even perpetuate violence.

The functions and uses of social media are constructed not just by the designers of a technology but also by users of the platforms as well. If social media is a type of public sphere, then the voices of various user groups should absolutely be represented on the various platforms. danah boyd (2014) argues networked publics (online public spheres) can act as voices for the voiceless; however, the surveillance functions of popular misogyny and popular racism on these platforms detract from this potential. Highlighting marginalized groups' voices on social media platforms is an important function of the public sphere, but it can cause problems when this visibility becomes a spotlight or a type of surveillance, an issue Banet-Weiser (2018), Watcher-Boettcher (2017), and Consalvo (2012) all point out. The relationship of social media platforms to what Banet-Weiser (2018) describes as popular misogyny and the rise of connected discourses of white supremacy and homophobia is a complex and problematic web, connected to previously mentioned patterns of problematic tech. In these cases, people who use these platforms to spread their sexist and racist messages—and the designers who struggle, or refuse, to moderate the content on their sites—are both implicated in this complex mess of a relationship. What is ignored when these instances are treated as glitches or anomalies, is what Banet-Weiser (2018) describes as the "social, political, economic and cultural structure" (p. 36) that is the context of the problems of social media and other technologies.

As a lens, technofeminism strikes a balance between technophilia and technophobia, "to explore the complex ways in which women's everyday lives and technological change interrelate in the age of digitization" (Wajcman, 2004, p. 6). Women's use of technology often simultaneously enables and constrains their identities and experiences. For instance, social media has allowed for new forms of misogyny and

harassment toward women while also facilitating women's collective resistance against such mistreatment, as seen in the #metoo movement (Mendes et al., 2018). Technology is inextricably linked to societal inequalities and other problems. As Turkle (1995) writes,

> There is no simple causal chain. We construct our technologies, and our technologies construct us and our times. Our times make us, we make our machines, our machines make our times. We become the objects we look upon, but they become what we make of them. (p. 46)

We have created our technology, and our inequalities. Wajcman's (2004) technofeminism offers two promises, "a different way of understanding the nature of agency and change in a post-industrial world, as well as the means of making a difference" (p. 130). By examining the relationship between gender and technology in society through a technofeminist lens, I reach for the possibility of making things better.

2.5. Conclusion

Considering the broader view of popular culture and its role in society, it is clear there has been a shift in the way people interact with and understand it. Both legacy media, like film and television, and social media are intwined in popular culture. They are more niche now, but some of the big-ticket items are some of the most visible. Van Zoonen (1994) describes the relationship between gender and communication as primarily "a cultural one, concerning a negotiation of meanings and values that informs whole ways of life and which is vice versa informed by existing ways of life" (p. 148). She positions media as part of feminism's cultural and material struggle. This is another way social media is a technology of gender. Similarly, Banet-Weiser's examinations of popular feminism and popular misogyny in online spaces is a story of a power struggle over gender happening through digital technologies. Banet-Weiser (2018) writes,

> the intensification of misogyny in the contemporary moment is in part a reaction to the culture-wide circulation and embrace of feminism. Every time feminism gains broad traction - that is, every time it spills beyond what are routinely dismissed as niched feminist enclaves - the forces of the status quo position it as a peril, and skirmishes ensue between those determined to challenge the normative and those determined to maintain it. (p. 3)

Struggles against the normative system, the dominant ideologies, and the ways power is entrenched in society are challenged through human action on (and through) digital

media platforms. She goes on to argue both feminism and misogyny are “continually restructured through this dynamic” (Banet-Weiser, 2018, p. 37) of conflict on social media and other corners of the internet. Banet-Weiser connects both popular feminism and popular misogyny to a neoliberalism that “produces not only ideology but also violence, and it is a structuring force that is both popular and networked” (Banet-Weiser, 2018, p. 39–40). This framework allows us to look at the ways human action can change, or attempt to change, the relationship between gender and technology in society. The ideological struggle between popular feminism and popular misogyny will only continue through these digital media platforms, and there is still a lot more to understand. This will be a key theoretical framework for my dissertation research into the social media discourse that accompanies the release of female-led superhero movies.

With Twitter as the setting, and the gendered discourse about female-led superhero films as the subject, my dissertation research will address these ideas through the following research questions:

> **RQ 1:** What discursive cultural frames do Twitter users construct about female-led superhero movies?
>
> **RQ 2:** What are Twitter users’ sentiments about female-led superhero movies?
>
> **RQ 3:** How are popular misogyny and popular feminism present in the social media discourse about popular films?
>
> **RQ 4:** How do popular misogyny and popular feminism interact with the cultural themes and sentiments in the dataset?
>
> **RQ 5:** What is the current role of computational methods in cultural studies and communication?
>
> **RQ 6:** How can a computational approach to measuring culture add to textual analysis in critical communication research?

The social media discourse about popular culture is a public sphere of political conversation, discussion, and argument. Through sentiment and discourse analyses of tweets, I detail the ways social media users create and participate in gendered discourses. I bring together theories of popular culture, social media, and gender to examine social media (media information technologies) sites, such as Twitter, as platforms that play a key role in the relationship among technology, gender relations, and media.

Chapter 3. Methodology

This empirical study is an analysis of social media posts about women-led superhero films. In this dissertation, I investigate how Twitter users shape sentiment and cultural and gendered understandings about women-led media texts on social media. I also conduct a quantitative sentiment analysis and qualitative frame analysis on tweets from March 6 and 7, 2019, when the film *Captain Marvel* (2019) was released in North America. Twitter, as a social media platform, is a space where user discourse contributes to socially shaping culture. The quantitative sentiment analysis measures the amount of discourse that is positive and negative. The qualitative framing analysis further explores the cultural and gendered ways through which the positive and negative sentiments about the film are articulated.

In this chapter, I explain the methods I used to conduct this study, including computer-assisted and manual content analysis strategies. I further outline the details of my study, including data collection, cleaning, and coding. Through this process, I examine the sentiments, cultural frames, and gendered frames within the dataset through a feminist discourse analysis (Banet-Weiser, 2018; Gill, 2000; Lazar, 2007, 2014; Wajcman, 2004). Finally, I address some limitations and challenges I encountered with this study, and how I have addressed them in later chapters.

3.1. Methodological Overview

3.1.1. Discourse and Content Analysis

Discourse is a key site of study for communication scholars. Both media discourses and discourses about media can teach us about each other and society. Stuart Hall (1980) explains cultural meaning-making through the framework of encoding and decoding of media. Producers and creators of media encode meaning into texts, and viewers decode meaning from those same texts—but not necessarily the same meaning. In this way, meaning is made by both audiences and producers of cultural texts. Figure 1 is a “slightly modified” diagram of Hall’s encoding/decoding model by van Zoonen (1994, p. 8) that highlights the social context within which both producers and

audiences are located. This model also illustrates “meaningful discourse” in the overlap between encoding and decoding, rooted in social context.

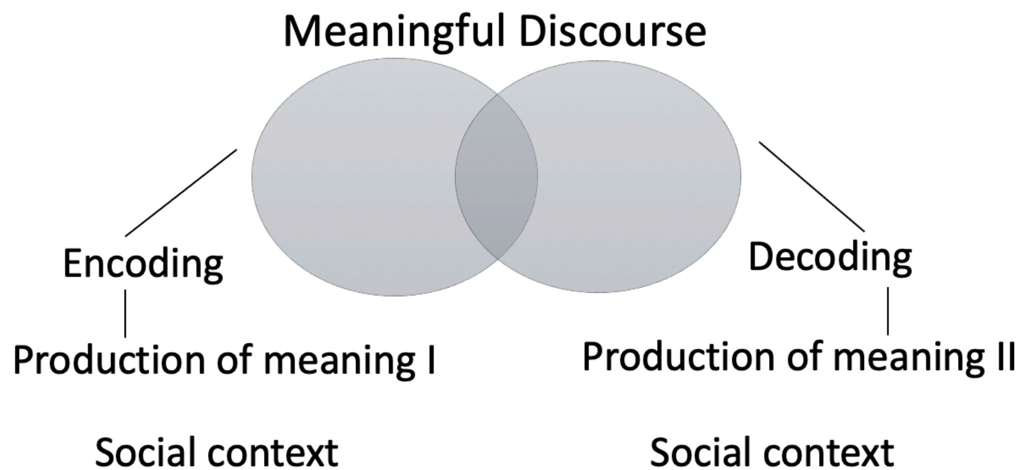

Figure 1. Modified Encoding/Decoding Model
(van Zoonen, 1994, p. 8)

Today this meaningful media discourse has been expanded. Media discourses, both between the encoding and decoding of media texts by producers and audiences, are also co-constructed through channels like social media platforms. The overlap between producers and audiences that may have previously been conceptualized as simply the text itself is now an even richer source of media discourse that includes exchanges between producers and audiences, as well as among audiences. In this way media discourse encompasses not only the discourse within a media text but also the wider discourse outside a media text, through different channels, not just a cinema screen or a television screen but also a browser window or a phone application. Social media offers different constraints and affordances than legacy media. Social media offers a different context, or access to more context, through new and simultaneous channels of communication. Figure 2 illustrates the differences in the social media age when it comes to the encoding and decoding process.

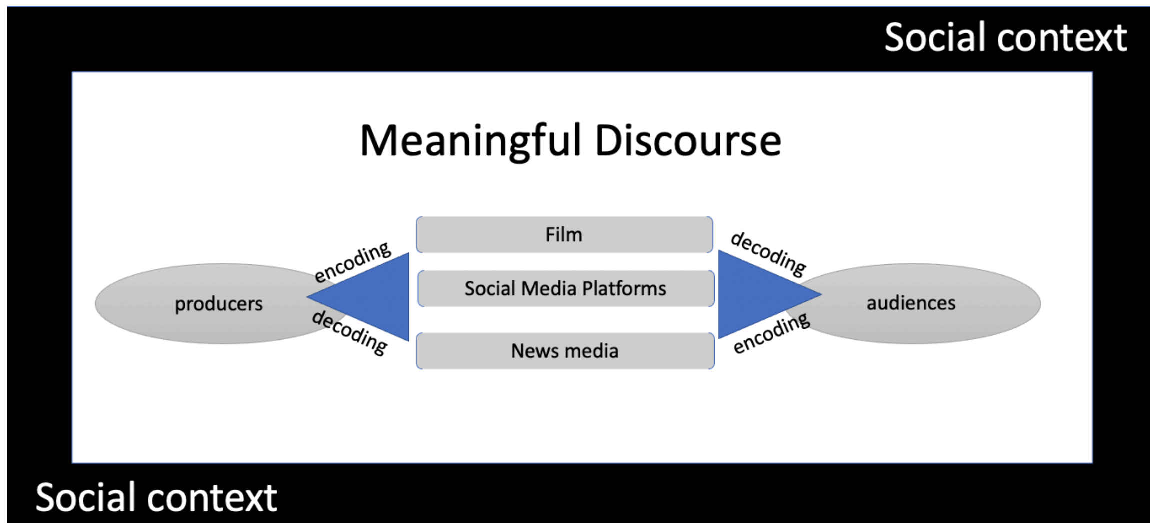

Figure 2. Encoding and Decoding in the Social Media Age

In Figure 2, I illustrate several elements of the context within which our meaningful discourse currently takes place. The first element is the border surrounding the entire figure, which represents the social context. This social context is what users bring to every interaction with each other and with media texts. Social context is created from experiences and observations, pasts, and patterns. The next element is the ovals representing producers and audiences. Both of these categories are permeable, as producers of some media are audiences of others, and vice versa. Both producers and audiences, grounded in their social context, encode and decode meaning from the media they encounter. I have represented the encoding and decoding processes with the triangle to indicate both these processes can happen at the same time, for both groups, and from multiple channels. The channels are represented in the middle of the image, in this case film, social media platforms, and news media. These channels can be encoded and decoded one at a time, or simultaneously. For example, a producer may encode meaning into a film, and an audience member may decode meaning from that film while encoding their understandings into posts on social media platforms. At the same time, news media may report on box office numbers or on social media trending topics, further encoding meaning that may in turn be decoded by both audiences and producers. The entirety of this exchange, in the form of meaningful discourse, takes place within the social context of producers, audiences, and the media channels themselves.

Discourse analysis, broadly, is a tool to understand how people use language. Fairclough (2003) sees discourse as "ways of representing aspects of the world – the processes, relations and structures of the material world, the 'mental world' of thoughts, feelings, beliefs, and so forth, and the social world" (p. 124). Through discourse, researchers can better understand how the social world is constituted, especially in the case of social media discourse, which is open and accessible to so many people. If, as Fairclough (2003) argues, "the aim of critical social research is better understanding of how societies work and produce both beneficial and detrimental effects, and of how the detrimental effects can be mitigated if not eliminated" (p. 203), then scholars cannot make sense of how societies work without thinking about how societies use language. Similarly, researchers cannot make sense of text-based social media platforms without thinking about how people use language on those social media platforms. Furthermore, as Fairclough (2003) argues,

> Social life is reflexive. That is, people not only act and interact within networks of social practices, they also interpret and represent to themselves and each other what they do, and these interpretations and representations shape and reshape what they do. (p. 208)

Discourse and language are part of how media function as technologies of gender, of how our technologies shape people as people shape technologies. Barker and Galasinski (2001) further tie the use of language and the shaping of society to the formulation and maintenance of ideologies through who gets to speak and who is heard.

Content analysis methods, such as sentiment analysis, are well suited to this research because they allow me to examine a large dataset. Babbie and Roberts (2018) define content analysis as "the systematic study and interpretation of cultural products (artifacts)" (p. 244). They believe it to be a particularly well-suited method to answering the key question of communication studies: "Who says what, to whom, why, how, and with what effect?" (Babbie & Roberts, 2018, p. 244). Similarly, van Zoonen (1994) suggests content analysis can be used to assess manifest characteristics of large quantities of media output**.** Content analysis is not without its limitations, however; hence, I will be pairing it with a qualitative framing analysis to examine the ways people use language within these tweets. The two methods can work together as an open process through which the researcher can better understand both the quantitative and qualitative aspects of the data through the other method.

3.1.2. Feminist Discourse Analysis

This dissertation is a feminist research study. This means I have built on previous feminist research in developing my theoretical basis and methodological process. It also means my research questions are feminist in subject. I am investigating gender in discourse and technology, social media, and media texts, and I will expand on this in chapter five, but, for now, Alice Marwick (2013a) argues "gender is produced and reproduced in social media both by software and the user interaction that takes place online" (p. 60). Users participate, view, engage with, and generally *use* social media for all sorts of reasons, from keeping in touch with family to news sources, as well as for amusement and popular culture, memes, arguments, and exchanges of information. Scholars have examined the impact of social media on politics, business, culture, information, and communication. As a site of study, social media sites are examined as platforms, networks, cultures, technologies, media, discourse, databases, and more. For my research, the most pressing element of social media as a site of study is its relationship to gender.

One way in which this is a feminist research study is through the role of data. For D'Ignazio and Klein (2020), feminist data science starts before the data and does not end with the data. All of the research I do is feminist research. It is who I am to consider power and gender and structure and agency in everything I study. It is one of the layers that permeates society in a way that is impossible for me to not see. My view on discourse analysis also foregrounds feminist research principles. For example, I draw upon Van Zoonen, who argues "both communication and gender are discursive and social phenomena at the same time" (Van Zoonen, 1994, p. 127). Two other elements from van Zoonen's *Feminist Media Studies* are essential to my analysis. The first is her characterization of feminist research as politicizing the process, both internally and externally.

> Internally, by interrogating the power relations inherent in doing research, externally by aiming at producing results that are relevant to the feminist endeavour. This is the backdrop against which to understand the specific epistemological and methodological requirements of feminist research *vis-a-vis* the respective elements of the research cycle: concepts, design and operationalization, data gathering and analysis, quality control and reporting. (van Zoonen, 1994, p. 130)

Similarly, the second way I understand this as a feminist study is to analyze gender issues in the context of media content that is not “journalism and factual programming” (van Zoonen, 1994, p. 46). This study focuses on gender, communication, and meaning-making as cultural and political, understanding that “media are part of feminism’s cultural and – albeit to a lesser extent – its material struggle” (van Zoonen, 1994, p. 148).

Lazar (2007, 2014) has developed a practice of feminist critical discourse analysis (FCDA) that includes principles of “feminist analytical activism, gender as an ideological structure and practice, complexity of gender and power relations, discourse in the (de)construction of gender, and critical reflexivity as praxis” (2007, p. 141). Through feminist critical discourse analysis, Lazar “aims to advance a rich and nuanced understanding of the complex workings of power and ideology in discourse in sustaining (hierarchically) gendered social arrangements” (Lazar, 2007, p. 141). In FCDA, researchers “show up the complex, subtle, and sometimes not so subtle ways in which frequently taken-for-granted gendered assumptions and hegemonic power relations are discursively produced, sustained, negotiated, and challenged in different contexts and communities” (Lazar, 2007, p. 142). Lazar also emphasizes the necessary interdisciplinary nature of FCDA. The “critical” in critical discourse analysis means this type of analysis is already concerned with analyzing social inequality and injustice.

There are a few ways in which this study fits into the FCDA format. First, regarding the principle of feminist analytical activism, my analysis examines discourse about movies, and my analysis of this particular discourse illustrates “the workings of power that sustain oppressive social structures/relations” (Lazar, 2007, p. 145). Second, my analysis illustrates gender as an ideological structure in terms of how gendered social media discourse contributes to how “unequal power relations and dominance” (Lazar, 2007, p. 146) are created, maintained, and understood. Third, my study addresses what Lazar describes as “the operation of a subtle and seemingly innocuous form of power that is substantially discursive in nature” (Lazar, 2007, p. 148). Fourth, the principle of discourse in the (de)construction of gender is examined and highlighted through an emphasis on the social, “how gender, ideology and gendered relations of power get (re)produced, negotiated, and contested in representations of social practices . . . and personal identities in texts and talk” (Lazar, 2007, p. 150). And lastly, the principle of critical reflexivity as praxis is evident throughout my reflexivity in this dissertation, of my own theoretical positions and practice, especially in chapter six. Many

other scholars have used FCDA to examine social media discourses (Bogen et al., 2019; Boling, 2020; Gupta & Trehan, 2021; Nartey, 2021). Feminist critical discourse analysis is an excellent tool to use when examining social media discourse, especially in this topic area, and I am glad for my research to follow in this tradition.

3.1.3. Critical Technocultural Discourse Analysis

Another perspective on discourse analysis that I draw from in this research project is critical technocultural discourse analysis (CTDA). Brock (2018) makes a case "for a critical cultural approach to the Internet and new media technologies, one that interrogates their material and semiotic complexities, framed by the extant offline cultural and social practices its users engage in as they use these digital artifacts" (p. 1,013). CTDA is a conceptual framework that considers both content and infrastructure as discourse to be examined. Brock (2020) describes two key aspects of CTDA,

> The first is its holistic inquiry into tech artifacts, practices, and users. . . . The second, and most important, innovation is the centering of technology use by marginalized groups within their own understanding of themselves rather than unmarked racial and socioeconomic standards of 'modern' technology use. (p. 8)

This methodological tool kit encourages researchers to ask questions about the defaults in our technological landscapes. For example, social media is an interconnected system that includes technological artifacts as well as the practices of creators and users. Through this framing I can gain more insight into the ways these technologies affect, and are affected by, the context of society.

For Brock (2020), culture is technology, and technology is culture. In this way, culture and technology are both context for each other, and they thus necessitate being examined together. CTDA accommodates analysis of the ways technologies enable and constrain user actions through the discourse of their design and creation:

> An . . . essential component of CTDA is a critical analysis of the ways people manage technological constraints on action, agency, and being (the 'technocultural' aspect). People follow the interactions and practices mapped out by the designers and engineers who code the technology, but they also find ways to create additional pathways and practices to represent themselves within that technology. . . . In doing so, they draw on their cultural, environmental, and social contexts to make meaning from their technological influences. (Brock, 2020, p. 9–10)

Users of technologies do both expected and unexpected things with technologies. From the perspective of designers or programmers, social media platforms function in both expected and unexpected ways. CTDA foregrounds an interrogation of “ideological influences within the technological artifact, within the practices incurred through the artifacts design, and within the discourses of technology’s users” (Brock, 2020, p. 10). This is a well-rounded and expansive, yet structured, methodological lens from which to conduct a nuanced analysis.

CTDA fits with my research because of the overlapping and interlocked aspects of concepts and locations of my site and object of study. This study addresses concepts of culture and gender, as created and reflected through social media discourses of popular culture. These concepts are located within both the social media site, Twitter, as well as in the context of media text of the film itself. Furthermore, my study examines computer-assisted and manual content analysis as technologies and practices of research. I examine technology (social media, film, research software), artifacts (tweets, trailers), and user practices and beliefs (tweets, discourse, meaning) as multimodal discourses. From this, I draw conclusions that take into consideration multiple aspects of the phenomenon under examination. Given my interest in meaning-making and the overlapping ways in which people and technologies are engaged in the process of meaning-making, CTDA is useful for this kind of critical cultural research.

CTDA focuses on context and the intricate ways in which our society and technology interface and are interconnected. Complex societal issues, like race and gender, among others, are excellent areas to employ this kind of harmonized methodological system. Brock (2018) specifically suggests scholars from disciplines like communication and gender studies, who deal with digital sites of study, should be employing his tool kit to examine digital or technological artifacts, discourses, and beliefs. This decentering of predominant discourses about the inherent qualities of ICTs is a vital and necessary area of inquiry. Keeping in mind CTDA considers the discursive properties of both human action and technology, I use a number of feminist theories to apply CTDA to my site of study. Using feminist media studies (van Zoonen), Technofeminism (Wajcman), and Data Feminism (D’Ignazio & Klein, 2020), I examine my dataset and its context through CTDA and FCDA. Both CTDA and FCDA allow for experience and emotion in the data, as well as the research process, which is in line with the feminist theoretical foundation and throughline of this study. In the following sections,

I detail the specifics of how my study functions in the context of this methodological structure.

3.2. Conducting the Study

3.2.1. Study Details

My site of study for this research is the social media platform, Twitter. Twitter is a social media platform that is accessible to a large, popular audience, as well as easily accessed by researchers. Chow-White et al. (2018) argue “Twitter is an efficient opportunity for sampling the public discourse and the [construction of] meanings” (p. 451). In addition,

> The platform provides large quantities of publicly available data from a wide variety of accounts over time and space. Furthermore, the short form simplifies the qualitative human coding in text analysis. Studying tweets produced about a topic in real time can be an efficient and reliable means for understanding public sentiment and the formal and informal production of frames of meaning about a topic (Chow-White et al., 2018, p. 451).

Twitter retains an important role in cultural discourse and is an accessible source of data for researchers interested in a wide range of topics. The body of scholarship on Twitter sets a precedence for its importance in social scientific research (Chow-White et al., 2018, 2020, 2021; Gupta & Trehan, 2021; Himelboim et al., 2013; Kjær et al., 2021; Pandarachalil et al., 2014; Tufekci, 2017). However, compared to other social media platforms, Twitter is relatively small (Stieglitz & Dang-Xuan, 2014). Other researchers argue Twitter is not without its flaws as a research site because of problems with bots, advertisers, and spam on the platform (Chow-White et al., 2021; Jones, 2019). Others also draw attention to the limited access researchers have to the full amount of data on the platform (Chow-White et al., 2021; Driscoll & Walker, 2014; Wang et al., 2015).

Twitter is a rich source of data from which to examine gendered discourse and the articulation of gender through popular culture texts. There are multiple forms of discourse involved in this site of study, with the social media platform Twitter as artifact, practice, and belief (Brock, 2018). In recent years, a series of similar discourses have emerged from popular film and television releases. Films including the all-female *Ghostbusters* (2016), *the Force Awakens* (2015), *the Last Jedi* (2017), and *Mad Max: Fury Road* (2015) have all been accompanied in their release by online controversy—in

the form of gendered social media discourse (Scott, 2019; Woo, 2018). Within this context, my dissertation examines social media discourses on Twitter that coincided with the release of *Captain Marvel* in 2019. *Captain Marvel* (2019) was the first film in the expansive MCU to star a female superhero in the solo lead role. Although the character has a long history within Marvel Comics (first as Ms. Marvel), when the film was announced in October 2014, Captain Marvel was not considered one of Marvel's flagship superheroes. However, the 2012 rebranding of Ms. Marvel as Captain Marvel, with the successful run of comic books written by Kelly Sue DeConnick, had found a motivated and dedicated fanbase—The "Carol Corps" (Edidin, 2014). It is this comic series that forms the narrative base for the film. The pervasive thought in Hollywood that female- or minority-led films do not do as well positioned each of these films as risky, each one as a monetary referendum on the value of comic book or action movies not staring the Western cinematic default straight white cis men (Kent, 2021b; Scott, 2019).

I anticipated running into some complications with the data collection and coding; chapter six tells this story. Some of the limitations I anticipated were due to the intertextuality of social media data. Tweets are created and exist in context with wider conversations that do not necessarily translate when taken out of the time and place within the wider discourse of Twitter. Fairclough (1992) explains that "Intertextuality is basically the property texts have of being full of snatches of other texts, which may be explicitly demarcated or merged in, and which the text may assimilate, contradict, ironically echo, and so forth" (p. 84). Twitter is absolutely an intertextual text, and as such its meanings may "depend on other meanings" (Barker & Galasinski, 2001, p. 69). I address this throughout chapters four, five, and six.

3.2.2. Data Collection and Cleaning

My data collection and cleaning used both computational and manual methods. Using the Twitter's Researcher API[2] access,[3] I collected a dataset of 77,606 tweets containing search terms related to the *Captain Marvel* (2019) movie. Search term

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[2] API definition from Bail (2014): "Application Programming Interfaces (APIs) [are] webbased tools [that] provide an interactive interface with large data archives that are designed to enable targeted data extraction" (p. 470).

[3] Accessed at https://developer.twitter.com/en/products/twitter-api/academic-research with the help of Dr. Ahmed Al-Rawi.

keywords included #MsMarvel, #BrieLarson, #CaptainMarvel, #MissMarvel, #higherfurtherfaster, and I collected Tweets from March 6 and 7, 2019 (the two days preceding the official North American release of the film). I chose this date range because this was the height of marketing for the film, and "midnight releases" are generally the Wednesday and Thursday before the Friday "release date" for Marvel films, so many engaged fans are tweeting their first reactions to the film during this window. Hollywood has cultivated an "opening-night eventfulness . . . over the last twenty years" (Moulton, 2021, p. 16) that assures studios that dedicated fans and enthusiastic audiences will see a film as soon as they can to keep films in theatres longer—and therefore collect higher profits. This is an excellent window in which to collect this type of data from a social media site that emphasizes urgency and being a part of the conversation.

The Twitter API search returned a JSON (JavaScript Object Notation) file that I converted to CSV[4] using Python to work with it in Excel and run my analysis in Python. To clean the dataset, I first deleted non-English tweets, which reduced the dataset from 77,606 to 42,072. I also removed extraneous data columns that made the dataset unwieldy for analysis. Some arrays included in the JSON file needed to be separated into discrete columns; I also removed other extraneous data, such as IP addresses, user account identification numbers, and repeated information, and I deleted duplicates and retweets, which further reduced the dataset to 14,129 tweets. The removal of these types of information and duplicates is in line with decisions made in other Twitter research studies (Babcock et al., 2020; Bogen et al., 2019; Linabary et al., 2020).

3.2.3. Coding and Data Analysis

Computer Assisted Content Analysis: Sentiment Analysis With Python

The first aspect of my coding and analysis is the computer-assisted content analysis portion. Sentiment analysis is used to study social media users, as well as the various topics toward which they express sentiment. As a type of content analysis,

[4] With help from the Digital Humanities Innovation Lab at SFU

sentiment analysis in large datasets can provide a big picture idea of what is contained in a dataset, broad strokes that can then be narrowed down by a researcher if desired. Computer-assisted content analysis is a quantitative approach for exploring what is broadly included in a social media analysis (in this case). Armstrong and Towery (2022) argue "most social science researchers are taught that to dig deep into content for meaning and interpretation, the use of human coding remains the gold standard, because computers are unable to determine nuances and underlying meaning within content" (p. 1). However, it is a helpful lens with which to look at large datasets through. Computer-assisted content analysis is not necessarily rich in meaning or nuanced in process, but it is an instrument to use for a look at the denotative level of what is in a dataset like this. For example, for this research in particular, not all sexist content would register as negative to the program, nor is all the content marked as negative by the program sexist. However, some interesting work has been done in computer/data sciences to develop programs/scripts to identify misogynous tweets (Ahluwalia et al., 2018).

Once I collected and cleaned the dataset, I used computational methods to run the first round of coding. I used Python, a high-level general purpose programming language, with Jupyter Notebooks to run my computer-assisted content analysis. Python is a computer programming language used by scholars to automate some of their data processes. Scholars have created various programs and tools within Python to examine and understand large datasets. In Python, I ran a program called VADER Sentiment Analyzer to run sentiment analysis on my dataset (Al-Rawi et al., 2021; Hutto & Gilbert, 2014). VADER is a commonly used "rules-based model for general sentiment analysis" (Hutto & Gilbert, 2014, p. 1) that I used to evaluate my dissertation dataset. Developed specifically to analyze sentiment on user-generated content on social media platforms, VADER creates a score for each input, in this case, tweet, based on the internal lexicon of the (algorithm). The developers combined a sentiment lexicon of positive and negative words, as well as words seen to vary sentiment intensity (think "very" as a modifier of "angry", etc.). The program's developers also included grammatical considerations, including acronyms, emojis, and slang terms, and validated results, with the researchers checking the algorithms' work while in development. Other scholars have evaluated VADER and found it to be consistent (Ribeiro et al., 2016), a discussion I expand on in chapter six.

VADER returns scores for each tweet of positive sentiment, neutral sentiment, and negative sentiment, as well as a combined score that integrates all three into one score between 1 (one) and –1 (negative one). The closer to 1 the tweet is, the more positive VADER classifies it. Whereas the closer to –1 the tweet is, the more negative VADER classifies it. I then used Python to add these scores as additional columns in my dataset CSV file. According to VADER's classification system, tweets between 1 and 0.05 are positive, tweets between –0.05 and –1 are negative, and those between 0.05 and –0.05 are neutral, so I also added a column to label the tweet positive, negative, or neutral. After some manual coding (explained in the next section), I ran VADER again after removing emojis from the dataset because I observed VADER had some issues classifying tweets with certain emojis (fire, crying face) and added those results as columns to my dataset.

Frame Analysis: Manual Coding of Cultural Frames

To address the qualitative research questions, I manually coded for cultural frames in Google Sheets (Benford & Snow, 2000). Other researchers in communication have used computer-assisted content analysis augmented with manual and qualitative methods to explore social media datasets (Burgess & Matamoros-Fernández, 2016; Chow-White et al., 2020, 2021; Cornelio & Roig, 2020; Gupta & Trehan, 2021; Lewis et al., 2013). Following their lead, I also manually coded for sentiment for two reasons. At first, this was to verify a sample of VADER's results to better understand what the computer-assisted analysis had done. But second, I then decided to manually code the entire dataset to analyze the usefulness of VADER for a project like this. In this process, I manually coded for the sentiment of the tweet, and separately I coded for the sentiment toward *Captain Marvel* within the tweet. I did this because in the manual coding of sentiment, I encountered some tweets in which these two sentiments differed. I explore and explain these differences in depth in chapter six. For both of these codes, I used the same categories as the Python classification: positive, neutral, and negative. Throughout the analysis in chapters four and five, I include the sentiment analysis to add context and depth to the cultural and gendered frames. Where the manual and computer-assisted sentiment analysis agree, I have used the VADER computer-assisted sentiment analysis. In instances where there is disagreement between the two methods of sentiment analysis, I have included both. In chapter six, I go into further detail analyzing these differences.

For the qualitative analysis, I developed an inductive coding protocol for the cultural frames, including a deductive coding protocol for the gendered frames. Although I had a general idea of what types of cultural frames might be found in the dataset from my background research and understanding of the discursive context, an inductive approach allowed me to identify a full range of cultural frames, as all were drawn from the data itself. Most frames were identified in the process of pilot-coding 200 of the tweets, though some were identified or further refined as I continued. Table 1 details the cultural frames. While I was coding for the cultural frames, I also evaluated each tweet for gendered discourse. For the gendered frames, I used a deductive coding approach where I started with Banet-Weiser's concepts of popular feminism and popular misogyny and evaluated each tweet for the presence of either concept. With the frame analysis, my goal was to reflect the multiple discourses present in the dataset. To that end, the inductive cultural frame coding allowed me to identify the breadth of discourse, and the deductive gendered frame coding provided me a firm starting point from which to evaluate the extent to which gender was a discourse in the dataset.

Table 1. Cultural Frames in the Captain Marvel Dataset

Pro-Movie Actors	Tweets praising the main actors
Neg-Movie Actors	Tweets criticizing the main actors
Reaction/Plot/Anticipation	Tweets just expressing reaction to the movie/plot details
Competition	Pitting CM against other female superheroes (Alita, Wonder Woman) or other movies
Defending Movie	Tweets defending CM as a movie or attacking "haters." Some of these tweets are "negative" and using the movie hashtags but not negative about the movie
Defending Haters	Tweets defending the anti-CM stance. Some of these tweets are "positive" and using the movie hashtags but not positive about the movie
Review	Review Controversy—Referring to the Rotten Tomatoes controversy or "Real reviews of film." Does not include tweets like "here's my review," but does include tweets that reference a review they read/specific impression of the movie
Politics	Tweets where the subject crosses into "politics." Includes tweets that mention politicians (Trump, Hilary, etc.) or tweets that refer to "Leftists," "Libs," or "Alt-right trolls." Common hashtags in these tweets are #SJW (social justice warrior) #getwokegobroke; common words are shill, conservative
Race	Was originally categorizing these tweets in "politics" but in coding it became clear this frame needed its own category. Tweets in this category mention race in some way, either in reference to Brie's comments about "white men" or tweets that point out that the original Captain Marvel in the comics was black (not "carol danvers," but "monica rambeau"); or tweets calling Brie racist for being cast in the movie
Queer	Didn't originally expect to code for this topic, but did. Includes tweets whose authors position themselves as queer in the tweet, or tweets that queer the movie/relationships in the movie in some way
Boycott	Some crossover with the "Competition" frame. Tweets in this category state they're "not seeing the movie," use the word boycott, or say they're seeing Alita (another movie released in the same month) instead, also "convincing people not to see the movie"
Corporate/Informational/ Marketing	Tweets that are largely just informational, from corporate accounts. This includes movie theatres tweeting that they have tickets available for showings, official tie-in merchandise, giveaways, actors on talk shows, reports from red carpet premieres

For the gendered frames, I classified tweets according to Banet-Weiser's (2018) framework of popular misogyny and popular feminism, a process I expand upon in

chapter five. In the process of coding, these two concepts did not entirely fit some of the tweets I identified as being gendered discourse, so I added classifications for tweets responding to popular misogyny without being popular feminism, and vice versa. The gendered frames are presented in Table 2.

Table 2. Gendered Frames in the *Captain Marvel* Dataset[5]

Popular Feminism	Tweets encompassing "popular feminism"
Popular Misogyny	Tweets encompassing "popular misogyny"
Response to Popular Misogyny	Tweets responding to "popular misogyny" but not necessarily popular feminism
Response to Popular Feminism	Tweets responding to "popular feminism" but not necessarily popular misogyny

In the process of coding the dataset of 14,129 tweets, I further identified retweets that needed to be deleted. Due to the way the Twitter Researcher API collects tweets, some retweets cut off the end of the text, resulting in my being unable to properly code for sentiment. I subsequently deleted these, leaving me with a final total of 10,606 tweets in this dataset. I manually coded all tweets for tweet and movie sentiment, as well as for cultural frames. During this process I evaluated each tweet for the applicability of additional cultural frames and gendered frames, and coded accordingly. I also took steps to improve the reliability of my manual coding. Matthes and Kohring (2008) argue there can often be problems of reliability in frame analysis, especially in inductive coding protocols. To mitigate this, I returned to the dataset at many points during the analysis process to reassess a sample of tweets in terms of cultural and gendered frames. The time in between these rounds of coding served to give me some distances from the previous round of coding to make sure my coding was reliable.

3.3. Conclusion

In this chapter, I have described how feminist research methods and discourse analysis formed my research process. I have also shown how both computational and

[5] More detailed discussion of the coding process and criteria for these frames can be found in chapter five.

manual coding has allowed me to address quantitative sentiment analysis and qualitative frame analysis on this dataset. This methodology also came with its own limitations. The nature of how the Twitter Researcher API functions meant I had to enter specific hashtags or words contained in the tweets I wanted to collect. My instincts (lived experience) are that many of the controversial statements made about the film on Twitter will not necessarily have been tweeted with the official or studio-promoted hashtags, but that negative tweets would be likely to be found either in responses to such tweets or in quote tweets, where users can post a comment on an attached tweet without including the same hashtags or keywords.

In chapter four, I detail my analysis of the qualitative cultural frames in the dataset. This analysis is augmented with the results of the quantitative sentiment analysis to further contextualize the findings. Chapter five presents my findings in terms of the gendered frames in the dataset. This discussion expands on the evidence of popular feminism and popular misogyny within the dataset and illustrates how these frames connect to the cultural frames and sentiment analysis. Finally, chapter six is a reflection and critical evaluation on the combined methodological approach and processes used in this research project and their potential for future work in critical feminist data studies and discourse analyses. Chapters four and five address the discursive elements of culture and gender that work through this site of study. With chapter six, I address the role of computational methods in communication and cultural studies. Throughout chapters four and five, I include examples of the ways the computational methods enabled and constrained my analysis, and these elements necessitated further examination.

Chapter 4.

Cultural Frames

Popular culture, movies, and social media are sites of cultural politics. They are part of our shared language and context, and researchers can learn from this intersection of gender, discourse, and entertainment. This chapter addresses the qualitative cultural frames I identified in tweets about the 2019 *Captain Marvel* film through my first two research questions.

> RQ 1: What discursive cultural frames do Twitter users construct about female-led superhero movies?
>
> RQ 2: What are Twitter users' sentiments about female-led superhero movies?

Throughout the analysis, I also include the results of my sentiment analysis to add context and depth to the results. I examine the main cultural frames, themes, and topics present in the dataset and provide context for each, including the importance each of their meanings indicates in terms of their relationships to the film, popular culture, and the internet. First, I focus on the cultural context in which this film was released and discussed on social media. Then, I detail the three categories of cultural frames I identified. Finally, I conclude that, although the majority of the tweets are not expressly political in nature, each frame is connected to or influenced by cultural politics.

In chapter two, I discussed how cultural studies scholars have examined popular culture and media through drastically different technologies, including film, television, and now, social media. In this chapter, I argue social media is an important place to examine cultural frames. There is a long history of studying the social internet. From chat rooms and mailing lists to Web 2.0 and fan websites, online discussion is popular culture. However, Devon Powers (2022) argues that for too long media scholars have asked the word "popular" to do too much in communication, culture, and media studies.

> It is more accurate to say that the "popular" of popular culture has been asked to do too much work—stretched over an everwidening and complexifying cultural situation that it was never intended to fit. We have asked "popular" not only to be whatever we love the best, but to be the

> kernel of our politics and the tether to the people, applicable in any and all contexts. The problem is not only that popular culture cannot be all it is expected to be. It is that it no longer needs to do the work it was conceptualized to do. (p. 8)

Powers (2022) argues the cultural forms described as "popular" are now simply "culture." This resonates with me because of the way I struggled to settle on a specific definition of popular culture when referring to different elements involved in this dissertation. If popular culture is a descriptor of such a wide range of things as different types of television, from reality television to sporting events to YouTube videos to social media platforms, comic books, movies, and streaming services, perhaps popular culture is so hard to define because it no longer has the same extent of specificity in our media landscape. The cultural context of these social media platforms and these films is popular—in the sense that it is watched, that it makes money, and that it is talked about. But these places and texts are also niche and corporate and, in the case of Twitter, sometimes deeply annoying. To their audiences, users, the people who interact with Twitter and superhero films, this is culture. We live in it, and it surrounds us.

Powers's (2022) arguments about popular culture are representative of how the communication context is constantly changing. What was once unique about Web 2.0 (interactivity, participation, etc.) is now taken for granted and stretched to almost every facet of what researchers describe as the "social web." This means our interaction and participation with culture is expanded from our previously smaller circles (Rainie & Wellman, 2012). Audiences do not solely discuss opinions on movies with friends or coworkers; users can shout it to the world on multiple platforms, where thoughts can meet multiple audiences. For many people, this is a career. A viral tweet can help your podcast or YouTube or TikTok following grow, and thus controversy is inevitably entangled with social media platforms because attention, views, clicks, and likes are the currency of our culture. Therefore, the context for my research is not just films; it is not just social media; it is the interplay between the two realms of our present culture when it comes to considerations of media. As I discussed in chapter two, the different ways scholars characterize people in their relationships to media tend to switch based on mode of interaction. Someone who watches a movie is an audience. Someone who uses social media is a user. But someone who uses social media to discuss something generally deemed meaningful or important is part of a public. Through this analysis, I bring these different elements together into an examination of how people, whether they

are users, audiences, or publics, interact with, understand, and make meaning out of media texts.

In previous chapters, I discussed how media texts are interpreted and how meaning is negotiated in more than just the text itself today. In this chapter, I expand on these discussions through the case of *Captain Marvel* and the resulting social media discourse. Social media's role when it comes to popular culture and all kinds of related conversations is multifaceted. For this research, *Captain Marvel* is a compelling example of these theories because of its unique circumstances and the highly charged context within which the film was released. The next sections detail the cultural context of the film ahead of the data analysis.

4.1. Cultural Context of *Captain Marvel*

Movies are not released into a vacuum and received by audiences with a blank slate. There are necessarily so many things that go into making a film, from the source material to the casting, the writing, and the previous films in the franchise. There are also audience expectations, their preconceived notions about what a good film is, who should be in it, what stories it should tell, and how the world should work or should look like based on their own experience and understanding. In the case of 2019's *Captain Marvel*, much of the context predates the film by decades, because of the legacy of the Marvel Comics upon which the MCU is built. For *Captain Marvel*, there were existing contexts stemming from discourses in comics fandom, as well as the existing MCU films. In addition, these contexts are located within wider gendered cultural nerd discourses that echo broader problems in culture at large. As Benjamin Woo (2018) argues, geek culture has a sexism problem,

> Today, the face of geek culture is not only fan communities sharing their enthusiasms together: it's also a comment thread troll; it's a Twitter egg threatening rape and death; it's Loughner's crooked grin . . . How did we get from "sensitive new age geeks" to "angry young nerds"? (p. 173)

Woo (2018) draws parallels between the rise of sexist discourses in geek culture to the development of "men's movements." Woo draws from scholarship by Kimmel (1987), who categorized such movements as "masculinist" or "antifeminist," and Messner (1998), who examined their relationship to certain "institutionalized privileges." Superhero films exist within two industries that have problematic histories when it comes

to gender, both the comics and film industry. With the addition of social media to the contributions of these two industries, the various problems and fractures can be seen more clearly.

In chapter two, I introduced some key events in the history of Twitter that help us understand the frames and trajectories of social media discourses. One of the most relevant events to this research was "GamerGate," which had reverberating effects on the comics industry. GamerGate, and the related "ComicsGate," greatly affected comics fandom—and by extension comic book movie fandom (Blodgett, 2020). Curtis (2020) goes so far as to declare the presence of a "comics culture war,"

> Where increasingly diverse representations have been met with aggressive counter-demands by conservative fans targeting progressive readers and creators they refer to as "social justice warriors." . . . Eventually the more aggressive trolling of creators came together under the #comicsgate banner – a manufactured scandal that emerged from the earlier misogyny-dressed-up-as-games-journalism known as #gamergate – which began in July 2017. (p. 929)

This context is vital to understanding the frames I have identified and explained later in this chapter, especially when it comes to the frames within the anti-fan themes.

The release of *Captain Marvel* in March 2019 was Marvel's first solo-female-led superhero movie. Although *Ant Man & the Wasp* had been released in 2018, the character of Wasp was an addition to the *Ant-Man* story, and she still had second billing in the title, as well as a secondary role in the film. The MCU was by this point a powerhouse when it comes to superhero or comic book movies—and in the film industry as a whole. As Taylor and Glitsos (2021) write,

> despite the popularity of comic-book filmic adaptations, led in particular by the three-phrase Infinity Saga narrative of the Marvel Cinematic Universe, there was a 9-year period (2008-2017) in which no female-led superhero films were released. Strikingly, in this period Marvel released 20 films – sometimes 2-3 *per year* – while the DCEU[6] released three films. (p. 3)

Nine years and 23 superhero films, not one of them with a woman having top billing. This stretch of time ended in 2017 with the release of DC's *Wonder Woman*, which I discuss in chapter six. At this point, there are several discourses and narratives in the

[6] DC Comics Extended Universe

fan spaces that encompass the comics and films that play out in the tweets in this dataset. This includes fans of other female superheroes arguing theirs should have been Marvel's first female-led film (Black Widow), as well as others arguing theirs was better in some way (Wonder Woman), or even that people should go see a different film instead (the Alita Challenge). These narratives increased in intensity as the release of *Captain Marvel* approached.

The lead-up to any large film release, especially when it comes to MCU films, which are shrouded in secrecy to prevent "spoilers" from being leaked, is accompanied by a vast marketing machinery. *Captain Marvel* was no different, and several storylines came out of the marketing and press ahead of the film's release. For Marvel fans, the lead-up can be years long because often the studio will announce casting in a big forum like the San Diego or New York comic cons, and news organizations compete to get the scoop ahead of any others. Two storylines in particular followed Brie Larson's casting and participation in the film, especially following the character's appearance in one of Marvel's famous post-credit scenes in *Avengers: Infinity War*, released in April 2018.

The first storyline was in reaction to a speech Brie Larson had made while accepting the Crystal Award for Excellence in Film (Deadline, 2018; Desta, 2018) about the lack of diverse film reviewers in the industry. Larson references Choueiti et al.'s (2018) work from the Annenberg Inclusion Initiative's report finding film reviewers in the North American film industry are unlikely to be as diverse as the casts of the films they are reviewing:

> Am I saying I hate white dudes? No, I'm not. What I am saying is if you make a movie that is a love letter to a woman of color, there is an insanely low chance that a woman of color will have a chance to see your movie and review your movie . . . It really sucks that reviews matter, but reviews matter. We are expanding to make films that reflect the people who buy movie tickets . . . I do not need a 40-year-old white dude to tell me what didn't work for him about *A Wrinkle in Time.* It wasn't made for him. (Larson, 2018, as cited in Desta, 2018, for Vanity Fair)

In this quote, Larson is pointing out film reviews have a huge impact on a film's reach, and that when the majority of film reviewers are from a traditionally important demographic for the film industry, this can put other films at a disadvantage. Larson draws attention to the barriers that films which speak to more diverse audiences face at every stage in the development and distribution process. These comments, made almost

a year before the release of *Captain Marvel*, echo throughout this dataset, and Twitter users' reactions to these words set the tone for a segment of the themes present in the data and form the basis for the ongoing review controversy. Some users twist her comments about a lack of access and opportunity for people of colour in the film industry into statements like "Brie Larson hates men and doesn't think they should be allowed to see *Captain Marvel*"—something she explicitly stated was not what she was saying.

The second prominent storyline in the lead-up to the film's release stemmed from responses to the first trailer for the film, in September of 2018, in which some viewers criticized facial expressions throughout the 2-min trailer. Specifically, the lack of a smile, is a seemingly timeless misogynistic comment (Daily Dot, 2018). Some of this discourse was linked to social media accounts associated with the ComicsGate controversy, which was prominent in summer 2018.

> This [ComicsGate/GamerGate] remained the context for the launch of *Captain Marvel*, with the film receiving hostile attention as soon as the first trailer was released. The pettiness of the misogyny was contained in a tweet carrying an image of Captain Marvel looking serious that asked: "Would it kill this bitch to smile?" (Curtis, 2020, p. 929–930)

As Curtis highlights, this storyline follows *Captain Marvel* until its release. Both storylines competed with the Marvel marketing machinery focused on the release of *Captain Marvel* on International Women's Day 2019. With this context in mind, the next section will detail the cultural frames and themes found within the *Captain Marvel* Twitter dataset.

4.2. Cultural Frames in *Captain Marvel* Tweets

Frame analysis has a long tradition in communication and media studies research (Benford & Snow, 2000). Over the last decade, scholars have examined cultural frames on both smaller (Calasanti & Gerrits, 2021; Humphreys et al., 2014; Lomotey, 2020) and larger (Giglietto & Selva, 2014) scale social media datasets. In chapter three, I discussed the cultural frames coding protocol for this project, including a description of each frame coded. Tweets could be coded for multiple cultural frames, though, due to the length of a standard tweet, most tweets only included one or two frames. In Tables 3 and 4, I have included totals of how many tweets fell into each frame category. I expected to see correlations between some of the cultural frames and either

positive or negative sentiment, so I have included this analysis where relevant. As I detailed in chapter three, where my manual and computer-assisted sentiment analysis are in agreement, I have included just the VADER sentiment analysis. Additionally, where there is disagreement between these two methodologies, I have included both. In Figure 3, I illustrate how the various cultural frames fall into major themes. These two themes take on broadly positive and negative categories, which I go into in more detail in the coming sections.

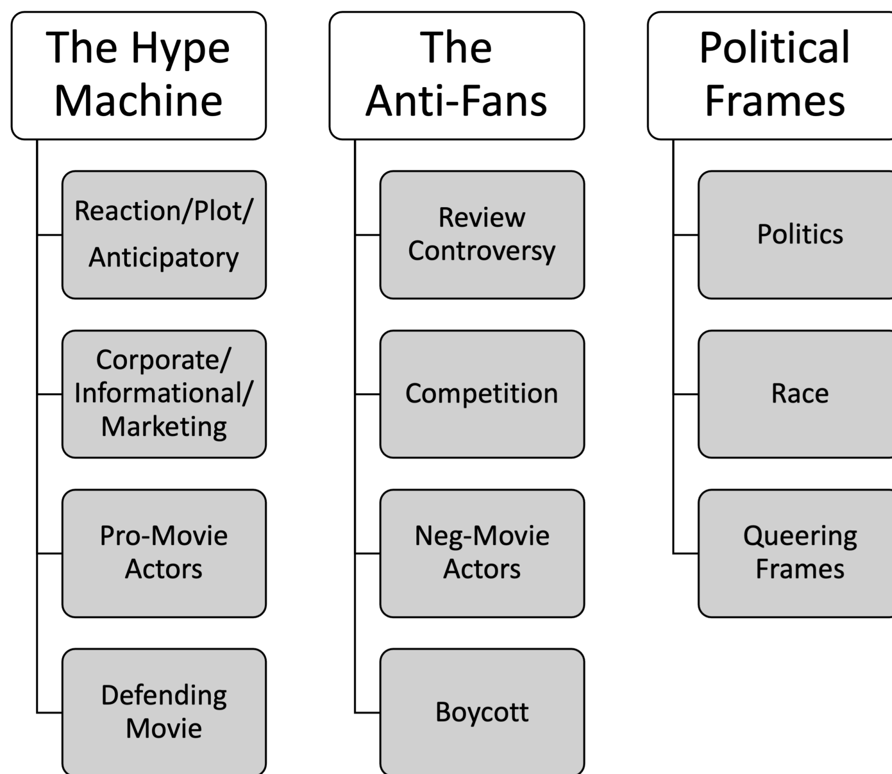


Figure 3. Cultural Frames in Captain Marvel Tweets

4.2.1. The Hype Machine

The first group of cultural frames in the dataset are part of the “hype” ahead of a new Marvel movie release. Devon Powers (2012) argues “hype . . . is closely related to a number of other well-studied communication phenomena . . . and is sometimes used interchangeably with others that suggest coordinated and/or embellished promotion, such as buzz or spin” (p. 859). She further argues the prevalence of hype

> explains a common and powerful dynamic of cultural circulation, one that reveals the increasingly digitized, promotional culture in which we currently reside. Exhibiting generic, cyclical, and rhetorical features, hype highlights the centrality of promotion, as well as its discontents—the disbelief, cynicism, and backlash that are inherent features of a thoroughly commodified communication environment. (Powers, 2012, p. 859)

Powers (2012) explains hype is a “genre of promotional communication” (p. 860) that relies on context because its “power emanates from its existence as an atmospheric condition” (p. 860). I use hype in this section because it communicates more than news coverage and messaging from companies themselves. In this case, hype also encompasses this atmospheric element, where the messages are taken up by others with no financial or cultural stake in the outcome. In this grouping of tweet frames, it is not just tweets by Marvel Studios, or other marketing communications, but regular users of social media who take part in the “hype,” whether they would describe themselves as Marvel “fans” or not.

The majority of tweets in the dataset are categorized as hype (Table 3) from four cultural frames: Reaction/Plot/Anticipatory, Corporate/Informational/Marketing, Pro-Movie Actors, and Defending Movie frames. These tweets are part of Marvel Studios’ marketing hype. Companies often try to generate social media buzz to promote their products, and many marketing strategies involve creating hype so fans and audiences will advertise for them. Marvel’s famous secrecy regarding spoilers plays into this—because information is in short supply—in an attempt to amplify a sense of excitement and demand (Moulton, 2021). Although many of the positive frames in hype are part of the marketing machinery of Marvel Studios, some tweets merely note evidence of their consumption of the film.

Table 3. Tweet Frames in the Hype Theme

Tweet Theme	Tweet Frames	Number of Tweets	Percentage of Theme
The Hype Machine	Reaction/Plot/Anticipatory	8169	87.1%
	Corporate/Informational/Marketing	516	5.5%
	Pro-Movie Actors	625	6.7%
	Defending Movie	64	0.7%
Total		9374	100%

Marvel has a dedicated fan base and wide appeal, as evidenced by the 23 movies released over a 10-year span. Marvel movies have made the studio over $22.588 billion USD worldwide (Bean, 2020). The audience is an integral part of this hype machine, and Marvel treats them as such. Events like San Diego Comic Con provide opportunities for Marvel and other large studios to present dedicated fans with information about their upcoming plans (Scott, 2019). Marvel and other studios have also increasingly positioned movie release opening nights as must-see "events" over the past 20 years (Moulton, 2021). In the case of *Captain Marvel*, there were another set of dedicated fans, the Carol Corps (who I wrote about in chapter four, and who were written in to the KSD comic books, discussed earlier in this chapter), who are specifically fans of "The Minor League Superhero Who Changed the Face of Fandom" (Edidin, 2014). The fans, as well as corporate tweets, are key elements of this collection of frames.

Reaction/Plot/Anticipatory

The Reaction/Plot/Anticipatory frame was by far the most prominent in the dataset, with 8169 tweets, coded for anticipatory hype, reactions, and plot references, making up 87.1% of the hype theme.

> I'm going to see the #CaptainMarvel movie in 2 hours [tweet]
>
> Can't wait until Saturday after work!! #higherfurtherfaster [tweet]
>
> Just saw #CaptainMarvel - Higher, Further, Faster ❤️❤️❤️❤️ [tweet]
>
> "I don't have to prove anything to you." #CaptainMarvel #Legendary [tweet]

And of course, a lot of love for the cat character,

I love Goose I love Goose I love Goose I love Goose I love Goose I love Goose #CaptainMarvel [tweet]

Given this dataset was collected as the movie was being first released, this makes sense. Predictably, the majority of the tweets are hype, with manually coded tweet sentiments and VADER coded tweet sentiments (Figure 4) both reflecting largely positive and, to a lesser extent, neutral tweets. However, the manual coding does show fewer positive and negative tweets, with more from each category coded as neutral.

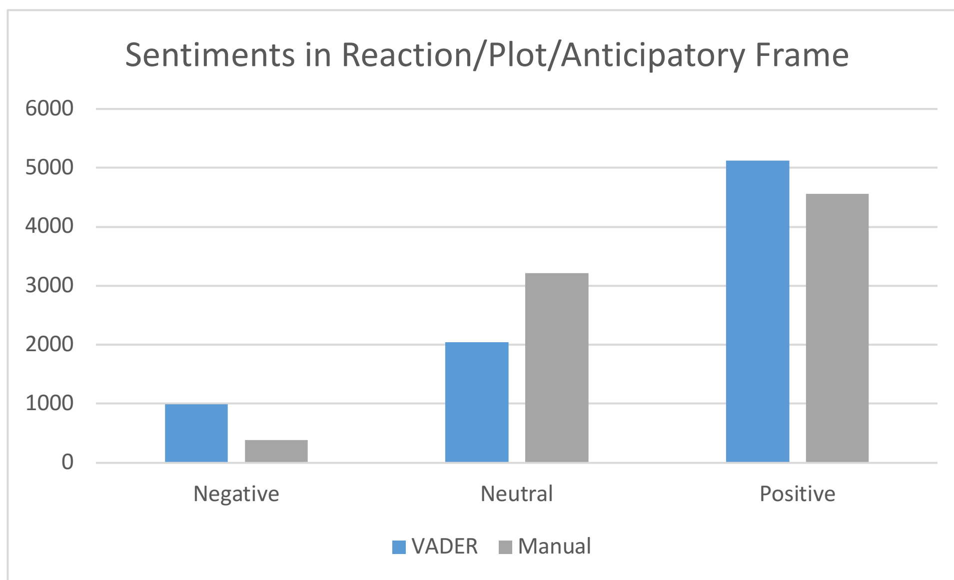


Figure 4. Sentiments in the Reaction/Plot/Anticipatory Frame

The prevalence of this frame in the dataset makes sense, in that Twitter and other social media platforms are used as marketing tools by corporations and as outlets for fans. Corporations like Marvel and Disney introduce a product, in this case a film, and try to create hype through red carpet events, tie-in events, sweepstakes, and interviews with the stars. Participating in a big event or topic like the release of a Marvel film is an opportunity for fans to share in an experience with a wider community. People (audiences) are excited, and they share their excitement. This is the popular culture machine, culture industry, and media landscape.

Corporate/Informational/Marketing

The Corporate/Informational/Marketing frame is another part of the hype theme and includes tweets that are largely informational, primarily from corporate accounts.

This includes movie theaters tweeting they have tickets available for showings, official tie-in merchandise, give-aways,

> Are you a #Marvel fan ❓ #CaptainMarvel is all set to steal your hearts 1 more question to avail your free tickets to this marvellous movie Do not miss!! #CaptainMarvelAtSRS #SRSCinemas #StayTuned [tweet]

actors appearing on talk shows,

> COMING UP at 8:30: We're bringing on the girl power as @LashanaLynch chats with us about playing fighter pilot Maria Rambeau in #CaptainMarvel! [tweet]

and reports from red carpet premieres.

> Brie Larson Wearing Custom #Rodarte #CaptainMarvel Premiere Brie was beautiful at the Los Angeles premiere of Captain Marvel! she wore a CUSTOM RODARTE GOWN Earrings @sydneyevan styled by Samantha McMillen MUA by @NinaPark Hair by @ brycescarlett [tweet]

Official Marvel accounts also tweet about the release of the film or the associated events. I categorized 5.5% of the tweets in the hype theme as part of this frame. Originally, I included these tweets in the Reaction/Plot/Anticipatory frame, but throughout the coding process it became clear this category was substantially different enough to be its own frame within the dataset.

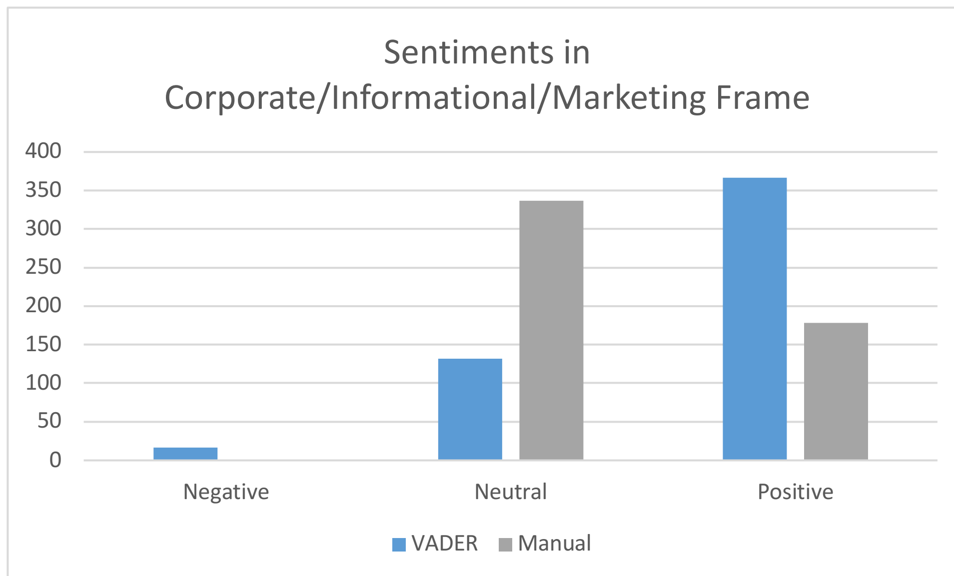


Figure 5. Sentiments in the Corporate/Informational/Marketing Frame

The manually coded tweet sentiments from the Corporate/Informational/Marketing frame (Figure 5) include a higher number of neutral tweets than the VADER coded tweets and fewer positive and negative tweets. However, both sets of sentiment analysis show a high proportion of neutral and positive coded tweets overall. Referring back to Powers's (2012) discussions of hype, I can infer the presence of positive and neutral tweets here aligns with the centrality of promotion and commodified communication systems in social media platforms.

Pro-Movie Actors

The Pro-Movie Actors frame includes 6.7% of the hype theme and consists of tweets praising the main actors, Brie Larson, Samuel L. Jackson, Clark Gregg, Lashana Lynch, and others. Some of the tweets include praise for their acting, others for their looks on the various red carpets or talk show spots. Many of the tweets in this category are in response to other tweets referencing Brie Larson's supposed "wooden" acting, from her lack of a smile in the trailer, or comments she made about not all movies having to centre white men, which I discussed earlier in this chapter. Many of the tweets specifically praising Brie Larson are framed in opposition to criticism, including "I stand with Brie" tweets written by fans of the actress and the film.

> Straight, white, old male, aka me, have now watched #CaptainMarvel Verdict? I absolutely love @brielarson as Carol. Can't wait to see more of her. Take your daughters and sons to watch this. #HigherFurtherFaster [tweet]

Others are directly confrontational to other negative tweets about Brie Larson, either saying how they were surprised at how well she did, or more defensively praising her against the people who have been complaining about her.

> #CaptainMarvel was amazing! Screw the haters, Brie Larson did an awesome job. [tweet]

Others tweet praise directly at the actors in the film, tagging them in their posts, for example, "@brielarson I would die for you #CaptainMarvel" [tweet]. It is clear that many of the tweets in this frame are from users who feel the need to note their support of the actors, mainly Larson, given the pervasive storylines in which she had faced criticism leading up to the release of the film.

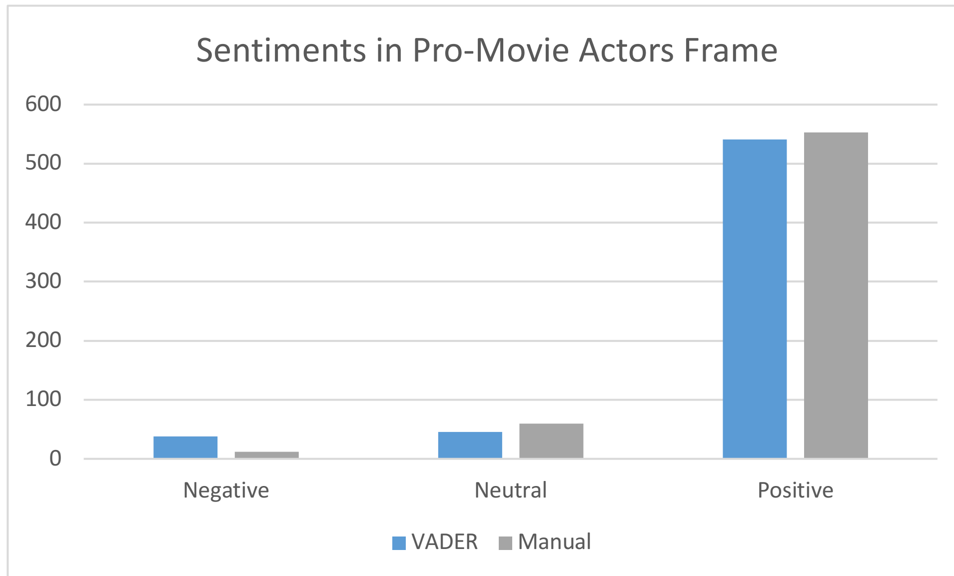


Figure 6. Sentiments in the Pro-Movie Actors Frame

In both of the methods of sentiment analysis, the tweets in this frame are overwhelmingly positive, which makes a lot of sense because the content is positioned as expressing support for the actors in the film. However, there are some negative and neutral tweets, as shown in Figure 6. I attribute their presence to the oppositional phrasing of many of the tweets. For example, although a tweet may express positivity toward the main actors, at the same time, it could be expressing similar amounts or more negativity toward "the haters," causing negative or neutral labels. In this way, the sentiments in the tweets may not be directed toward the same subject across all the tweets.

Interestingly, the tweets in this frame are not from official Marvel or Disney accounts or from other actors associated with the MCU. This contrasts with current social media controversies involving the official *Star Wars* account, as well as Ewan McGregor, praising fellow *Obi-Wan Kenobi* (2022) series actor Moses Ingram, a Black woman who experienced harassment from "fans" after appearing in the show. The official *Star Wars* Twitter account tweeted,

> We are proud to welcome Moses Ingram to the Star Wars family and excited for Reva's story to unfold. If anyone intends to make her feel in any way unwelcome, we have only one thing to say: we resist. . . . There are more than 20 million sentient species in the Star Wars galaxy, don't choose to be a racist. (@starwars, 2022a)

The official *Star Wars* social media pages also posted an impassioned video that actor and executive producer on the show, Ewan McGregor, filmed himself in his car defending Ingram and appealing to the fanbase's better natures while calling out acts of racism.

This is markedly different behavior from what John Boyega, Naomi Ackie, Kelly Marie Tran, and to some extent Oscar Isaac experienced in working on the sequel trilogy (Blodgett, 2020; Famurewa, 2020; Proctor, 2019a). Similar tweets have been posted by official social media accounts for the Amazon Prime series, *the Lord of the Rings: The Rings of Power* (2022), after some "fans" expressed confusion over why elves in a fantasy series could be anything other than white. The @LOTRonPrime Twitter account posted a statement of "solidarity" with their cast, writing,

> We stand in solidarity with our cast. #YouAreAllWelcomeHere (@LOTRonPrime, 2022)

with an expanded statement posted as attached images. These posts by Star Wars and Amazon show a marked difference from a few years ago, when corporations seemed to think avoiding or denying the existence of discussions of racism or sexism was the best course of action. This shift could tell us something about how corporate Twitter accounts are dealing with this sort of thing, especially when these types of discourses have become so much more visible online.

Defending Movie

Similar to the Pro-Movie Actors frame, the Defending Movie frame includes tweets by fans defending the *Captain Marvel* movie or attacking "haters." For example,

> the haters have gone too far, captain marvel and brie larson deserve better #CaptainMarvel [tweet]

> Captain Marvel was soooo good. Fsck all the haters. #captainmarvel Great job @brielarson ! [tweet]

> All the internet fanboy trolls hating #CaptainMarvel before they've seen it because it's female centric. Yeah cause I bet you hated Ripley fighting the Alien, Sarah Connor fighting the Terminator, and PS1 Lara Croft. Pull your pants up from around your ankles, it's embarrassing [tweet]

The tweets in this frame have similarities to tweets in other frames, including the Pro-Movie Actors frame and the Reaction/Plot/Anticipatory frame.

Other tweets in this Defending Movies frame attempt to point out the inconsistencies and absurdities in right-wing discourses being used against a comic book movie.

> Fellow conservatives, stop trying to turn #captainmarvel into a rallying point. Yes the star is a lib and has said some dumb things but so is Chris Evans and he's been in 3 of the most conservative movies you'll ever find. Let's just enjoy. Not everything is political. [tweet]
>
> I'm glad twitter is taking a stand by skipping #captainmarvel for #AlitaBattleAngel, a movie about REAL conservative values like... *checks script* ...a disabled woman and free healthcare advocate challenge their oppression by the wealthy land-owning class ¯_(ツ)_/¯ [tweet]

In the first tweet, the user appeals to conservative-minded individuals by locating themselves within the same worldview while trying to diffuse some of the more extreme rhetoric in the *Captain Marvel* discourse by highlighting parallels to statements from other lead actors in Marvel properties, in this case Captain America's Chris Evans. Whereas the second tweet highlights the contradictions in conservatives advocating support of a different film for political reasons, when that film also contains themes that one would expect conservatives to take issue with.

Despite the similarities between this frame and the others in this theme, it was interesting to examine this frame on its own, because of what it illustrates when it comes to the sentiment analysis. As discussed earlier in the chapter, some tweets were coded as negative in sentiment, but that negativity was not directed toward the film itself. Figure 7 illustrates the differences between sentiments in the VADER and manual coding, as well as the manual coding of sentiment toward the movie. The 64 tweets in this frame, 0.7% of the hype theme, are directly positioned in opposition to users who are tweeting criticisms of the film. Thus, these tweets are directly related to negative tweets, as discussed in the next section (the anti-fans), and express anger about the ways others on the social media site are discussing *Captain Marvel*. As shown in Figure 7, the tweets in this frame are largely coded as negative through the manual and computer-assisted processes. However, many of these tweets do not express negative sentiment toward the film, and so they were of particular interest to me methodologically when it came to the manual coding. These tweets express negative sentiment and include the movie hashtags (and therefore the mechanisms by which I told VADER the subject of the analysis); however, the negative sentiment is not directed toward the subject but rather

toward other tweets within the dataset. As you can see in Figure 7, none of the tweets in this frame express negative sentiment toward the film itself, despite being (correctly) labeled by VADER as expressing negative emotion. I go into further detail about this discrepancy in chapter six.

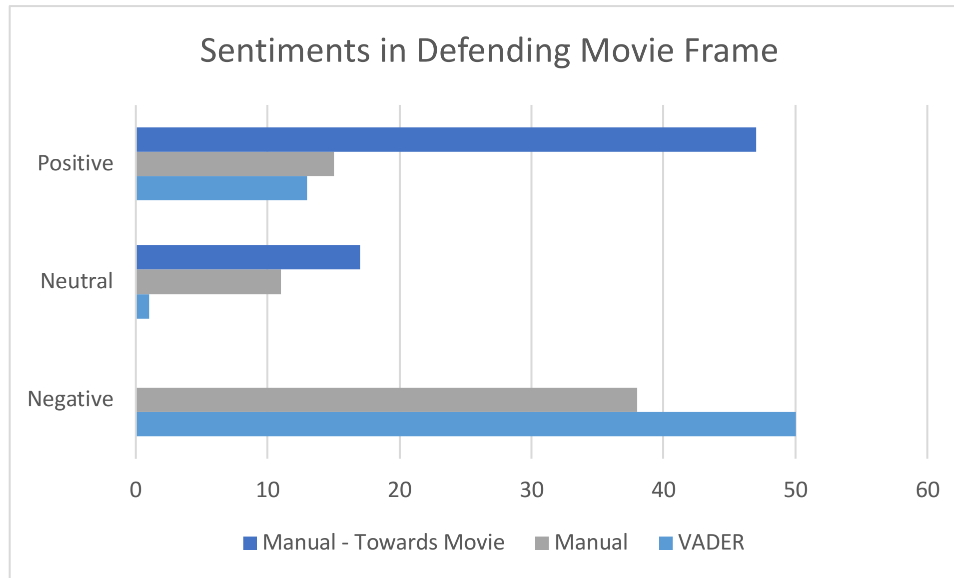


Figure 7. Sentiments in the Defending Movie Frame

4.2.2. The Anti-Fans

In chapter two, I examined the concepts of fans and anti-fans, terms from the field of fan studies that endeavour to conceptualize the intensity to which some audiences relate to or against media texts. I also discussed the limitations with the conceptualization of *anti-fans*, in that it does not feel like a label someone would identify with. Fans often claim the fan identity for themselves and would describe themselves as fans of a specific comic, film, movie, television show, or book. However, I am not sure many people are out there defining themselves as an anti-fan of *Captain Marvel*. However, at the same time, it feels disingenuous to talk about "fans" who express such negative emotions when it comes to media properties and texts. Can you truly be a fan of something when all you do is criticize it? Suzanne Scott (2019) offers a definition of anti-fans as "fans who direct their animosity not towards a particular media property, celebrity, or genre but rather towards other fans they deem undesirable based on their own fannish self-identification and valuation of fan culture" (p. 90). What I find helpful about this definition is the characterization of anti-fans as existing in opposition to other

fans, whose opinions are seen as wrong in some way. However, in the tweets in this theme, there does appear to be animosity directed at *Captain Marvel* itself, and toward Brie Larson, though perhaps this is positioned as elements of the wider Marvel fandom that these fans see as "undesirable."

Table 4. Tweet Frames in The Anti-Fans Theme

Tweet Theme	Tweet Frames	Number of Tweets	Percentage of Theme
Anti-fans	Review Controversy	610	52.1%
	Competition	313	26.7%
	Anti-Movie Actors	173	14.8%
	Boycott	75	6.4%
Total		1171	100%

This second group of frames (Table 4) exists in reaction and opposition to the hype theme, and it include tweets categorized as pertaining to the review controversy, competition, anti-movie actors, boycott, and defending haters frames. I conceptualize the reasons why these frames exist in the dataset as oppositional to the first grouping by revisiting Power's (2012) definition of hype as "a state of anticipation generated through the circulation of promotion, resulting in a crisis of value" (p. 863). It is this crisis of value that helps us understand the discourses of opposition within this dataset. As Powers (2012) describes,

> Calling attention to how hyped something is thus necessarily triggers the backlash against it: The communication is identified for what it is, just another vain attempt to sell us something unworthy of our belief, attention, or money. Recognizing communication as hype is thus a moment of distinction that separates the namer from the named, an argument about a fraud perpetrated, as well as, importantly, one about what other people do, think, or believe. (p. 868)

On the surface, this categorization of frames is more negative or reactionary than the previous grouping. A large portion of the tweets in this dataset are positioned in opposition to the movie for some reason or another; however, many of the tweets in these frames, while addressing the same topic (which may be negative), come to the topic from all sides, and this results in a mixed bag of sentiment in these categories. This includes tweets addressing a perceived purposeful effort to make the movie seem bad

and reacting to that in a confrontational manner. Arguably, fans of *Captain Marvel* were expecting to see such a movement, having been following the earlier storylines, especially the ones in opposition to Brie Larson, as discussed in this chapter's first section.

The Review Controversy

The tweets in this frame represent 52.1% of the anti-fan theme, which refers either directly or indirectly to the Rotten Tomatoes controversy over "real reviews of films," which has its origins in Larson's comments about the lack of diversity in film reviewing generally. Rotten Tomatoes, a movie review website where both fans and critics can submit ratings, was the focus of an anti-fan campaign to bring down *Captain Marvel*'s rating on the popular site ahead of the film's release. This caused such a stir that the site changed its policies so only critics could submit scores ahead of a film's release (Gardner, 2019; Steiner, 2019). As Curtis (2020) explains,

> It is also worth noting the concerted attempt to preemptively undermine the film's success by "vote-brigading" the review site Rotten Tomatoes with negative scores. Despite this, the quality of the film meant major box office success. This complex interplay of moves and countermoves—articulating dominant and subordinate creative, aesthetic, editorial, commercial, corporate, consumer, and fan values, coupled with their circulation and contest across different social sites, institutions, media forms, and platforms—informs the two films' engagement with hegemonic patriarchy. (p. 930)

The tweets in this frame read very much in the style of the previously discussed GamerGate discourses, a 2014 controversy in which proponents argued they were standing up for ethics in video game journalism. Many of the tweets in my *Captain Marvel* dataset profess to be about ethics in movie reviewing and position feminist readings of the film as "biased"—or even just female reviewers as biased toward the film because they are women. The echoes of GamerGate and ComicsGate reverberate through this dataset, and I revisit this in more detail in chapter five.

The review controversy was a popular theme in this dataset, and tweets in this frame were strongly related to other frames (e.g., defending haters, competition, boycott) within the anti-fan theme. This was the driving frame in the anti-fan theme, with tweets in this theme fitting into two major categories, either proponents or opponents of the review

controversy argument. On one side, there are tweets expressing that “honest” reviews of the movies are being silenced (silenced by whom is uncertain).

> Hearing that a lot of journalists and online reviewers are afraid of posting negative #CaptainMarvel reviews because of people that will call them misogynist. This is insanity. Their job is to review movies objectively and they are afraid to. [tweet]
>
> Curious to see what will happen when someone in the media releases a negative review of #CaptainMarvel that DOESN’'T shower @brielarson with unconditional praise in the title. [tweet]
>
> An open and honest film review of #CaptainMarvel from @Chris_Stuckmann (my favorite film critic) who is never political. He’s also the foremost authority on superhero movies & anime too. His analysis was very similar to the one by @GraceRandolph [tweet]

Whereas the other group expresses disdain for users posting from the previous category.

> The people who troll-rate #CaptainMarvel because @brielarson suggested there should be more female reviewers are the most fragile of snowflakes. They’re just so utterly pathetic. Again, I wonder how many of these butthurt losers support Trump [tweet]
>
> I’m willing to bet that every “disappointing” #CaptainMarvel review from this list was written by a white guy nitpicking about Brie Larson who also secretly wishes she was wearing the Ms. Marvel swimsuit costume in the movie. [tweet]
>
> Apparently #CaptainMarvel getting 84% on @RottenTomatoes means it’s “getting mixed reviews.” Avengers #InfinityWar got 83%, and the consensus was it was pretty great. I wonder why it’s being reported differently... 🤔 [tweet]
>
> Friends! I would love for you to send me your fave #CaptainMarvel reviews written by women! cc @FemaleCritics [tweet]

A subset of tweets reject “both sides” of the controversy, refuting the narrative that the reviews are made up but also that “gender politics” are irrelevant.

> Here’s a quick question: have you considered that most reviews for Captain Marvel are extremely positive not because of payments on the side or gender politics or whatever, but because...and stay with me here...it’s actually an overall good movie? #CaptainMarvel [tweet]

As discussed earlier in this chapter, Brie Larson's comments about the lack of diversity in film journalists and critics from the previous year seem to be a persistent theme throughout the tweets in the dataset, as well this theme in particular.

In Figure 8 below, there is some disagreement between the manually coded and VADER coded sentiments in this frame. The manual coding categorizes more of the tweets in this frame as neutral. This difference is largely due to recategorizations of tweets that VADER had coded as positive. Through manual coding, I determined many of these tweets contained enough of both positive and negative sentiments for the tweets to be neutral rather than positive. For example, below are a selection of tweets VADER classified as positive that I reclassified as neutral,

> The early reviews of #captainmarvel are in, turns out the movie should have smiled more. [tweet]
>
> I guess the boys really don't like this female-lead superhero film. @captainmarvel #stillgonnaseeitthough #CaptainMarvel [tweet]
>
> Be real cool if people would rate #CaptainMarvel after they've fucking seen it instead of both sides trying to turn it into some movement. [tweet]

Although many of the tweets in this frame use the words "great" or "honest," they also include words or hashtags like #sjw or "shill" to indicate their disdain, pulling a tweet more out of the positive category, whereas such words may not have a sentiment value the automated program can understand.

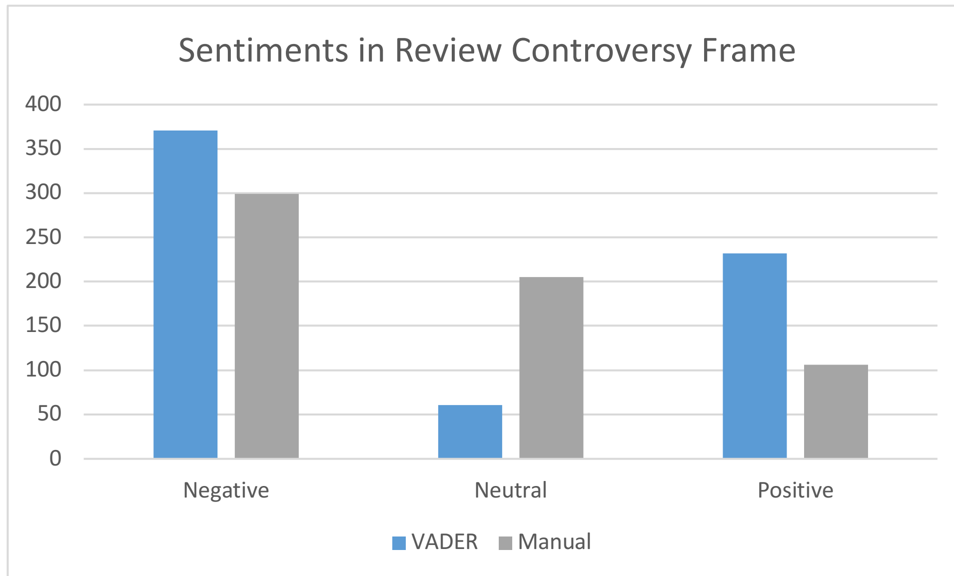


Figure 8. Sentiments in the Review Controversy Frame

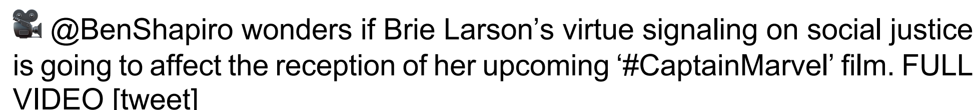
Anti-Movie Actors

The Anti-Movie Actors frame includes tweets criticizing or otherwise expressing negativity toward the main actors for either their performance in the film or appearances in promotional clips, interviews, talk show appearances, and so forth. Of the anti-fan theme, 14.8% of the tweets are categorized in the Anti-Movie Actors frame. Interestingly, although the correlating frame from the previous section (Pro-Movie Actors) includes tweets praising many of the main actors in the film, the majority of tweets in this frame solely focus their negativity on Captain Marvel herself, Brie Larson, citing her “wooden” performance and suggesting Marvel replace her with another actress for future movies.

> @Marvel Swop out #BrieLarson for #MargotRobbie or #JamiePressly as @captainmarvel before #AvengersEndGame...you need an actress people like [tweet]

Of course, it is hard to imagine the tweet above being taken seriously by anyone at Marvel, especially given production schedules and that the filming of *Avengers: Endgame* took place before the filming of *Captain Marvel*. Although it is understandable that not everyone would know this, one should probably understand it is not possible to cast, film, and edit a Marvel movie like *Avengers: Endgame* in the roughly six weeks left between the release of *Captain Marvel* and *Endgame’s* scheduled release date.

Other tweets in this frame more explicitly tie their opposition to Larson to what are seen as leftist or feminist views on her part. Larson won an Oscar for Best Actress in a leading role for her work in *Room* (2015), in which she plays a victim of gendered violence. Since then, she has been outspoken on issues of domestic violence and violence against women. Larson has also been involved in Time's Up, a nonprofit founded in 2018 by Hollywood celebrities in response to the #MeToo movement and the allegations against Harvey Weinstein. Time's Up supports victims of sexual harassment, especially in workplaces. Many of the tweets targeting Larson also use language about "Social Justice Warriors" (SJWs) and "woke" people, with both terms used as a pejorative (Brock, 2015a; Proctor, 2019b). These tweets seem to argue the only people that could like this movie are militant feminists or other "brainwashed" people.

> #captainmarvel #brietard #brietoo #getwokegobroke [tweet]
>
> #CAPTAINMARVEL IS YET ANOTHER #SJW DISGRACE!! Here's why these via @YouTube [tweet]
>
> Get woke go broke #CaptainMarvel [tweet]
>
> #CaptainMarvel will be at the very least a decent movie. Will it be amazing? Not if they push a feminist agenda. Will it be as good as Logan? Nope never, not in a million years. There is a reason. Logan is the best superhero movie because it has a deeper meaning than any others. [tweet]
>
> 
> 🎥 @BenShapiro wonders if Brie Larson's virtue signaling on social justice is going to affect the reception of her upcoming '#CaptainMarvel' film. FULL VIDEO [tweet]
>
> #FakeNews DailyBeast is shilling for #CaptainMarvel by blaming "Incels" and "men's right activists" if the movie bombs at the box office?! Seriously WTF... Men's Rights activists have nothing against Capt. Marvel. #BrieLarson #Sexism #AntiMale #MAGA #qanon #theStorm #captainFAIL [tweet]

These tweets equate leftist politics, feminism, and Larson's own beliefs and actions to an "agenda" of "social justice" that, for them, precludes the possibility of a worthwhile film. Chapter five further details the anti-feminist and anti-"wokeness" messaging in these types of tweets.

These tweets are incredibly angry, at the inclusion of a female superhero, at people with "liberal" politics, and at Larson, specifically. Many of the tweets in this frame are also categorized in the review controversy frame, for example,

> Been reading not so good reviews, guess what? It's exactly what some of us already knew. Brie Larson is a bag of bricks & even when "kicks ass" (sure) looks boring. [tweet]

> My family and friends have decided that we think white males are more valuable to society than #CaptainMarvel so far I know of 30 people who will not see it even if they give us tickets and the popcorn! #WalkAway [tweet]

These tweets once again clearly reference the pervasive storylines that followed the film and Larson, from months before its release in theatres. Although not all the tweets direct their negativity solely at Larson, the majority of tweets in this frame single her out.

The Anti-Movie Actors frame was another where it was interesting to see the difference between the manual coding and the computer coding. As shown in Figure 9, in this frame, manual coding identified many more negative tweets and fewer positive tweets than the VADER coding. As in the previous frame, there are many tweets in which it appears the computer coding is not able to interpret the sentiment of some of the tweets when they express negativity toward the lead actress. For example, here are a few tweets that VADER identified as positive that were manually coded as negative:

> Just getting tired of #CaptainMarvel and @Disney lecturing me on my whiteness and maleness. If Brie Larson wants to alienate the bulk of her fan base, which is white and male, I'll happily oblige. [tweet]

> Well, #CaptainMarvel is as #boring and #generic as everyone thought it would be. @brielarson has spent too much time spitting in our faces to do a good job of acting. The story is by-the-numbers and has none of the punch of an #IronMan or a #CaptainAmerica [tweet]

In the above two tweets, it looks like the words "happily" and "good job" are doing a lot of work to pull VADER's label toward positive, whereas the words in the rest of the tweet do not counteract it enough for the program. However, in the following tweet, something different is happening,

> You know something went terribly wrong when guys on porn sites REFUSE to fap on your sexy photos for political reasons. Hilarious comments 😂😅 #CaptainMarvel #BoycottCaptainMarvel [tweet]

This is one of the tweets in which the emojis make a huge difference. Although VADER categorized this tweet as positive, when I removed the emojis, VADER returned a negative label for the tweet, which aligns with the manual coding.

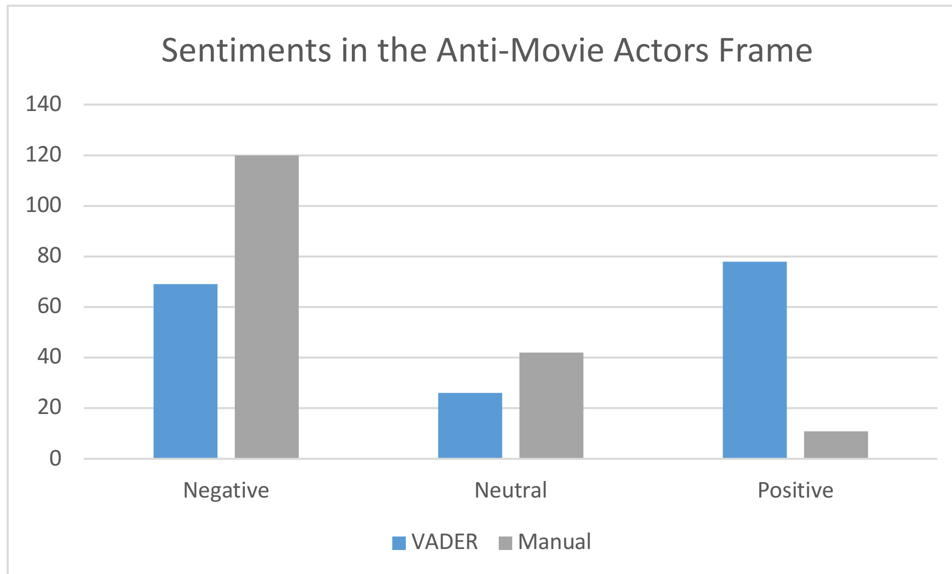


Figure 9. Sentiments in the Anti-Movie Actors Frame

Competition

The Competition frame features tweets that position Captain Marvel in opposition to, or in competition against, other women superheroes, including Black Widow and Wonder Woman, in a "who would win in a fight" type of way. It also includes tweets that position Larson in opposition to other actors,

> #Brielarson is a downgraded #ScarlettJohansson [tweet]
>
> Yeah but can she compete with Halle Berry as Catwoman? #captainMarvel [tweet]

This frame also includes tweets that compare the film to other movies, either ones that had been released previously or ones that were in theatres at the same time. The tweets comparing *Captain Marvel* to *Alita: Battle Angel*, released in February 2019, were of particular interest in that they included calls to boycott *Captain Marvel* in favour of "supporting another female superhero instead," a frame discussed further in the next section.

> Judging on the reviews, #CaptainMarvel may not be on the same caliber as Wonder Woman, but I'm not going into the movie just to find reasons to hate it, like some detractors do to deter others' enjoyment. [tweet]

There were still further tweets comparing Captain Marvel to DC's Shazam, a character who was briefly called "Captain Marvel" in the 1960s. Ironically, a Shazam film was also released in spring 2019. In total this frame contained 26.7% of the tweets in the anti-fan theme.

The Competition frame tweets are largely positioned along with negative reactions to the movie or negative tweets about Larson. Many of these tweets profess a level of "it's not women superheroes they don't like or support, but this one in particular is bad." And in fact, they "liked *Wonder Woman*" or would have liked "a Black Widow movie because that character has put in her dues over the years in the MCU."

> Well i guess if there's a silver lining about #CaptainMarvel it's that when it comes time to do the black widow movie they will take all the SJW garbage out of it. Because if we the fans smell a hint of it we're not showing up, period. Still can't believe she got sidelined for this. [tweet]

This tweet and others like it are written as if the user has a direct line to the producers at Marvel studios. Thinking back to the negotiation of meaning-making with discourse at the centre of producers and audiences (Hall, 1980; van Zoonen, 1994), connected through media texts and social media, this tweet is positioned as responding directly to the people in charge. This Marvel fan is giving notes, highlighting "we the fans" do not want any of "SJW garbage" like women's stories being highlighted in this expansive storytelling universe. The "we the fans" is particularly striking given that, in this dataset, negative tweets, anti-fan tweets, and, as examined in chapter five, misogynistic tweets, are all in the minority when it comes to "fan" voices. This user takes for granted Marvel "will take all the SJW garbage" out of it, not that Marvel *should*, or Marvel *might*, but that Marvell *will*.

In contrast, other tweets in the Competition frame compare the film or the character to others and declare *Captain Marvel* the victor, for a variety of reasons.

> Just saw the pre-screening of #CaptainMarvel and number one reason why she's much better than #WonderWoman: she was not sexualized ONCE. Proof you can have an amazing, super hero movie without turning a female character into a sex object. #Marvel [tweet]

The above tweet judges the two movies based on perceptions of whether or not the main characters were sexualized, and the user finds *Captain Marvel* to be "much better" because of a lack of sexualization of the character. Perhaps the author of this tweet

thinks *Captain Marvel* is more feminist than *Wonder Woman*, perhaps they think it makes more sense to go into battle in pants rather than a strapless minidress, or maybe they do not like romance plotlines in films. Chapters five and six further explore some of these differences and perspectives.

As in other frames within this theme, there are tweets that profess that others are going overboard with their "complaining" or "overreacting," and they are fairly confrontational in doing so.

> What if instead of an #AlitaChallenge everybody just shut the fuck up and watched #Alita and #CaptainMarvel and #Shazam and judged them all on their own merits instead of all this crowing about made up bullshit Brie Larson didn't even say you bunch of knuckleheads? [tweet]

This tweet takes issue with the ways others have run with the storylines that preceded the release of the film, the ways Larson's words were warped by a reactive group of Marvel "fans" to dismiss the film. Overall, this frame follows a fairly standard format to other film discourses. One of the main ways people talk about films is whether they are better or worse than others they have seen, or what films they remind people of in terms of plot, or tone, or cinematography. What is notable though is the narrow range of films and characters *Captain Marvel* is compared to in this frame. As if there can only be one good female superhero film, and the rest might as well not exist or be watched.

Although VADER categorized the majority of tweets in this frame as positive, the manual coding was much more evenly distributed between positive, neutral, and negative (see Figure 10). From examining the wording of the tweets in this frame, the prevalence of tweets about who would "win," who is "way better," and so on sways VADER more toward positive when the tweets themselves may be more negative or neutral on the whole.

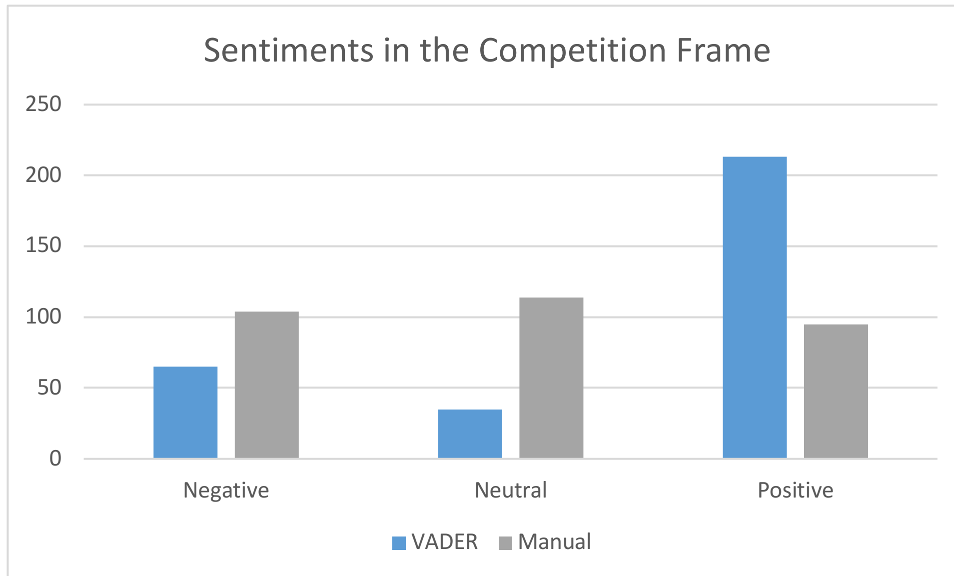


Figure 10. Sentiments in the Competition Frame

Boycott

Tweets in the Boycott frame state they are "not seeing the movie," use the word boycott, or say they are taking "the Alita Challenge" and therefore seeing *Alita: Battle Angel* instead. There are 75 tweets in this frame, or 6.4% of the anti-fan theme, with a great deal of crossover with the previously discussed Competition frame, and to a lesser extent the Review Controversy frame. These tweets, like many of the tweets in the Review Controversy frame, are in part a response to comments Brie Larson made about the lack of diversity in film critics and reviewers. Larson had commented on how many of the press members who get to review big ticket movies were men, and that she would prefer that her press days be more inclusive of more marginalized reporters and reviewers.

> I love getting abuse from the femenist movement haha! people complaining about the poll about #CaptainMarvel and #AlitaBattleAngel lets face it! alita was awesome!! CM will be garbage! just check out the reviews from "WOMEN CRITICS"! haha beaten by your own drum [tweet]

Many of these tweets, like the one above, take issue with comments from other fans about bad reviews of the film coming from male audiences. Therefore, they appeal to any less-than-stellar reviews of the film written by women (or said to be written by women) as authority to lend to their cause.

As discussed further in chapter five, the backlash to these comments were gendered and resulted in a "movement" to "boycott" *Captain Marvel*, suggesting people see *Alita: Battle Angel* that same weekend of the *Captain Marvel* release.

> If you want to celebrate #InternationalWomensDay in the cinema, go see a movie with a strong, female lead, true character development and innovative, interesting story. And I mean #AlitaBattleAngel. Not #CaptainMarvel 'I'm a hero!' and 'Not made for white dudes.' #AlitaChallenge [tweet]

Presumably this is to "support" a female-led movie that didn't have an outspokenly feminist lead actor. I do not necessarily want to get deep into the details of the *Alita: Battle Angel* film, but the film is about a cyborg character with no memories of her previous life. The cyborg is rescued by a scientist who names her Alita after his deceased teen daughter. The movie is live action, but lead actress Rosa Salazar's face and body are heavily altered with CGI to give her the look of the anime character the film is based on.

This "boycott movement" was amplified on YouTube and Twitter (Babcock et al., 2020) as proponents urged their followers not to see *Captain Marvel*. This was taken up as a cause to be advocated for, to prevent people from going to see the film to apply pressure to Marvel (or Hollywood in general) to not make these types of "SJW" films again.

> Okay, despute my complaints I was gonna give this movie a shot, but now I am going to do my best to make sure as few people see #CaptainMarvel as I can. [tweet]
>
> #CaptainMarvel is trending as a topic with lunatics on conservative #TalkRadio, encouraging ppl not to go see it because "liberal Hollywood" is politicizing the movies with gender issues. Crazy at a new level: As if celebrating women in superhero roles is in any way not awesome. [tweet]

Again, while this frame is markedly related to the Review Controversy and Competition frames, the tweets have a unique quality in their fervour and intensity toward a goal. These tweets go a step further than saying the negative reviews of the film are warranted, professing they won't be seeing the movie because the "liberal media" is burying the negative reviews for "political reasons."

At only 6.4% of the anti-fan theme, this frame seems small, but this is one of the instances in which the data collection methods would not necessarily have identified all

of the tweets on this topic. The selection of Captain Marvel hashtags and search terms would only have included uses of #AlitaChallenge if a tweet were also tagged with one of the included terms. The #AlitaChallenge tag was largely used by *Captain Marvel* anti-fans who worked to popularize the challenge (think Ice Bucket Challenge, Cinnamon Challenge) for people to go see Alita. In their work on *Captain Marvel* misinformation campaigns, Babcock et al. (2020) found the earliest use of the #AlitaChallenge hashtag was in early 2018, but that it had “minimal use” until,

> On March 4, 2019 a politically right-wing celebrity/conspiracy theorist used the hashtag to promote their version of the Alita Challenge (i.e., go spend money on Alita instead of Captain Marvel during the latter’s opening weekend) and the hashtag soared in popularity. (p. 84)

Babcock et al.’s (2020) research tying “boycott *Captain Marvel”* tweets to efforts by right-wing personalities outside of Twitter adds complexity to the sources of Twitter discourse when it comes to the tweets about *Captain Marvel*. Although this study is on Twitter, social media platforms are not insulated from each other, and what happens on one can influence what can happen on another.

As with the other frames in the anti-fan theme, there are tweets that address the boycott without advocating for it. There are also some that are fully in opposition to the boycott, in many cases calling it out as sexist.

> Anybody notice how it’s mostly dudes not going to see #CaptainMarvel? I can only wonder what that’s about 🤔 [tweet]

> It’s not a boycott if they don’t want you to go... #CaptainMarvel [tweet]

> Nothing says “I’M NOT SEXIST!” like pretending to lover #AlitaBattleAngel in order to justify wallowing in your creepy obsessive 🔥H🔥A🔥T🔥R🔥E🔥D of #CaptainMarvel. The #AlitaChallenge isn’t about supporting Alita, it’s just a shield for garbage humans. Fuck off, manbabies. [tweet]

These tweets range in tone from teasing to incredibly confrontational. The phrasing “can only wonder what that’s about” allows readers to fill in their own assumptions without naming sexism or misogyny, whereas the third tweet does not hold back the disdain.

Some of the tweets in the Boycott frame took a different approach, appealing to Marvel fans who see every film released whether or not they are fans of that particular

character or story. These are fans of Marvel itself, and they pose a challenge for proponents of the boycott. To appeal to these fans, tweets were phrased in a “you can still be a Marvel fan and not see this one” way.

> Fuck Captain Marvel... GIVE US THE CREDIT SCENS #CaptainMarvel [tweet]

> If you skip this film you’re not going to missing anything in the next Avengers film. It seems to be the writers struggled with the character as much as they have in the comic books over recent years to have fun and develop a meaningful villain #mcu #marvel #CaptainMarvel [tweet]

> This Captain Marvel trash needs to be avoided by true fans if the MCU is to survive. #BoycottCaptainMarvel #CaptainMarvel #Marvel [tweet]

> Y’all skipping captain sjw? #captainmarvel [tweet]

With the expansive MCU maintaining continuity throughout its many movies, and leaving “breadcrumbs” of information through cameos and post-credit scenes, many Marvel fans feel they have to see every film released to have all the information going in to bigger movie events like *Avengers: Endgame* that was set to wrap up many of the “phase three” storylines only a few weeks after the release of *Captain Marvel*. By focusing on the, minimal to these authors, acceptable reasons to go, liking to see the end credits scene and therefore having more information going into the next film, or reassuring fans they will not lose their fan credentials by “skipping captain sjw,” these tweets avoid criticism from some of their target audience.

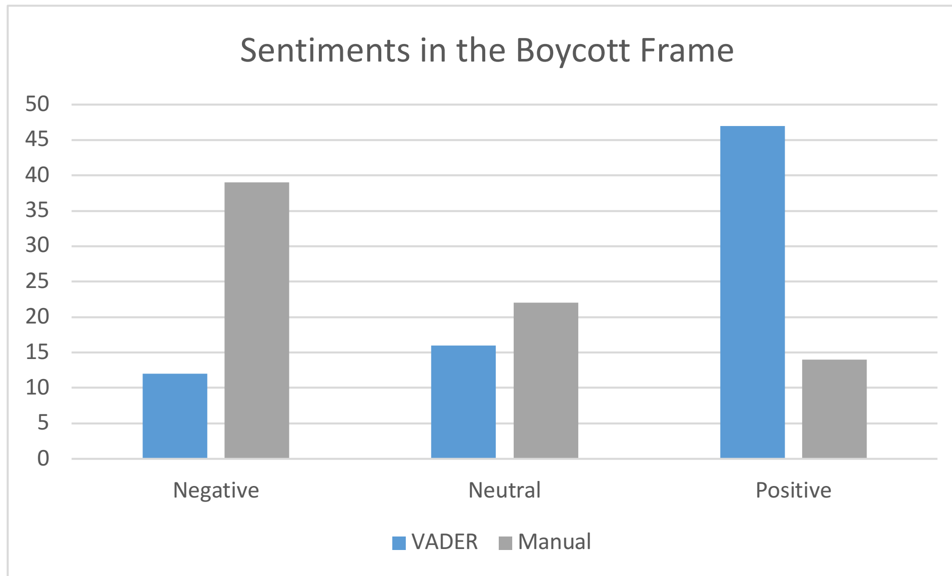


Figure 11. Sentiments in the Boycott Frame

The Boycott frame is another one in which VADER and manual coding processes returned different results, with the manual coding process designating more tweets as negative and fewer as positive (Figure 11). Here are some examples of tweets VADER categorized as positive that manual coding designated as negative:

> #AlitaBattleAngel was dragged by the shill media to protect and prop up #CaptainMarvel. ALITA has had to fight the negative publicity from people who should have been supporting the film starring a female heroine. Many of them were in Disney's pockets [tweet]

> As a white male, I'm doing @brielarson a favor, and not seeing #CaptainMarvel [tweet]

> I sorta wanted to see this movie. Now me and my lady parts feel like they've been made far too relevant for what would otherwise be an eyes-ears-brain job that we might sit this one out too. My other superfluous-to-movie-watching organs agree. 🙄 #captainmarvel #epicfail [tweet]

In my analysis of these frames in the anti-fan theme, examples of disagreements between the manual coding and the VADER coding include tweets that have a prevailing negativity due to implicit or explicit sexism. Further analysis on this can be found in the popular misogyny section in chapter five.

4.2.3. Political Frames

The last group of cultural frames in this dataset contains political themes. Overall, I argue people's interactions with popular culture and the way they talk about topics in films are political in nature, and this can be characterized as cultural or informal politics. However, the themes present in these tweet frames (see Table 5) are notable because they are explicitly tied to formal politics. The tweets in this theme reference formal politics (political figures), use right vs. left phrasing of the political spectrum to address certain portions of the audience or users, or highlight issues of race and sexual orientation in a politicized way in discourses about the film.[7]

Table 5. Tweet Frames in the Political Theme

Tweet Theme	Tweet Frames	Number of Tweets	Percentage of Theme
Political Frames	Politics	265	74.9%
	Race	49	13.8%
	Queering Frames	40	11.3%
Total		354	100%

Although this is the smallest of the three thematic groupings of cultural frames, there is a lot going on in the tweets that I have categorized here. There are tweets that call out "liberals" or "conservatives" for their takes on the film release, tweets that make comparisons between the film characters and US political figures, and tweets that complain about the presence of politics in films at all (though I for one cannot conceptualize a world in which art and stories are devoid of politics completely). Even others criticize big budget movies like these as never being political enough. There are tweets that read as sincere and others that read as suspiciously facetious. Some of the tweets seem to be "concern-trolling" or written in a way that actually serves to uphold the status quo. For Whitney Phillips (2016), trolling behaviour and the language of trolling is

[7] Both race and sexual orientation in social media film discourses could absolutely each be given the same treatment that I will be giving discourses of feminism and misogyny in chapter five, but because they are not the primary focus of this dissertation, I will be discussing them here in the cultural frames chapter.

thoroughly intertwined with mainstream cultural problems like racism and homophobia. These “bad-faith” tweets, which I relate to Suzanne Scott’s discussion of “spreadable misogyny” and “performative trolling,” are posted from Twitter accounts whose profiles and other posts make it clear the user is not progressive but is instead using progressive or leftist language to dissuade people from seeing the film.

Politics

The Politics frame makes up 74.9% of the political themes, contains tweets that cross into explicitly political topics, and includes tweets that contain the names of politicians including Donald Trump, Hilary Clinton, and others. I have also included tweets that use political keywords such as “Leftists,” “Libs,” “conservatives,” “shill,” and "alt-right trolls.” Outside of my search terms of the *Captain Marvel* hashtags and keywords, common hashtags in these tweets include #SJW (social justice warrior), #getwokegobroke, and #canceled.

A lot of these tweets were, for lack of a better term, extremely weird. Many of them seem loosely tied at best to the topic of the film, some of which could possibly be bots high-jacking popular hashtags. Social media “bots are essentially algorithms designed to accomplish simple informational tasks” (Al-Rawi et al., 2019, p. 66). In the case of Twitter, these are accounts that are run by programmed algorithms, rather than distinct human users of the social media platform. Al-Rawi et al. (2019) found Twitter bots are very common when it comes to political topics, “fake news” in particular. The prevalence of bots in political content on Twitter could potentially explain some of the content in the Politics frame in this dataset.

> Captain Marvel Is Doomed! - #BrieLarson - @RealJamesWoods @JackPosobiec @benshapiro - #CaptainMarvel - #wakeupuamerica - #AlitaChallenge #Alita #npc #SJW - @Disney - #Shazam #ShazamMovie [tweet]

Another possible explanation is called “hashtag piggybacking,” which Chow-White et al. (2021) argue “can build new meanings by association” (p. 16). In this case, users, including bots, include multiple hashtags in a tweet to connect two or more conversations to expand a tweet’s audience.

This project does not include an analysis of how many bots are present in the dataset because the research questions did not focus on the identity or characteristics of

the accounts. Chow-White et al. (2021) argue that bots, as “media-technological factors, instead, should be considered part of the discourse as they also constitute what users experience in their everyday interactions with social media platforms” (p. 8). Similarly, Brock’s (2018) critical technocultural discourse analysis emphasizes examining both content and infrastructure in the study of social media—in this case, bots contribute to content and are a result of infrastructure when it comes to Twitter. Furthermore, in Babcock et al.’s work on Twitter misinformation campaigns in 2020 on *Captain Marvel* and 2019 on *Black Panther*, they found only “low levels of bot-like accounts” (Babcock et al., 2020, p. 90). From this I can extrapolate that perhaps this frame is not overrun by bots, but instead the tweets are indeed tied to the movie.

The tweets in this dataset that explicitly connect formal politics to the film are particularly notable. The visible crossover between formal politics and popular online and film culture is fascinating. If a fictional comic book movie can prompt a Twitter user to post angrily about Hilary Clinton, it must be indicative of the ways cultural politics and formal politics are connected through things like popular culture.

> It is my contention that Captain Marvel will be the Hilary Clinton of movies #CaptainMarvel #Hilary2016 #BlackPanther #Obama2012 [tweet]
>
> #CAPTAINMARVEL IS TOXIC #NEWWORLDORDER PROGRAMMING TO THE MAX!! #culturalmarxism #agenda2030 #populationcontrol [tweet]
>
> Alexa, make a Venn Diagram of men who said women are too emotional to be President and men who lost their s*** over a movie with a female superhero. #CaptainMarvel [tweet]

Recently, scholars have found there is evidence that alt-right ideology has been moving through popular culture avenues, including GamerGate, ComicsGate, and Q-anon conspiracies (Burgess & Matamoros-Fernandez, 2016; Curtis, 2020; Salter, 2018; Scott, 2019). The presence of tweets claiming *Captain Marvel* is “#culturalmarxism” or #newworldorder programming” in this dataset further illustrates this evidence. I can also see some users are making these connections themselves and drawing attention to the connections between sexism in formal politics and sexism in popular culture discourses, as in the third tweet above.

A final group of tweets in the Politics frame express boredom or apathy for politics in media texts altogether.

> Hey Alt Right and Alt Left, stop using geekdom as your next battleground. #CaptainMarvel is a film not a political movement. See it or don't. The rest of us have shit to do. [tweet]

> Sigh...really wishing I could go see a fantasy film without my escape being colored by politics. #captainmarvel [tweet]

These two tweets argue popular culture should be a politics-free zone, that people should just see or not see movies, and, when they do, not draw any parallels to political beliefs from their messaging. There are also a few threads that take issue with the *Captain Marvel* movie not being political enough from a more leftist perspective. Some tweets point out some of Disney's shortcomings when it comes to progressive themes, given it is a huge corporation, whereas others point out the glorification of the military present in this film and others in the MCU.

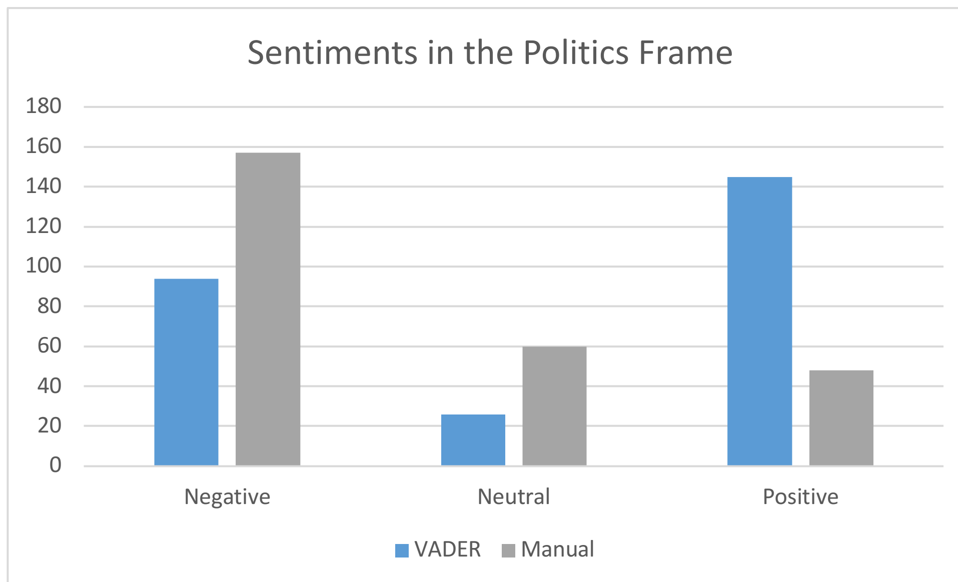


Figure 12. Sentiments in the Politics Frame

The Politics frame is another in which the VADER coded more tweets positively than the manual coding (Figure 12). For example, the following tweets VADER coded as positive, but the manual coding categorized as negative.

> Good lord lol I could care less about either movie #CaptainMarvel #AlitaBattleAngel #AlitaChallenge #Marvel #SJW #Disney [tweet]

> #CaptainMarvel what's the deal with #BrieLarson and all the other #sjw actors - why do they never smile? Surely the essence of power is being

> able to relax. Men are not bad ladies - they are your future - or at least they were for your Mums...[tweet]

> CAPTAIN MARVEL SHILL PROVES THEIR SEXIST AGENDA - #NPC #CaptainMarvel #WakeUpAmerica #SJW #BrieLarson #AlitaBattleAngel #Alita @JackPosobiec @RealJamesWoods @scrowder [tweet]

The manual coding reflects a shift of positive computer-coded tweets to negative and neutral. Some of the wordings in these tweets tie their meaning to larger discourses within the dataset, and potentially the program does not recognize the words “SJW,” “shill,” or “Wake up America” as holding negative weight without the larger political context.

Race

I originally coded the Race frame as a part of the political frame, but it became clear these tweets made up 13.8% of the political theme and needed their own frame category. Tweets in this category explicably mention race or racism in some way. The tweets in this section differ wildly. Whereas many stem from Larson’s comments about Hollywood’s pervasive privileging of white men and position Larson as “racist” against white men, other tweets focus on the seeming erasure of the comic books’ first female Captain Marvel, Monica Rambeau, a Black woman. Other tweets in this frame referenced how the movie dealt with issues of race through the storyline, but because these tweets were from the few days prior to the wide release of the film, these tweets were necessarily in the minority, given that not as many people had been able to see the movie by this point in time. Many of the tweets about “racism against white men” correlate with the Boycott or Review Controversy tweet frames, and none were nuanced discussions of race in the entertainment industry. Twitter’s character limit, emphasis on immediacy, and design that can obfuscate conversation connections, could be seen as a technical constraint, which in many ways prevents nuance (Brock, 2020).

> Hollywood is a bunch of left wing elites who try to tell us what and how to think! GIRL BYE! #racism #racist #leftists #LiberalismIsAMentalDisease #liberals #BrieLarson [tweet]

> Imagine telling everyone that black women weren’t the target demographic of a movie. #CaptainMarvel [tweet]

The overlapping frames in these tweets make the discourses complex to examine, and the rhetoric involved is indicative of the political atmosphere of the last decade or more.

The discursive strategy of equating the decentering of white men as the default in popular culture with the history, prevalence, and depth of racist structures in North America is a common one. It indicates a willful ignorance and false equivalency, as well as a deep fear of being treated equitably.

The other category of the Race frame tweets is a bit more difficult to parse. Some tweets in this frame bring up important points about Marvel's track record when it comes to issues of racial representation in their films. You will remember Marvel Studios released 17 movies starring white men as the lead characters before releasing *Black Panther* in 2018.

> As much as I love the #MCU and excited for #CaptainMarvel, these two posters highlight the lack of diversity and (more importantly) inclusion. Over 10 years, the posters show 3 women (no leads; no WOC) and 4 Black males (only 1 lead). Hoping for better in Phase IV. [tweet]

Tweets in this frame also specifically ask why Marvel "skipped" over Monica Rambeau who, as discussed in chapter one, was the first character to be named Captain Marvel. They argue this is yet another example of racism and discrimination in Hollywood, an argument also made by film critics outside of Twitter (Danee, 2019).

> Oh waitaminute...you mean to tell me that the Monica Rambeau character is in the movie??? That's where Marvel blew it. They could've been innovative and had any number of Black actresses play THAT Captain Marvel. Rambeau was #CaptainMarvel before Danvers, right? [tweet]

> White-washing at it's finest for #CaptainMarvel [tweet]

> If they didn't skip over Monica Rambeau for Carol Danvers I would be hype for #CaptainMarvel ... I may just wait for it to go on iTunes now. [tweet]

Other scholars of Captain Marvel (Langsdale, 2020; Taylor & Glitsos, 2021) have argued Marvel's tendencies to sideline their Black female characters is a critical issue within the MCU, and because of this "Captain Marvel thus still affirms a status quo in which Black women's histories, presents and futures are sidelined by white hegemony" (Taylor & Glitsos, 2021, p. 7). The presence of these tweets in the dataset reflects the importance of this problem to fans. These arguments relate to other themes in the dataset about *Captain Marvel* not "going far enough" or "being political enough," which I expand upon more in chapter five.

There were other tweets discussing the sidelining of Rambeau for Danvers's story in the film that read much differently. A portion of the tweets in this frame pin representational diversity problems on Brie Larson, saying she was wrong, and it was racist to take the job "instead of getting Marvel to cast a black woman." These tweets read as either a complete misunderstanding of how the entertainment industry works or an attempt to subvert valid concerns about race in the MCU to encourage people to join the boycott.

> So uh, Brie... where are the women of color at? Or is this film for white females only? #CaptainMarvel #comicsgate #feminazi #SupportIndieFilm [tweet]
>
> Brie Larson should've protested her own casting if she cares so much about bi-racial ppl of color #CaptainMarvel [tweet]
>
> I hope that for #CaptainMarvel 2, Brie Larson will sit it out and give it to a WOC. Seems fair. [tweet][8]

These tweets use the choice of Carol Danvers rather than Monica Rambeau as a way of attacking the movie's "faux feminism" or "fake wokeness," but in evaluating these tweets it's hard to tell what the angle or motivation was. The minimization of structural racism to the individual actions of one woman is potentially another tactic by the Anti-Movie Actor Twitter users and the "Brie Larson is racist for saying white men aren't the most important audience" tweets to attack her in a way that might win over another demographic to their cause. It could also be another example of ignorance to how the film industry works. Maybe they truly believe one blond actress turning down a job would show the Marvel Studios behemoth the error of their ways and cause them to reconceptualize their film to spotlight another character.

I spent a lot of time on these tweets during the coding process because they did not make sense to me. I cannot categorically write off these tweets because Marvel's proportion of films focusing on superheroes of colour is severely lacking, and that is worth interrogating. However, many of them did not read to me as genuinely progressive in nature. The way many of these tweets are written, or what YouTube videos or images

---

[8] Interestingly, "Captain Marvel 2," to be released in 2023, is titled *the Marvels* and will star Brie Larson as Carol Danvers/Captain Marvel, Teyonah Parris as Monica Rambeau, and Iman Vellani as Pakistani-American Kamala Khan, aka Ms. Marvel.

they have linked to, indicate they are not really concerned about these issues, but rather using these claims to shore up their hatred for Larson and the movie itself.

> #CaptainMarvel was a bore. A generic superhero movie. Expected more from @Marvel, would have preferred to see something truly groundbreaking like Ms Marvel, Kamala Khan, giving an unknown non white actress a shot at Hollywood, instead of another white actress who is boring. [tweet]

There were also considerations of phrasing, as in the tweet above. The focus on Larson as “a bore” or “boring” is repeated often enough in the Anti-Movie Actors frame, as well as in the popular misogyny frame discussed in chapter five, that it is indicative of something else at work here.

A few tweets also referenced the themes of the film when it came to how the movie dealt with big issues in a more positive light. They reference important issues addressed by the film’s plot and included support for Lashana Lynch’s character in the film.

> Captain Marvel delivera a good political narrative. It tackles racism and border control in a subtle way. #CaptainMarvel [tweet]

> .@LashanaLynch Black girls get to see a bad ass Black woman pilot! #CaptainMarvel [tweet]

> Please everyone go and support #CaptainMarvel movie and make these crybaby ass white boys/men mad i love it. She said she wants more diversity and she doesn’t care for the white man opinion. I like Brie larson we want more diversity in movies point blank, period white boys lol [tweet]

There were also differences between the VADER coding results and the manual coding results in the Race frame (Figure 13). In line with the previous sections, the manual coding identified negative and neutral tweets in many VADER had labeled as positive. Although it is a small frame in terms of number of tweets, it is possible VADER is not highly tuned toward issues of race and their laden “sentimental” values.

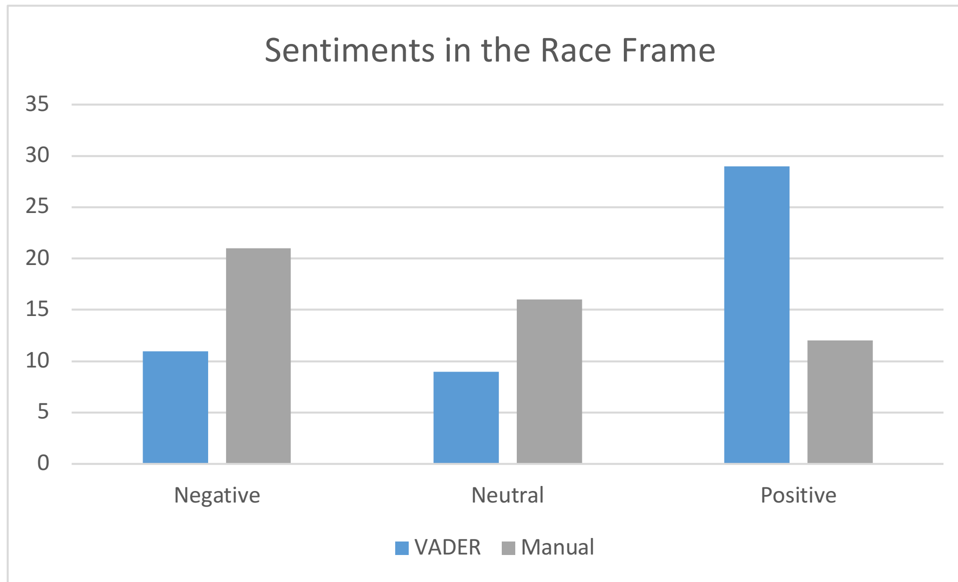


Figure 13. Sentiments in the Race Frame

Queering Frames

The Queer frame was developed inductively over the course of manual coding and identified 40 tweets, or 11.3% of the political theme. This frame includes tweets in which the authors position themselves as queer in the tweet, or tweets that queer their reading of the movie or the relationships in the movie in some way. In terms of proportionality, there are not many of these tweets in my dataset, and as such I cannot draw many conclusions from their presence. However, I felt it was important to include them in the analysis to some degree because these tweets mainly serve to provide a queering of the film text and reactions to the film in a way that fills an important gap in the MCU. As of 2022, there has only been a modicum of onscreen queer representation, in *Avengers: Endgame* (2019), *Eternals* (2021), the *Loki* (2021) Disney+ series, and *Thor: Love and Thunder* (2022). As all four of these were released after *Captain Marvel*, it is clear that, if MCU audiences want to read a queer relationship into *Captain Marvel*, it makes sense they would have to do it themselves instead of waiting for the studio to do so.

> You tellin' me #CaptainMarvel isn't gay???? Coz I know YOU LYIN AND SHIT [tweet]
>
> Carol & Maria are so gay for each other 😏 [tweet]

> Also I would like to thank the film makers for keeping Carol's massive gay energy alive in that movie #CaptainMarvel [tweet]
>
> Let Carol be gay you scoundrels!!! #CaptainMarvel [tweet]
>
> MY LESBIAN ICON I LOVE HER SO MUCH #CAPTAINMARVEL [tweet]

These tweets are enthusiastic, positive, and celebratory. They align with a long history of fans queering media texts (Doty, 1993). Other scholars have in particular examined fans' queering of the MCU in online spaces (Beyvers & Zitzelsberger, 2020; Fielding, 2020; Meyer, 2020).

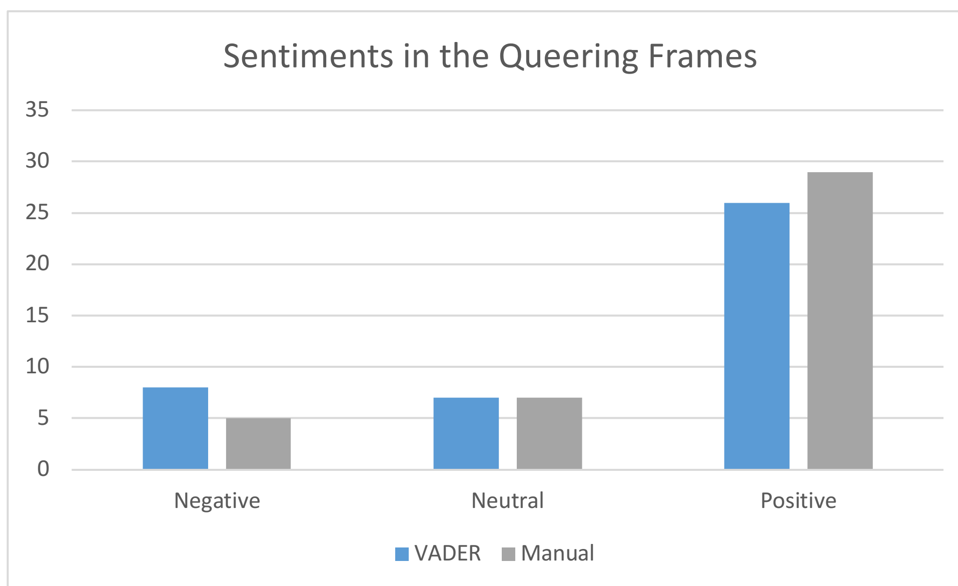


Figure 14. Sentiments in the Queering Frames

In this frame, the VADER coding and manual coding were very closely aligned (Figure 14). Of course, not all the tweets in this frame are positive. Some tweets directly take issue with the positive queer readings of the film and the characters.

> Calls for #CaptainAmerica to be gay are back, and now SJWs are saying #CaptainMarvel is gay too. I swear it's almost pathological at this point. Superhero = gay for them. [tweet]

This user equates queer interpretations of the film as progressive "social justice" politics and makes it clear they see this as the *wrong* reading of the film, with words like "pathological." Other similar tweets appeal to the authority of the comics themselves to back up their claims that Captain Marvel must be straight.

> I totally get why people want #CaptainMarvel to be gay, but it's just not the character. Her published history contains a collection male lovers and interests, including Rhodey and Parker. Retconning that away is as inappropriate as it would be to turn Iceman hetero. [tweet]

This tweet is notable for a few reasons. First, unlike other films in the MCU, there is no overt romance plotline in Captain Marvel—and therefore arguably no evidence toward any sexuality on her part. Second, the argument erases the possibility of bisexuality, as a history of dating a certain gender does not preclude a character from being interested in other genders in the future. Third, there is again a false equivalency between fans reading queerness into a character and the studio "retconning" (retroactive continuity, indicating erasing a past history of a character) a canonically queer character like Iceman, when there already exists a dearth of queer characters.

Other tweets in the Queer frame claim a positionality of queerness from which to express misogynistic views. For example,

> @TheMarySue as a lesbian I got to say, you've just lost all credibility stop with your nonsensical toxic man hating!!! Most of those negative reviews are from women who did not like #CaptainMarvel. Just Stop with your false accusations... [tweet]

This tweet is directly responding to the Mary Sue, a website focused on news about female-oriented "nerd" properties, including superhero films. In this case, the Mary Sue posted a story titled "Captain Marvel Is Fun and Most of the Negative Reviews Are Written by Men…Shocking" (Leishman, 2019c). Some of these tweets also subvert progressive language to try and twist people's reactions.

> If anyone has seen #CaptainMarvel and isn't a little upset that they misgendered and mishandled a major #Marvel character, then good for you. And no, I'm not talking about Brie Larson's character. She rocked it. [tweet]

For example, the tweet above is talking about the character of Mar-Vell, who was a man in the comics, and Carol Danvers's mentor. In the movie, they wrote the character of Mar-Vell as a woman. The act of reimaging a character as female in a media property lacking in female characters has been done before in film and television (Chow-White et al., 2015; Jowett, 2019) and does not have the same meaning as "misgendering" actual people. Although there were relatively few tweets in this frame, they were varied and illustrated important nuances within the discourses in the dataset.

4.3. Conclusion

Throughout this chapter, I ask critical questions of the relationship between media and culture. Through examining themes in movie discourse on social media as a site of cultural politics, researchers can learn about the complexities and relationships between these different elements. In this chapter, I documented the cultural frames identified in the dataset, and, through my frame and sentiment analyses, I have explored the cultural context of the release of *Captain Marvel* in March 2019. By looking at a dataset of this size in this way, I was able to identify conversations and threads of discourse without interviews or focus groups. Although this strategy of course did not allow for follow-up questions or interrogate motivations in terms of these frames and sentiments, this snapshot in time of these cultural conversations on Twitter provides better understanding about the way people, as social media users and media audiences, interact with cultural and societal ideas.

In describing the first group of frames as sharing a “hype” theme, I relied on Powers’s (2012) explanation of hype as “highlight[ing] the centrality of promotion, as well as its discontents – the disbelief, cynicism, and backlash that are inherent features of a thoroughly commodified communication environment” (p. 859). I have identified elements of hype throughout this chapter, from the centrality of promotion in the first group of frames to the discontents whose voices are more visible in the anti-fans and political themes. These high expectations, high emotions, and strong reactions illustrate what Lazar (2007) describes as a “struggle over interests” (p. 148). Although coded into these different frames, the tweets throughout the dataset illustrate that the discursive frames are interrelated, and, as shown in chapter five, all have gendered elements. Although the majority of tweets are not expressly political, all of the frames are connected to political discursive elements.

Throughout this analysis, there have been other elements at work when it comes to explaining what is going on in these frames, and that is questions of gender in the cultural frames. In this chapter, I have left out expanded discussions of these frames throughout the dataset, even as I tried to explain the differences between computer-assisted and manually coded sentiment analyses that definitely seem to hinge on questions of gender and misogyny. In chapter five, I examine the gendered frames of

misogyny and feminism that haunt every aspect of this dataset and attempt to do justice to the complexities present in the dataset.

Chapter 5.

Gendered Frames

In this chapter, I examine the gendered themes of popular feminism and popular misogyny within the dataset and draw conclusions about their presence in this dataset, as well as what they can tell us about social media and popular culture. My analysis of the gendered frames will also revisit some of the analysis from the cultural frames to more deeply explore some of the gendered elements driving the cultural frames. In doing so, I incorporate the cultural frames and sentiment analysis into the gendered frames discussion to bring all three forms of analysis together. The main problem this chapter address is that movies and social media are sites of gendered forms of cultural politics, and my intention is to answer the following questions within that context:

> RQ 3: How are popular misogyny and popular feminism present in the social media discourse about popular films?
>
> RQ 4: How do popular misogyny and popular feminism interact with the cultural themes and sentiments in the dataset?

This chapter addresses the spectre of misogyny that haunted the analysis of the cultural frames in the previous chapter. By examining the gendered discourses in the dataset, I will draw conclusions about the struggle for meaning, identity, and political ideas within cultural discourses.

Throughout this dissertation, I have discussed scholarship of feminism and misogyny in online and social media contexts, including in media texts like films. This tradition of feminist media studies (Harvey, 2020; van Zoonen, 1994) is fundamental to my analysis of the gendered frames in this chapter. The tweets in this dataset are examples of Twitter users “audiencing” in public (Livingstone, 2005). Although some of these users may consider themselves fans, and I may consider others anti-fans, all are examples of discourse being facilitated through social media platforms as an instance of gender and technology being constructed together (Wajcman, 2004). Central to my analysis in this chapter are Sarah Banet-Weiser’s concepts of popular feminism and popular misogyny, from which I devised the coding protocol for the gendered frames.

Examples of popular feminism include popular online activism, which has relied on making things visible, from #MeToo (Banet-Weiser, 2018; Mendes et al., 2018) to #MasculinitySoFragile (Banet-Weiser & Miltner, 2016). This includes progressive/feminist movements, hashtag activism, and trending topics bringing light to societal problems. Banet-Weiser (2018), in *Empowered* (2018), discusses the prevalence of online feminism,

> In other words, there are many different feminisms that are popular in the current moment. Indeed, media platforms such as Twitter and Facebook have enabled a visibility of feminisms that have long struggled for a broader space and place in culture, which makes it often difficult to distinguish between and among them. (p. 9)

This popular, sanitized version of feminism often goes viral, but Banet-Weiser argues it almost never breaks through the structural barriers in society. It also is often neoliberal, postfeminist, corporate, white, cis-, and lacking in critical depth. Prominent hashtag feminisms include #TimesUp, #MeToo, #WhyIStayed, among others (Banet-Weiser & Miltner, 2016; Boling, 2020; Linabary et al., 2020; Mendes et al., 2018).

Social media also includes a number of anti-feminist, sexist, misogynist, and backlash cultural frames or narratives. Alice Marwick (2013a, 2013b) has written about online sexism and the built-in sexism in the tech industry (the creators of the social media platforms), as have others (Hicks, 2017). A key example for the discussions in this chapter is the #GamerGate "movement." I discuss GamerGate in chapter two as a moment in the history of social media that illuminated problems with the social web. Described by proponents as about "ethics in videogame journalism," GamerGate was a sustained attack on women in the videogame industry, as well as fans of videogames, started by an angry ex-boyfriend of a high-profile videogame journalist. This example of largely unchecked misogyny in spaces related to comics has made it more acceptable to continue this type of reaction to visible women in online "nerd" spaces. In their article on the #MasculinitySoFragile hashtag, Banet-Weiser and Miltner (2016) argued,

> #GamerGate and other incidents of weaponized misogyny are not simply a response to entitlements that never came to fruition. They are also a response to the incursion of women and people of color into what were previously almost exclusively white, male spaces. (p. 172)

It is no coincidence that GamerGate and ComicsGate took place in 2014, following what Curtis and Cardo (2018) describe as significant advances in women's representation

within comics, as characters and as creators such as writers and artists, including the redesign and relaunch of the Captain Marvel character. These “incursions” of women into male-dominated nerd spaces were met with backlash in the form of popular and weaponized misogyny online. This backlash is present in the hype/anti-fan dichotomy of the cultural frames analysis in chapter four and in the popular feminist/popular misogyny relationship I analyze in this chapter.

Similarly, Sarah Sobieraj (2018) addresses the elements of visibility and publicness when it comes to examples of backlash in digital realms and argues there is patterned resistance to women’s visibility in digital publics, and that this is met with

> a steady drumbeat of sexism directed at many women who participate in public discourse. Female journalists, academics, political figures, activists, and bloggers, for example, often find themselves targeted for abuse. Myriad other women using social networking services, playing games, and participating in digital communities also find themselves on the receiving end of vitriolic, gender-based backlash. (p. 1,701)

She goes on to write that there are personal and political (democratic) costs to letting online sexism constrain the topics women can talk about online, and they can even push them off social media altogether. The threat of intimidation, discreditation, and public shaming has, Sobieraj (2018) argues, constrained women and their use of public space throughout history. Online threats, attacks, and violence follow this trajectory in the new public spaces of social media platforms, and, as Regehr (2020) argues, sometimes these online threats and violence move once more to offline violence.

This theme of action and reaction of popular feminism and popular misogyny is also visible in other online discourse about films that pre-date *Captain Marvel*. In popular culture discourses, especially in science fiction, fantasy, and superhero genres, intimidation and backlash have long been public reactions to advances in representation in media properties. There have been many examples where creators and producers have tried to update characters and franchises and been met with resistance from fans or audiences. An early example is the 2003 reboot of *Battlestar Galactica*, where the writers of the new show reimagined two existing characters, Starbuck and Boomer, as women. The original 1980s TV show, which lasted one season, had included hardly any female characters. This shift in the new series caused an uproar in some fan communities, especially concerning Starbuck, the brash hotshot pilot character (Adams,

2015; Chow-White et al., 2015; Jowett, 2019). In 2015, *Mad Max: Fury Road* also faced sexist social media reactions from “the manosphere,” arguing the Mad Max character had been sidelined for Furiosa’s storyline, and that the film was “feminist propaganda” (de Coning, 2016; Du Plooy, 2019). This is an interesting parallel to reactions to *Captain Marvel* in that *Mad Max* is an existing franchise that features the Max character in several films, and yet there were vitriolic reactions about Max being sidelined. Similarly, *Captain Marvel* joins the huge MCU, with many more films featuring and centering male characters. The following year, the 2016 all-female *Ghostbusters* film was the center of a racist and sexist social media storm, which pushed star Leslie Jones to leave social media (Bryan & Clark, 2019; Proctor, 2017; Scott, 2019). The *Star Wars* sequel trilogy similarly had racist and sexist social media pushback, to the extent that “fans” recut *The Last Jedi* (2017) to exclude all women with speaking parts in the film and posted it online (Selk, 2018). This social media reaction ended up driving Daisy Ridley off of Instagram and (in part) caused John Boyega and Oscar Isaac to sour toward the *Star Wars* franchise (Famurewa, 2020; Scott, 2019).

It is helpful here to come back to Powers’s (2012) explanation of cultural hype in that it includes “centrality of promotion”—in this case of the various movies—and the accompanying “disbelief, cynicism, and backlash.” Rosalind Gill (2016) too, writes about backlash, but a backlash that resists a sense of linear progression,

> for every uplifting account of feminist activism, there is another of misogyny; for every feminist “win,” an outpouring of hate, ranging from sexual harassment to death threats against those involved; for every instance of feminist solidarity, another of vicious trolling. (p. 613)

Similarly, Banet-Weiser (2018) emphasizes that backlash is not as simple as the directionality implies, “popular misogyny lashes out in all directions” (p. 36).

Another key concept is that of the perceived “injury” of feminism. As Banet-Weiser (2018) writes, “Expressions of popular misogyny often rely upon the idea that men have been *injured* by women . . . men have lost jobs and power because women have entered into previously male-dominated realms, regardless of how slowly” (p. 35). Backlash and injury are important scaffoldings for the rest of the chapter as a helpful model for thinking about popular feminism (promotion, injury) and popular misogyny (disbelief, cynicism, backlash) in the *Captain Marvel* dataset, and as well for the other ways these concepts echo throughout our online and film culture.

Another key relationship between cultural hype and popular feminism and misogyny is in the theme of visibility, which Banet-Weiser emphasizes in her work. The examples of other film and television properties that both expressed certain aspects of popular feminism and sparked misogynistic or racist reactions on social media were all extremely visible franchises. *Star Wars*, *Ghostbusters*, these are media properties with opinionated fans and a huge amount of name recognition.

> As popular feminism makes increasing demands for visibility, the political project of popular misogyny continues on more powerfully as a less visible, structuring force. To be clear: the visibility of popular feminism has been in large part about making what is hidden, routinized, and normalized about popular misogyny more public, displayed, and explicit. (Banet-Weiser, 2018, p. 37)

Similarly, Marvel is extremely visible, having released film after film in their expansive Cinematic Universe for more than a decade now. In terms of film discourses and releases, Marvel Studios' hype machine excels at making their movies visible, and, in the case of *Captain Marvel*, I argue this visibility is part of the reason the reaction of popular misogyny has been so strong in return. Throughout this chapter, I present my analysis and explanation of how gender, and the themes of popular feminism and popular misogyny, worked through the dataset, and why this film was such a lightning rod for these discourses.

5.1. Coding Gendered Frames

In this chapter, I address the gendered cultural frames of Popular Feminism and Popular Misogyny. In the process of manually coding for cultural frames I also evaluated each tweet for the Popular Feminism and Popular Misogyny frames. Although the cultural frames coding was inductive, the gendered frames were deductive. I specifically examined the dataset for tweets that fit within the definitions of popular feminism or popular misogyny, as outlined in Table 6. The table outlines key passages and parts of definitions from *Empowered* (2018) that I used to conceptualize the coding for gendered frames. Not every tweet was categorized in this set of frames (because, for example, "I'm excited to see this movie" doesn't contain any clear gendered discourse), but each tweet in the dataset was evaluated for this frame.

Table 6. Gendered Frames in Captain Marvel Tweets

Gendered Frame	Coding Details
Popular Feminism	Tweets encompassing "popular feminism”
	Active (p. 3) “networked across all media platforms, some connecting with synergy, others struggling for priority and visibility.” (p. 1) “a call to bring more women to the table, simply because they are women.” (p. 12) “corporate-friendly popular feminism emanates from an increasing visibility of a gendered disparity in dominant economic spheres – a lack of female CEOs, a lack of female Hollywood directors, a lack of women in technology and media fields, and an increased awareness of sexual harassment within corporate industries such as media and technology.” (p. 12) “the dominant culture of the popular feminism . . . is primarily white, middle-class, cis-gendered, and heteronormative.” (p. 13)
Popular Misogyny	Tweets encompassing “popular misogyny”
	“Reactive” (p. 3) “A hatred of women” (SBW, 2018, p. 2) “responds to, reacts against, and challenges popular feminism.” (SBW, 2018, p. xii) “The instrumentalization of women as objects, where women are a means to an end: a systematic devaluing and dehumanizing of women.” (p. 2) “networked, an interconnection of nodes in all forms of media and everyday practice.” (p. 2) “men are suffering because women in general, and feminism in particular.” (p. 5)
Response to Popular Misogyny	Tweets responding to “popular misogyny” but in a way that does not meet the criteria to be coded as popular feminism
Response to Popular Feminism	Tweets responding to “popular feminism” but in a way that does not meet the criteria to be coded as popular misogyny

Only 11.1% of the tweets in this dataset contain overtly gendered discourse, which is fewer than I expected when I began this research (see Figure 15). Although it does not make up the majority of the dataset, the gendered discourse is very visible and drives much of the action in the rest of the tweets. The strength of conviction in these tweets

guides the overall narrative. The gendered discourse was also very visible outside of Twitter, in popular media discussions about the release of the film. The gendered frames are a smaller portion of the dataset than, for example, the entertainment industry hype machine theme in the cultural frames section. However, they punch above their weight in terms of shaping the experiences of movie audiences and social media users, as well as in our perception of a film like this. The tweets in these frames are highly visible and shape the wider discourse and perceptions of these films and these conversations.

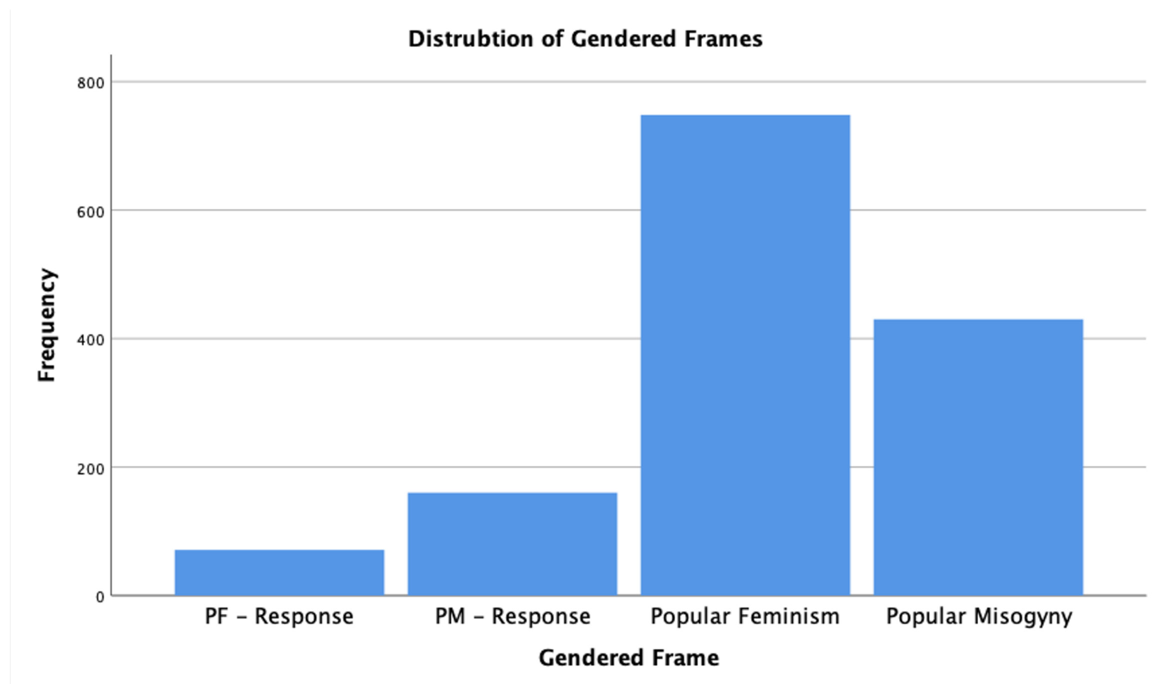


Figure 15. Distribution of Gendered Frames

In researching computational communication methods, I found one study that attempted to automate the detection of misogynistic tweets. Ahluwalia et al. (2018) explain that,

> Automatically labeling tweets as misogynous vs. non-misogynous is challenging because the language of tweets is full of syntactic and grammatical flaws, making extraction of text-based features difficult. Sometimes tweets consist of only one or a few words, and due to the lack of conversational context, it is difficult to assess whether such very short tweets should be perceived as misogynous. (p. 242)

Although their script was not available for me to use, from the various coding strategies used to evaluate the *Captain Marvel* dataset, it is clear it would be difficult to automate

this kind of coding. Manual coding relies on an understanding of the context of the film release and the media storylines leading up to it. This process also relies on one's ability to interpret what was being said in the tweets according to the popular feminism and popular misogyny concepts.

5.2. Popular Feminism

This movie was perfectly positioned to be a maelstrom of popular feminism. From the choice of superhero to highlight, the emphasis on this being Marvel's first woman-headlined film, and the marketing positioning—the release date, March 8, 2019, was even planned to coincide with International Women's Day. This film was marketed as a win for women and, as a result, was steeped in neoliberal and popular feminisms. Disney has used similar strategies before, in promoting *Star Wars: The Last Jedi* and *Beauty and the Beast* in 2017 (Koushik & Reed, 2018). Arguably, this popular feminist strategy was Marvel's only option in terms of marketing the film, given how long it took them to make a movie about a female superhero. Marvel had to make it an event, to position it alongside everything else they had done, rather than positioning it as just another Marvel movie. Overall, there are 748 tweets, 7% of the dataset, in the Popular Feminism frame. In terms of sentiment analysis, 72% of this frame is positive, 20% is neutral, and 8% is negative. The majority of the tweets in this frame are found within the hype theme, which in turn contained few tweets from any of the other gendered frames (see Figure 16).

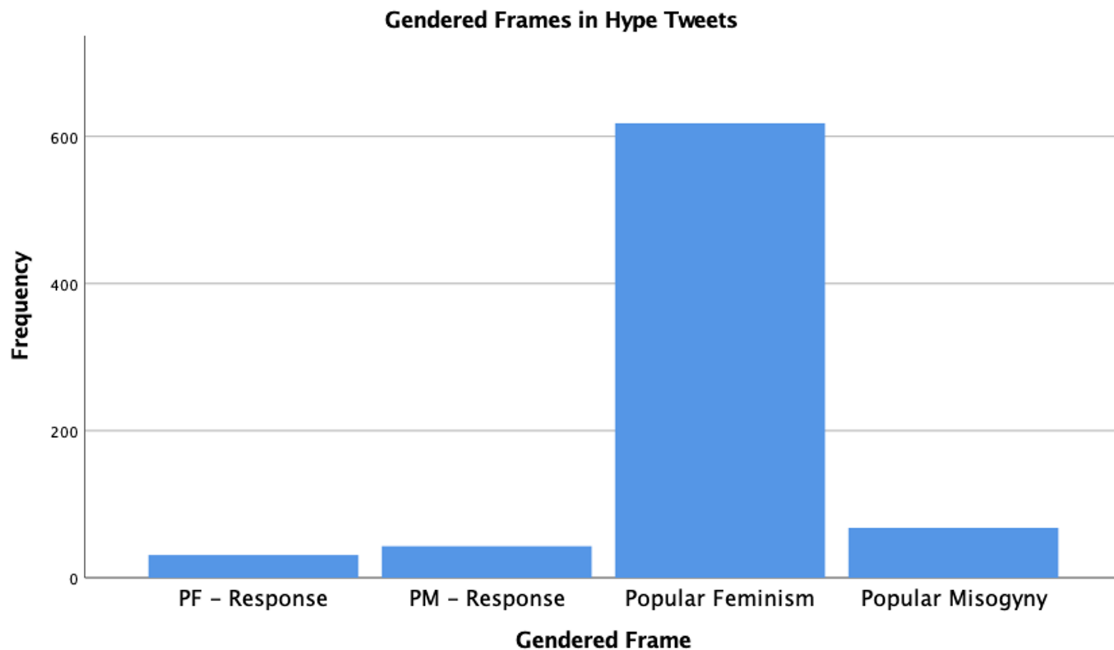


Figure 16. Gendered Frames in Hype Tweets

Many of the tweets in the Popular Feminism frame emphasize International Women's Day. The film's release on International Women's Day 2019 was a key piece of Marvel's marketing strategy, and many of these tweets fall into the Hype cultural frames from the previous chapter. This includes tweets from individuals and brands and official marketing tweets from Marvel. Various talk shows and podcasts also tweeted to advertise appearances on their shows by the film's actors. This is a clear example of the Popular Feminism frame. International Women's Day has "radical and revolutionary" (Wilson, 2022) origins. However, its current North American formation does not focus on previous calls to "demand the eradication of racism, gender oppression and economic exploitation" (Wilson, 2022).

International Women's Day was first celebrated in 1909, with an emphasis on the rights of female workers. Now, especially in North America, it is more of "an occasion to generically celebrate women and girls in our lives on social media" (Cope, 2022). This shift manifests as social media posts by companies about their female employees, despite not paying them equitably—or every store you have ever given your email address to sending you a discount code to buy "women's products." Many of the tweets in this frame include marketing campaigns about "celebrating IWD with *Captain Marvel*"

—from Marvel Studios, as well as individual theater chains and other brands. There were also tie-in campaigns asking people to highlight the female heroes in their own lives in replies, and many users participated in this, tagging both #InternationalWomensDay and #CaptainMarvel. With this in mind, the theme of International Women's Day can be characterized as a current example of popular feminism.

Another type of tweet in this category was specifically feminist in nature, or explicitly mentioned "feminism" or words associated with popular feminist movements, including statements like the following:

> Going to see #CaptainMarvel is an 'act of destroying the patriarchy' [tweet]

This group of tweets indicates their alignment with feminist values by using words like "girl power," "sisterhood," "women supporting women," "proud to be a woman," "TheFutureIsFemale," and using capitalization to emphasize Captain Marvel's gender as a superhero: HERo or SHEro. Other tweets highlighted the importance of kids seeing a female superhero and positioned Captain Marvel as a role model for little kids of all genders. Many tweets also emphasized the importance of Lashana Lynch's role in the film, especially for "little black girls getting to see a bad ass black woman pilot." Still, others talked about why this movie was feminist to them, including "getting back up again after every fall" and describing the movie as "a love letter to feminism," or talking about why the film is relatable.

> I think a bunch of women will relate to CM because it's basically about someone been told repeatedly to keep her emotions in check to be successful [tweet]

Another subset of these tweets is positioned in opposition to misogynistic discourses on Twitter, including "Captain Marvel drinks weak men's tears for breakfast" and asking, "what's the Venn diagram of men who said women are too emotional to be president and men who lost their "s***" over a female superhero movie?"

The tweets that explicitly mentioned feminism were not generally from official accounts, which skirted around the term, using "HERo" or focused on International Women's Day as more of a "soft launch" of the popular feminism of this movie, without using a term that could result in contested reactions. This is indicative of the "corporate-

friendly" aspect of popular feminism that Banet-Weiser emphasizes. Another key aspect of which is the "increasing visibility of a gendered disparity in dominant economic spheres" (Banet-Weiser, 2018, p. 12), one of which is Hollywood. Official Marvel accounts were simultaneously using International Women's Day as a marketing hook, releasing their first female superhero film and playing into the corporate-friendly popular feminism while at the same time shying away entirely from using words like feminism, which would be seen as too strong or too political.

As previously discussed, *Captain Marvel* was the first Marvel movie starring a woman as the solo lead superhero, after more than a decade in which Marvel released multiple movies per year. As a result, many tweets in this dataset address the gender gap in superhero films, specifically calling out Marvel and DC. Still others drew attention to the relative lack of women-centered films in Hollywood overall, tweeting "Basically every movie has a male lead, can't they let us have this one?" Or highlighting problems with industry and drawing attention to all the looks at all the "great women involved in making this film" from directors, writers, and other professions on the film. There were also many tweets calling attention to the fact that Pinar Toprak was the first female composer to score an MCU film (Huver, 2019).

This group of tweets also highlighted or listed other female characters from various comics who "also deserve their own movies." Although these tweets shared some similarities with the Competition frame from the previous chapter, it was more of a "yes, and" phrasing. These tweets included comments like "You don't need to put someone down to raise someone else up." Others drew positive connections between Wonder Woman and Captain Marvel, both the characters themselves and the movies.

> *Wonder Woman* shows how women are and *Captain Marvel* shows what being a woman is like. [tweet]

Some tweets also connected *Captain Marvel's* potential to that of *Black Panther's* in terms of representation.

Some tweets in the Popular Feminism frame were extremely focused on industry metrics of success when it comes to box office sales and other monetary indicators that the movie would be "successful." This group of tweets advocated for others to buy more tickets to make a bigger opening weekend to "show the haters" they were wrong.

Although it may seem out of place for fans to be advocating for Disney to make more money as a "feminist" act of fandom, there is a long history of discourse regarding poor box office performance being interpreted as a lack of audience support for any movies starring female protagonists (Cocca, 2016; Donoghue, 2019; Taylor & Glitsos, 2021). These tweets fit in with what Jowett (2019) describes when it comes to feminist critiques or consumptions of Disney merchandise from franchises such as *Star Wars*. Jowett finds online fan movements and hashtags advocating for more women's representation in Disney merchandise create "rallying points for fans" (p. 194).

> Simply exchanging views and debating aspects of fan-related feminism or feminism-related fandom helps serve the need of all fans (irrespective of gender) that desire more equal representation in the media and more equal treatment from the companies who market media tie-ins. (Jowett, 2019, p. 194–195)

For corporations, the relationship between fans and media content is primarily economical in nature. The primary goal of a company like Disney or Marvel Studios is to make money from their properties, whether through ticket sales or merchandise revenue. It follows that fans would understand their buying power, their potential to contribute to box office takes and merchandise sales, would be an opportunity to communicate with the corporations.

The tweets in the Popular Feminism frame were also aware of the negative tweets, both the anti-fans from chapter four and the Popular Misogyny frame I discuss later in this chapter. Often tweets directly address the Review Controversy, Anti-Movie Actors, Competition, and Boycott frames. Many of these tweets echo Brie Larson's comments on "not caring what men think of the *Captain Marvel* movie." The majority of tweets that fit in this aspect of the frame can be characterized as aggressive or exasperated, especially when it comes to the boycott and the Alita Challenge. The Alita Challenge, you will remember from the previous chapter, was an anti-fan campaign to encourage moviegoers to spend their money on tickets to *Alita: Battle Angel* instead of *Captain Marvel* on opening weekend. For proponents of the Alita Challenge, Alita was a better female superhero, one who fit more traditionally into the mold of female superheroes designed for the male gaze. Tweets in this frame that addressed the boycott and the Alita Challenge used words like "silly" or "stupid." Others derided the "fragility" of the anti-*Captain Marvel* Twitter contingent.

> this movie isn't anti-man and there were men in our cinema [tweet]

> a subset of men is always going to hate movies starring women. [tweet]

> The men who comment 'as a white male this film isn't for me' on captain marvel are the same men who ask 'why isn't there a national men's day' on IWD, there is one (It's in November). [tweet]

Others take issue with the premise of the Alita Challenge.

> the Alita challenge isn't about supporting Alita, its a shield for garbage humans [tweet]

These tweets also use words like "trolls" and "pathetic" to describe boycotters and pose questions like "why is 2 female superhero movies too many?" Others posted strategies for how to respond to "the haters," including,

> When men refer to CM as Ms Marvel to me, I either refer to Captain America as Mr America" or start talking about how great Kamala Khan is. [tweet]

These tweets refer to the new Ms. Marvel in the comics, a teenage Pakistani-American character who took up the Ms. Marvel name after Carol Danvers rebranded as Captain Marvel. The framing of opposition to misogyny is a component of some of the tweets in the Popular Feminism frame.

Similarly, in response to more negative or anti-fan tweets, there are a subset of tweets that are what I see as protective of the film and the actors involved in it. These tweets hype up Brie Larson, or the character of Captain Marvel, or the movie itself. These tweets draw attention (in a good way) to Larson's acting, performance, her advocacy, or the things she has said in interviews leading up to the film's release. Many tweets address Larson herself, "Brie you were amazing!" or tagging her Twitter account in their posts, "@brielarson is our Captain Marvel from the comics." These tweets talk about why they love the film, including major themes like how the storyline is not about the process of getting powers, it is about not trying to be something someone else wants you to be, and finding your strength was there all along. Or they talk about how it is refreshing the character "isn't sexualized" and that the film does not involve the main character having a love story. These tweets use words like "fun," "enjoyable," "powerful," "strong," "proud," and "empowering" and quote resonant lines from the movie, including "I don't need to prove anything to you." They also express strong emotion about the

film's soundtrack, including a fight scene *Captain Marvel* has as No Doubt's "I'm Just a Girl" plays.

Of the gendered frames in the dataset, it is not surprising Popular Feminism is the most salient. This film had all the ingredients to be positioned as a feminist text, and clearly Marvel leaned into this through marketing and the choice of release date. As Kent (2021b) argues, there is a consumer-friendly feminist ethos throughout the Captain Marvel comics and the release of the film, which aligns almost perfectly with the "corporate-friendly popular feminism" (Banet-Weiser, 2018, p. 12) of *Empowered*. In these tweets, there is also evidence of the "primarily white, middle-class, cis-gendered, and heteronormative" (Banet-Weiser, 2018, p. 13) aspects of popular feminism. In many ways, the tweets in these categories also resembled some of the widely discussed hashtag activism or feminist activism in digital spaces (Banet-Weiser & Miltner, 2016; Boling, 2020; Linabary et al., 2020; Mendes et al., 2018).

5.3. Popular Misogyny

The second gendered frame in this dataset is Popular Misogyny. It was this type of framing that originally prompted my research questions about this dataset. Sarah Banet-Weiser (2018) writes,

> Popular misogyny is not a movement; it is a deeply embedded networked context, one that structures not only the material world of law, policy, and regulation but also identity, affect, and sexuality. Among other things, it is a reactive response to popular feminism; a waging of battle, a call to arms. This does not end with one round; both feminism and misogyny are continually restructured through this dynamic. (p. 37)

This description of popular misogyny as a "waging of battle" aligns with discussions and experiences of the previously discussed GamerGate and ComicsGate events in the "nerd" spaces of the internet (Curtis, 2020; Proctor, 2017; Salter, 2018).

Other scholars have categorized this type of networked, popular misogyny as "resistance" to women's public voice and visibility online (Sobieraj, 2018) or as offshoots of "the manosphere" (Marwick & Caplan, 2018). All these descriptions share an understanding of the type of discourse involved and how it can be characterized or spotted in social media spaces.

> A networked misogyny means that the concept itself is constantly moving from one node to another, emerging in different spaces, with varied manifestations. (Banet-Weiser, 2018, p. 34)

In this section, I examine how popular misogyny emerged in the context of the *Captain Marvel* movie release. Overall, I coded 430 tweets in this frame, or 4% of the dataset. The sentiment analysis shows 73% of this frame is negative, 20% is neutral, and just 7% of the tweets are positive.

For Banet-Weiser (2018), popular misogyny is always reactive. It is a response to the popularity and visibility of feminism. The *Captain Marvel* movie, and the popular feminism of its promotion and fan response, was extremely visible. Referring to Powers's (2012) discussion of cultural hype, promotion is accompanied by backlash, in the same way that, for Banet-Weiser, popular feminism is accompanied by popular misogyny. As discussed in chapter four, the accompanying backlash to the marketing and fan hype for *Captain Marvel* was largely found in the anti-fan category of cultural frames. Figure 17 shows the distribution of gendered frames within the anti-fan category of cultural frames from chapter four, with the majority of Popular Misogyny tweets categorized as anti-fan tweets. This chart also shows us that although all the gendered frames are present within the anti-fan tweets, the Popular Misogyny frame is more common in this theme than the others.

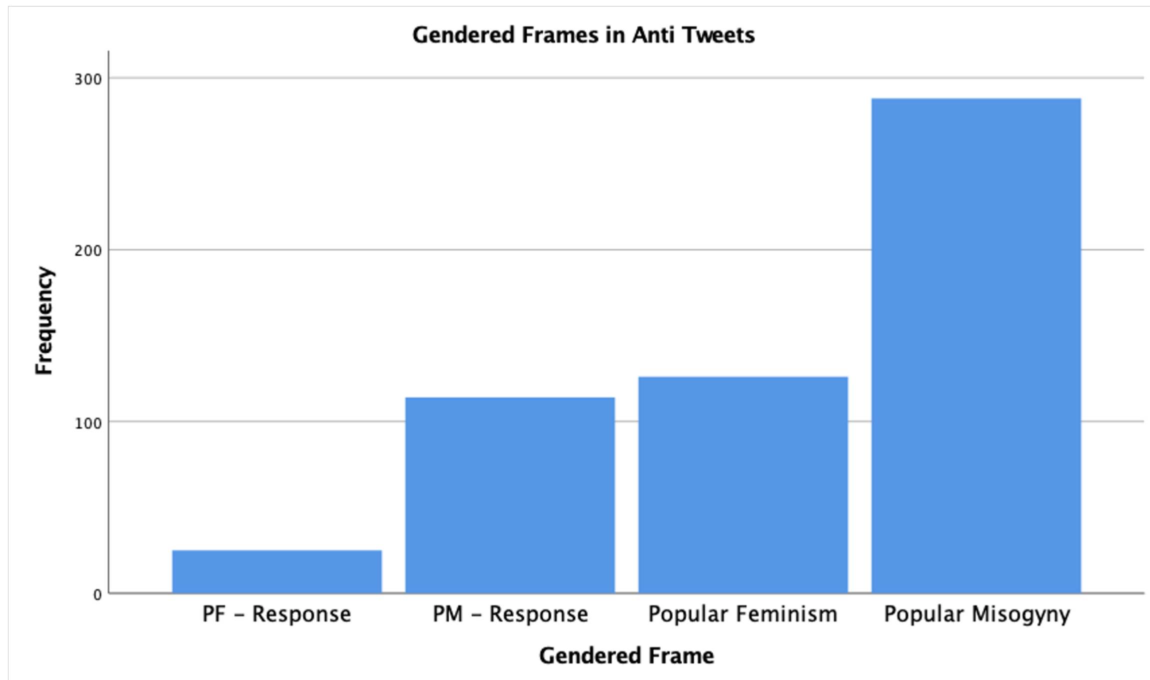


Figure 17. Gendered Frames in Anti-Fan Tweets

The anti-fan tweets are much more likely to contain Popular Misogyny framing, they are backlash to both the film's feminist-themed marketing and to the comments made by lead actress Brie Larson about diversity. I also read them as resistance to women's public voice and visibility, in a continuation of GamerGate and ComicsGate themes. This continuation is what Massanari (2015) refers to as "toxic technocultures" or what Proctor (2017) refers to as "toxic fan practices," a subcategory of Massanari's toxic technocultures. There are several ways the tweets in this frame resist the popular feminism of *Captain Marvel* itself and the tweets in the Popular Feminism frame.

The first way the tweets in the Popular Misogyny frame manifest are in direct opposition to feminism. The tweets in this frame that express direct opposition to popular feminism include tweets containing the hashtag #feminist with derogatory or disturbing images attached, or using words like "feminazis," "SJWs," or making connections to ComicsGate and GamerGate in order to dismiss them.

> You cannot blame Gamergate for the dislike of #captainmarvel and expect to be taken seriously. [tweet]

The tweets directly mentioning GamerGate are interesting and appear in two forms. Either they express support for GamerGate and ComicsGate, in a way that supports

Curtis's (2020) assertations of a "culture war" within comics (p. 928), or they resist assertions that GamerGate is at all related to other such sociocultural controversies, and therefore feminists' reactions to GamerGate are entirely unwarranted or blown out of proportion.

There are also reactions to popular feminist phrasing or buzzwords in these tweets. Claims of "Toxic Masculinity" are met with "Toxic Marvelinity" in an attempt to elevate the injuries of these two ideas to the same level (Banet-Weiser, 2018).

> #ToxicMasculinity ?🤔 #ToxicMARVELinity #CaptainMarvel [tweet]

> My wife, the biggest feminist i know, won't watch this movie because it's still a superhero movie. So you alienate me, a big fan of the MCU, but do not get her. [tweet]

This tweet stood out for a few reasons: first the appeal to the authority of this user's wife, the statement that she is the "biggest feminist" he knows. I can most likely conclude this user's standards for what a "big feminist" is are not that high if they are not willing to watch a movie, from a studio they claim to be a fan of, because there is a woman in the lead role. The injury of being told he is not the main audience demographic for this film is too big to overcome. For this person, the fact he is not being catered to is the only thing that matters. What is the point of making a movie about a female superhero? He is firmly convinced that he should be the target audience for all films.

There is a lot of vitriol in this frame, specifically aimed at feminists who are "ruining" Marvel for these self-proclaimed fans. Tweets characterize "feminists" as "homewreckers," "whores," "dogs," and "cancer."

> Corporate Feminism FAILED, Even the Left Thinks Captain Marvel Was Boring. Keep Identity Politics Out Of Entertainment #CaptainMarvel #GetWokeGoBroke. [tweet]

> Why are intersectional feminist attempting to ruin #CaptainMarvel for me before I even see it? Ugh. Do men do that to your shitty @amyschumer flicks? [tweet]

These tweets are particularly telling because of the way they use words from the language of feminism and the left to attack these concepts. Identity politics, wokeness, and intersectionality are used as negatives, as things to be avoided, without regard for the terms' meanings.

The blame for the perceived injury is placed solely on the “feminists” for “ruining” Marvel movies while simultaneously not acknowledging any injury perpetuated by “men” onto “shitty” movies that women like.

> #CaptainMarvel is more proof if any were needed that everyone hates #sjw stuff. Sure those guys should have the rights they want but everyone is bored with how angry and unreasonable it’s becoming. You guys should smile and be friendly - do a deal rather than this endless anger [tweet]

In this tweet, the universalization of “everyone’s” opposition to social justice and feminism is evidence of how polarized individuals’ experiences of the internet can be. This frame represents 4% of the tweets about *Captain Marvel*. As discussed in the cultural frames from the previous chapter, overall, many more tweets were positive than negative, but it is possible a Twitter user could see only “angry” and “unreasonable” discourse about the film. The continued focus on Larson’s and Danvers’s lack of a “smile” is continued evidence of the ways misogyny reacts against feminism, in women not acting politely or the way they are “supposed to,” and this shows through in these tweets. Remember, all the tweets in this dataset contain one of the search terms for the dataset, so many of these are tagged with the official #CaptainMarvel or other associated hashtags. The authors of these tweets want them to be seen by others in the conversation, and they are explicitly using these terms in discussions about the film.

The anti-fan cultural frames in chapter four included tweets about the “Alita Challenge” or the “boycott” of *Captain Marvel.* These tweets advocated for moviegoers to skip seeing *Captain Marvel* and instead go see *Alita: Battle Angel*.

> True fans need to avoid this movie for the MCU to survive [tweet]
>
> Going to do my best to make sure people don’t go see this movie [tweet]
>
> Call me a troll, but I’m praying #CaptainMarvel bombs this weekend 🤞🤞[tweet]

The Boycott tweets ranged in levels of intensity of arguments and in the levels of apparent misogyny. Some tweets were somewhat tame in their advocacy, appealing to “true fans” to avoid the film they perceive to be “ruining” the MCU. Many of these tweets advocate for not seeing the film for other reasons, arguing the film is bad, or not necessary to the continuity of the rest of the MCU. In other tweets, the sexism baked into the reasoning behind the boycott was more apparent.

> Tomorrow's showings, opening night, not even a quarter of #CaptainMarvel seats sold. Identity politics marketing, poor reviews, Brie Larson, rumours of Captain Marvel being hamfisted into Endgame at the last minute over established characters... it's created a very negative buzz [tweet]

The majority of tweets in the Boycott frame I coded as Popular Misogyny reference feminism, identity politics, prejudice against white men, or "wokeness" as reasons to ensure the film is not a success at the box office. The discourses in the Boycott frame were amplified by right wing personalities on Twitter and YouTube (Babcock et al., 2020).

Many of the tweets in both the Popular Misogyny and the various anti-fan frames directly blamed lead actress Brie Larson for their perceived problems with the film—and therefore actions like the boycott. Many argued it is "feminists'" or "Brie's" fault they "have to" boycott the film.

> If they wanted #CaptainMarvel to do well they should have been nicer to white men. [tweet]

> This kind of misandrist, brain dead, mindless SJWism is how you get people to hate what should have been another great MCU movie. Feminism is cancer. #CaptainMarvel [tweet]

> The only angry one is Brie, who is out there trashing white men. She is reaping what she sowed, killing #CaptainMarvel, not the people responding to her stupid SJW nonsense. [tweet]

In these tweets, there is evidence of the reaction to this perceived "suffering" of men at the hands of feminists, for the injury of daring to say that white men were not the target audience of a movie (Banet-Weiser, 2018, p. 5). Many tweets in the Popular Misogyny frame include misogyny directed specifically at Larson. These tweets include hashtags like "#brietard" and "#brietoo" (alluding to Larson's support of #MeToo) or advocating for her to be sexually harassed or assaulted. Saying Larson "has the sex appeal of a spoon," or one tweet that said "her booty meat" looked bad in the costume. The statements in these tweets exemplify the "instrumentalization of women as objects . . . [and] a systematic devaluing and dehumanizing of women" (Banet-Weiser, 2018, p. 2). For the users who posted the tweets in this category, Larson's feminist-aligned statements, her defense of the character's lack of a smile in the trailer, and her involvement in advocacy are perceived as injuries against men that *need* to be met with the reaction of misogynistic punishment in the social media arena.

Many of these tweets are explicitly gendered in their criticism of Larson, saying "we should call her Captain Menstrual." These tweets include a specific misogyny that goes beyond the variations of individual film taste. The way the criticism of the film is directed specifically at Larson and the words that are used do so illustrate many of the layers of misogyny in the tweets in this frame and their reactions to the film. The words in these tweets used to refer to Larson are a litany of misogynistic and right-wing dog whistle terms like "shill," "SJW," and more classic outright insults like "bitch." Some tweets call Larson boring, or they criticize her acting as wooden or otherwise bad, whereas still others say they "wouldn't even watch her in porn." Tweets in this theme also "quoted" rumours that the rest of the MCU cast from other films "hated" Larson and resented her addition to the MCU. The tweets tied Larson to the film's success or, to the users in this frame, lack of success, with statements like "Here's my review of the Brie Larson shit fest film."

These tweets echo other examples of popular online misogyny, the targeting of a specific woman as emblematic of the perceived problems. This occurred during GamerGate with the targeting of Zoë Quinn and later Anita Sarkeesian in 2014, as well as the hate directed at Leslie Jones upon the release of *Ghostbusters* in 2016 (Blodgett, 2020; Blodgett & Salter, 2018; Proctor, 2017). The targeting of Sarkeesian and Jones was also racial in nature, and there are some tweets in this dataset that are also racial and gendered.

Crazy rich asian to crazy bitch alien #CaptainMarvel [tweet]

This tweet is referencing another actress in the film, Gemma Chan, who plays one of the villains. While this tweet references a previous film of hers, *Crazy Rich Asians* (2018), the repetition of "crazy" and "bitch," words historically used to belittle and invalidate women, lend an air of racism and misogyny to the statement.

The Competition cultural frame is also represented in this gendered frame in which tweets reference other films that faced popular misogynistic treatment on social media, including "a fiasco, just like ghostbusters," as well as comparing Larson's Captain Marvel's "lack of weakness" and "Mary Sue-ness" to Daisy Ridley's Rey from *Star Wars:*

The Force Awakens.[9] Other tweets that put Captain Marvel in competition with other female superheroes include "They should have made a Black Widow or Scarlet Witch movie instead" or "We already had Wonder Woman." Other tweets say she's "No Gal Gadot" or is "just a downgraded Scarlett Johannsen." There are also references to *Wonder Woman,* including "Why does she think she's better than Wonder Woman" and "I don't remember any of this male bashing when Wonder Woman came out." A popular game is to argue about who would win in a fight between superheroes, and, among other tweets saying that Superman or Batman or any other given superhero could "beat" Carol in a fight, one tweet remarked that, in a battle between Superman and Captain Marvel, "Clark would just try to get her some help," presumably with her "inability to smile" or "anti-man attitude."

Many of the politically framed tweets are in the Popular Misogyny frame as well. These tweets exclaim the movie is "filled with identity politics" and ask "why don't SJWs ever smile?" They use hashtags and keywords that signal their political leanings, including things like #getwokegobroke using #SJW as a derogatory term, and they talk about the media "shilling" for the film. Others in this category respond to discourses in the Popular Feminism frame, with statements like,

> They're really tryin to push a fooking agenda here #CaptainMarvel #FeminismIsCancer [tweet]
>
> Get woke go broke [tweet]
>
> I don't think that the hate against #CaptainMarvel is because of the movie itself, but rather because of the political correctness people are spewing out with it. Of course, fristrations will be taken out on the movie then, because that's the one big way to do it. [tweet]

These tweets profess that "Captain SJW" needs to be "canceled" and use online conspiracy theory language like "Captain Marvel is toxic new world order programming to the max" (Hodson & Gosse, 2022; Marwick & Partin, 2020). These are among the tweets that explicitly connect politics to the film, and, for these users, this "political

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[9] A "Mary Sue" is a gendered term used to deride certain characters as "wish-fulfilment fantasy" (Jowett, 2019, p. 192). Calling a character a "Mary Sue" insinuates there's no believable elements of their character arc or skills. In the Star Wars example, Rey is called a Mary Sue for her sudden skill with the force and a lightsaber, when Luke Skywalker's similar sudden skills in the original trilogy are not called into question in the same way.

correctness" is an attack on their politics and experience with movies. The tweets that frame the movie as political are more likely to be tweets in the Popular Misogyny frame than in either the popular feminist frame—or no gendered frame at all. It is overwhelmingly misogynist or right-wing perspectives that are most likely to see popular feminist frames as political (in a way that is bad), especially in a film.

There is a group of tweets that are suspicious but lack enough context to analyze fully. A few tweets in the dataset are tagged with "#HeFree4Brie" that indicate the author of the tweet, a man, will not be attending on opening weekend so that women feel "safer" and include statements like "It's so important for my cis and trans sisters to see this movie in a #safespace." Some of these words are so politicized that I am suspicious when people use them, in that often "Safe Space" is used in a twisted or sarcastic way to mock people who would have originally used these terms. Plus, there are some other weird trans-related tweets with the #HeFreeForBrie hashtag, which seem to be a mix of facetious and earnest,

> Friday all my cis/trans sisters can come together in a safe space and begin healing with the glorious power of #CaptainMarvel and #brielarson This is vital we be allowed this once in a lifetime experience without the intrusion of men. New Fandom, Who Dis? #hefree4brie [tweet]

It feels facetious, but, without further context, I cannot tell if some of these tweets are sincere. Potentially at least some posters are sincere? I touched on some of these considerations in the Political Frames section of chapter four, but unresolved questions remain.

A subset of tweets consisted of what appeared to be internalized misogyny. Some of these tweets read like what someone pretending to be a woman on the internet to try and corroborate their misogyny would say. However, because the identities of the users cannot be investigated within the limits of this research project, I cannot read beyond the contents of the tweet. For the purposes of analysis, the tweets expressing an internalized misogyny are grouped together.

> I wanted to see this movie but now all the feminists have brought my lady parts into it too much [tweet]

> I usually go see movies with my husband but since he's not welcome i'm not going either. [tweet]

Both tweets above are reactions against what the users see as “feminists” going too far in their enjoyment of, or conversations about, the film. In the first case, there is resentment that too much attention has been focused on women in the lead-up to the release of the film, which has pushed this user further from it. In the second case, there is an expression of more loyalty to the husband, and the injury of feminism against him, than there is connection with the cause of feminism or a shared gender experience.

This placing of blame on “feminists” for what the users see as an overreaction or the act of going too far is repeated throughout these tweets, almost to the level of a purposeful misunderstanding of what it means to be or not be the target demographic of a film.

> As a woman, being exited for a female superhero is awesome. As a woman, using my gender to crap on men is not awesome. These things are not equal. I don’t have to crap on men to be excited about a female lead. I wish more women understood this. #CaptainMarvel [tweet]

> I’m a woman myself and I found the trailers boring, even some of the really far-left news sites that push feminism into everything rated #CaptainMarvel poorly. [tweet]

These tweets call to their authority as women about how women should behave, or what kinds of media women should like. These tweets are rejections of feminism and, in turn, ideologically align with popular misogyny.

Previous chapters include discussions of anti-fans, and although I have classed several of the cultural frames from chapter four as anti-fan in nature, there were several tweets in the popular misogyny frame that exemplify the concept of being an anti-fan. These were tweets where the users identified themselves as fans of Marvel who had specific problems with this movie, for misogynistic reasons. Tweets like,

> Was marvel not created by a white man, for other men? Seems disrespectful to treat the main source of income poorly, a terrible business move. Males outnumber females in the interest of ‘heroes’ and action/ adventure mediums. #marvel #captainmarvel [tweet]

Of course, a *true* Marvel fan would know that the creators of Marvel comics, Jack Kirby and Stan Lee were both Jewish, both sons of parents who had fled persecution in Europe (Tabachnick, 2014). Others tweeted reviews of the film, noting how it did not live up to their standards for Marvel movies,

> Saw #CaptainMarvel last night. Expected to come out of a great, polished superhero film... instead it was littered with blatant anti male moments, just like Brie Larsons press run. Baffling Marvel feels the need to teardown men to lift women up. Not impressed [tweet]

Anti-fans of Captain Marvel in this frame are self-proclaimed protectors of the MCU canon, whose chief concerns seem to be defending their idealized versions of their male childhoods. These tweets express that Marvel does not need to and in fact should not make superhero movies for women and stop "ruining" the experience of male fans by including women in their films. For Blodgett (2020), this vision of an idealized childhood lingers from a 1980s marketing strategy that established "a group of consumers who strongly identified with the geek identity" (p. 185). Since the 1980s, this identification has morphed into a reactionary "fan anger" found in regard to several franchises, including Marvel, Star Wars, and Ghostbusters, among others (Blodgett, 2020; Blodgett & Salter, 2018).

There were also some other miscellaneous misogynistic tweets, often containing references to other comics storylines that should have been done instead. One tweet advocated to "Bring Captain Marvel back to dc and make her a man again," referring to DC's character Shazam (see Competition frame in chapter four). Or they tweet about suffering through the film or just going to *Captain Marvel* to see the end credit scene (Marvel is famous for their "after-credits" scenes that connect each film to the rest of the MCU and drop hints about what could be coming next). Still others just tweeted thoughts like "I hope Thanos kills her in Endgame."

> Really hope that THANOS Will kick #captainmarvel butt!! #thinksheisbetterthenWonderWoman [tweet]

> Reviewers are complaining that #CaptainMarvel is unrelatable? That's isn't the director or the writers' fault, it isn't the actress's either. Read the comics, the character is a bad one. Arrogant beyond words, and can never seem to do any wrong, even when she does. [tweet]

With the expansive *Avengers: Endgame* set to come out just a few weeks after the release of *Captain Marvel*, the tweets in this dataset also have a lot to say about hopes and dreams for the content of that film.

Although the Popular Misogyny frame makes up just 4% of the dataset, it had a major influence on the larger discourses and narratives about Captain Marvel. They were reflected in popular media about the film from the release of the trailers until the

theatrical release (Leishman, 2019a; Leishman, 2019b; Leishman, 2019c). The "review-bombing" element of the Popular Misogyny and Review Controversy frames were also the final straw in review site Rotten Tomatoes in changing its policies in regard to allowing film reviews to be posted before its release date (Gardner, 2019; Steiner, 2019). Given this press coverage and influence, one could have expected more of the tweets in the dataset to be sorted into this frame.

There are several potential explanations as to why there are not more tweets in this category. The first is due to the data collection. Although the data were collected using a varied set of hashtags to locate a wide range of tweets on this topic, this collection method relies on users including these hashtags in their tweets. This means someone who wants to complain about the film or disparage it in a tweet would have to use common or official hashtags themselves. It makes sense that not everyone who has a misogynistic take on the film is going to tweet it under official hashtags or actively engage in the same parts of Twitter that fans are. To mitigate this in future research, scripts could be altered to also collect replies to main tweets by big, official, or high-profile accounts or tweets about the main actors and the movie. Smaller studies have taken this type of approach, including one which involved analyzing tweets directly addressing Rian Johnson, director of *Star Wars: The Last Jedi* (Bay, 2018). Alternatively, Lorentzen and Nolin (2015) developed a system of capturing hashtagged Twitter conversations and those un-hashtagged conversations that followed. The method relied on tracking hashtags and identifying key participants in the hashtagged conversations and collecting their tweets, hashtagged or not, as a way to follow the conversation further.

5.4. Responses to Popular Feminism and Misogyny

In the process of coding for popular feminism and popular misogyny, I also identified tweets on the margins of these categories. As a result, I created categories of tweets that responded to the discourses of popular feminism or popular misogyny but that did not express either of the frames. In other words, these tweets were gendered discourse, or acknowledged gendered discourse, but did not fit into the first two categories. There were three main ways these tweets were framed: that the film was not feminist enough, that all the people "complaining" on "both sides" needed to calm down, and that movies should just not be political in nature.

Not Feminist Enough

First, there are some tweets that respond to popular feminism by arguing *Captain Marvel* was not feminist enough or “not empowering.” These tweets include references to Disney or Marvel Studios being in the business of feminism for the potential profit. These tweets argued the film cannot be “ground-breaking” because of its entanglement with capitalism and profit, expressing that the film is not “progress, it’s a product.” These tweets also emphasized the conditions behind the scenes in the film industry, arguing a big studio film like this could not be truly feminist, and people need only look at the whole operation, from the top down, from studio heads to writers, and how poorly women below the line in film production are treated. Other tweets take issue with the military themes in the film.

> Does #CaptainMarvel and Brie Larson still want to push that #airforce tie-in? The branch of the military has a huge history of silencing sexual assault victims. [tweet]

The US Air Force was a presence throughout the trailers for the film, and advertisements for the US Air Force were shown before the trailers ahead of the film in US cinemas. In Canada, there were ads for the Canadian Armed Forces ahead of the film as well. Carolyn Cocca (2020) writes about the relationship between the military and female superheroes as a point of discomfort or contention. She argues the military affiliation of characters like Captain Marvel and Wonder Woman makes their feminism contestable for many.

These tweets also correlated with some of the tweets in the political frames from chapter four that criticized the film’s treatment of race, arguing that following the Carol Danvers storyline in this Captain Marvel film effectively sidelined the Monica Rambeau character, a Black woman, to once again privilege stories about white characters. The majority of tweets in this first category positioned the lack of “true” feminism in the film as a flaw. However, other tweets expressed that a lack of feminism was a good thing, in that it was “not too heavy on the girl power.” Others stated “there wasn’t really much of that SJW stuff in the film” or wondered why “feminists” were making Captain Marvel into a “gender topic.”

The Trolls Go Too Far

The second theme in this group of tweets was directly responding to the Popular Misogyny tweets, without expressing ideological alignment with the Popular Feminist discourse about the film. These tweets expressed exasperation or annoyance with "trolls" and "pathetic manbabies" for their views on the film or their attempts to boycott. Some stated "Y'all need to chill out, no one is forcing you to watch another marvel movie" or asked, "Aren't you tired of complaining?" Or they complained about pitting different movies/characters against each other, with tweets like

> Comparing captain marvel and wonder woman because they're both superhero movies with female leads is like comparing shark tale and jaws because they both have sharks [tweet]
>
> Why are we pitting #CaptainMarvel and #Alita against each other? [tweet]

Others attempted to draw attention to an apparent double standard in how female superhero films were treated (tweeted), saying things like,

> Don't know why people are so triggered about #CaptainMarvel being female, they didn't seem to have a problem jerking it to Gal Gadot playing wonder woman. [tweet]

These tweets posed an interesting problem for manual coding. They are clearly responding to the Popular Misogyny framed tweets but do not contain enough evidence to label them as Popular Feminism. I can infer a rejection of misogyny could align with an acceptance of feminism, but this story was not told clearly enough in these tweets to provide enough evidence to code for Popular Feminism.

Why Can't We All Just Get Along

The third theme was found in a group of tweets that seemed to address both sides, trying to draw parallels between feminists and misogynists, saying everyone needed to "stop making everything so political" or "stop being so sensitive."

> it's just a movie, it doesn't need to be part of an agenda [tweet]
>
> Not every woman hero is feminist; not every comment complaining about a woman is misogynistic. [tweet]

In these two tweets, there is a minimizing of several things, from the role of art and films in society to the ways in which our society is built in an unequal way. This does a greater

disservice to the Popular Feminism frame than it does to the Popular Misogyny frame, in that when every comment “complaining about a woman” is diminished as just personal preference and not the role of misogyny in society, consideration of the collective nature of the structural issues at play is lost.

Others seemed to echo the “ethics in videogame journalism” narrative of GamerGate, professing that “The movie is just bad” or “not that great.” These tweets also professed that “both sides” were over the top,

> Get ready to be called a misogynist if you dislike #CaptainMarvel and an apologist suck-up or Marvel shill if you do like *Captain Marvel*. Either way, it’s a lose-lose scenario. [tweet]

These tweets expressed a sort of “keep politics out of my movies” opinion that equated both misogyny and feminism as *politics* and therefore unwanted in entertainment. I find these tweets especially interesting in that by far the tweets that invoked “politics” were more likely to contain misogynist frames rather than feminist frames. This is illustrated in Figure 18, which shows the distribution of gendered frames in the politically framed tweets.

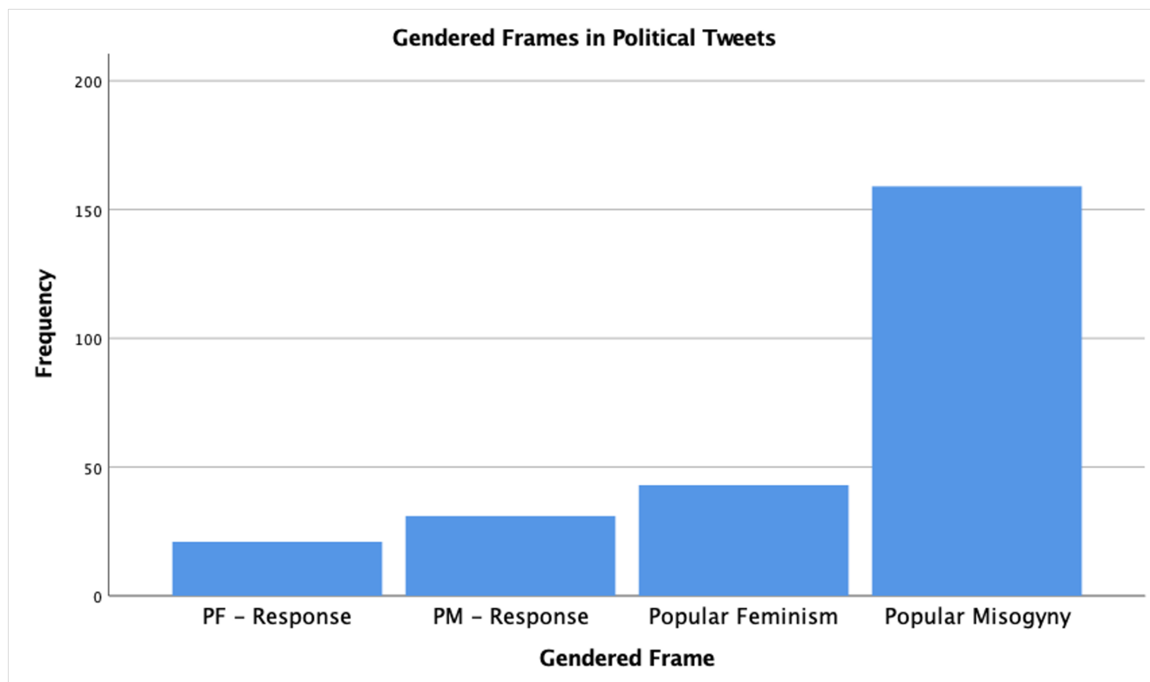

Figure 18. Gendered Frames in Political Tweets

5.5. Conclusion

In this chapter, I examined the ways popular misogyny and popular feminism are involved in, represented through, and provoke reactions within tweets about *Captain Marvel*. I set out to uncover how popular misogyny and popular feminism are present in social media discourse about popular films and detail the ways cultural politics, gender, and movies are entangled. This research design allowed for a meaningful examination of diverse conversations. In this dataset, 11.1% of the tweets examined were gendered, but the echoes of this 11.1% reverberate throughout the rest of the dataset and the popular media attention around the release of the film. In this chapter, I also examined how the Popular Misogyny and Popular Feminism frames interact with the cultural frames from chapter four.

The Popular Feminism frame appeared in tweets from both the hype and anti-fan themes, with the majority (82.6%) coded for one of the Hype frames. These tweets positively reacted to the plot of the film, anticipated the film, posted from official accounts, and expressed support for the film or the actors themselves in a manner that actively and visibly aligned with a corporate friendly popular feminism. In releasing the film on International Women's Day, Marvel Studios and their fans saw *Captain Marvel* as a girl power, feminist "SHEro" text. In contrast, the Popular Misogyny frame, while also appearing in both the hype and anti-fan themes, was most represented in the Anti-Fan frames (66.9%). These tweets expressed a negative reaction to the film's alignment with popular feminism, with tweets about reviewing films, tweets against the film's actors, and support of other superheroes or other films to the extent of a boycott. This antagonistic, anti-fan reaction to the film is steeped in a networked popular misogyny. While the gendered frames made up 11.1% of the tweets in this dataset, they were the driving force behind much of the narrative of the movie release. The two frames that reacted or responded to popular feminism or popular misogyny illustrate how these gendered tweets permeated the dataset. These two elements are intimately connected.

Chapter 6.

Reflecting on Computational Communication in Context

Interpretation is at the center of data analysis. Regardless of the size of a data, it is subject to limitation and bias. Without those biases and limitations being understood and outlined, misinterpretation is the result. Data analysis is most effective when researchers take account of the complex methodological processes that underlie the analysis of that data. (boyd & Crawford, 2012, p. 668)

This chapter addresses the problem of the role of computational work in the field of communication and the social sciences. Through my experience with my dissertation, I examine the affordances and constraints these methodologies offer. I chose to undertake this project with this methodology because I was unsatisfied with how most studies dealt with social media data. Communication scholars often assume machine learning or big data studies make claims that do not acknowledge or account for context, that they seem simplified or limited in the types of answers they can offer to vital research questions (Bail, 2014; Shah et al., 2015), whereas qualitative communication studies with smaller amounts of social media data leave data underexplored (Bogen et al., 2019; Calasanti & Gerrits, 2021; Cappella, 2017). In this chapter, I compare computational and manual methodologies for sentiment analysis in social media data analysis. There is a lot to be gained through computational methods of communication studies, but it is just as vital that research retains the context and nuance of manual and qualitative analysis. Computational communication is still relatively new and, as such, is still being shaped as a method and a discipline (Berry, 2014; boyd & Crawford, 2012).

In chapters four and five, I used a framing analysis to examine cultural and gendered discourses in the dataset. Throughout this process, I also provided context for the cultural and gendered frames through sentiment analysis, and in doing so I discussed some disagreements between the various methods. This chapter delves deeper into the process of computational analysis and the multiple ways I approached sentiment analysis throughout the course of the research. The analysis in this chapter is grounded in data feminism (D'Ignazio & Klein, 2020), feminist critical discourse analysis (Lazar, 2007, 2014), and critical technocultural discourse analysis (Brock 2018, 2020),

which I use as the theoretical scaffolding through which to evaluate the tools and processes used in my research. This allows for an evaluation of the tools used in data analysis, not just the data itself, in an effort to more fully understand the role and value of computational tools in communication studies of culture. This chapter is an extended discussion of my methodological processes, as well as the role of computational methods in communication studies.

This chapter includes considerations of absent data that haunt this dissertation, to borrow a concept from Kjær et al. (2021). The story of my computational methods for this project involves different data, pilot study data, that did not make it in to the final analysis in chapters four and five. Kjær et al. (2021) write about being "haunted" by missing data and the silences from factors such as collection server downtimes in their research. For them, missing data were often conceptualized as what they did not collect from Twitter's continuous API while their servers went down or there was a power outage. Kjær et al. argue "It is possible to reimagine absent data not as a limitation but as a haunting presence that should not be ignored" (Kjær et al., 2021, p. 16). For me, my first two datasets are the ghosts that haunt my dissertation, and, in this chapter, I give them another purpose. I use the story of these datasets to answer the research questions for this chapter.

> RQ 5: What is the current role of computational methods in cultural studies and communication?
>
> RQ 6: How can a computational approach to measuring culture add to textual analysis in critical communication research?

This chapter addresses the research questions by detailing the process of data collection, cleaning, and analysis. This walkthrough of my analysis will illustrate what processes I used, including their location in the trajectory of computational communication, and lay out the terrain of the field. I further look for common ground between methods (Ophir et al., 2020) and argue for the benefits of mixing computational and manual methods for this type of analysis.

6.1. Computational Communication and the Big Data Era

Scholars use computational methods in communication research in many areas, and this has increased as accessible computing power has increased. Cioffi-Revilla

(2010) argues computational social science began in the mid-20th century, with social scientists beginning to use computational tools for statistical data analysis (including "the early days of SPSS," p. 260). Since then, there has been what Berry (2011) describes as a *computational turn* in the social sciences and humanities. The computational turn is where computational methods are introduced into existing disciplines. Although communication scholars have used computing for as long as computing has been around, the expansion, accessibility, and sophistication of these methods is the innovation in this process. These methodologies have expanded, becoming "an intrinsic part of the research process" (Berry, 2011, p. 2) as computational humanities and social science research become more complex and larger in scope. For Berry (2011), the current computational social sciences and humanities research constitutes a "complex field of understanding culture through digital technology" (p. 4) and makes a collaborative and hybridity of disciplines available within the university.

In the early 2010s, many scholars were articulating different elements of the move toward combining computational methods and existing social science and humanities disciplines. At the same time Berry (2011) was describing the first wave of digital humanities scholarship in the late 1990s and early 2000s, moving through the computational turn, Cioffi-Revilla (2010) described computational social science as "a fledgling interdisciplinary field at the intersection of the social sciences, computational science, and complexity science" (p. 259). The theme of big data also starts to emerge, as researchers' capacity to analyze an unprecedented amount of data increased (Lazer et al., 2009; Mayer-Schönberger & Cukier, 2013).

Chris Anderson's (2008) article in *Wired* magazine declared the abundance of data in our digitized world constituted "The End of Theory," now that researchers could access all the data they could ever want. The scientific method could be obsolete, no need to hypothesis and test if anyone can just look for answers in the masses of data all around. The success of the Human Genome Project turned even the human body into data, unlocking the floodgates of analytical possibilities through computational means (Chow-White & García-Sancho, 2012). For danah boyd and Kate Crawford (2012), the big data era was now "underway" (p. 663), offering provocations as to what researchers could reasonably expect to examine or what questions they could answer with access to big data and computational research methods. They offer a definition of big data "as a cultural, technological and scholarly phenomenon that rests on the interplay of:

Technology . . . Analysis . . . and Mythology” (boyd & Crawford, 2012, p. 663). Other definitions of big data are conceptualized through a series of Vs, including volume, velocity, and variety (Dumbill, 2012; Kitchin, 2014). Although early social science and digital humanities work in big data would not qualify as “big data” by industry definitions, the potential for change is there as tools become more accessible and data become more plentiful (Manovich, 2011).

Researchers have more access to more data than ever before, but having more data does not directly translate to more or better answers to our research questions. As Bail (2014) writes of big data,

> Obtaining total or near total samples of text on a given topic is a remarkable feat given that it was nearly unthinkable only a decade ago. Yet such giant samples are of little utility if they cannot be classified in a meaningful manner. (p. 471)

In many ways, the following 10 years have involved social science researchers grappling with the impact, changes, and problems presented by access to more data. This has included calls for “deeper data” (Brock, 2015b), arguments for focusing computational methods on the practical, and reminders that computational methods cannot only be inductive because our programs have assumptions because they have been programmed by us (Matei & Kee, 2019).

The turn toward big data in communication that danah boyd and Kate Crawford (2012) wrote about has resulted in a plethora of research involving some degree of big data methods (Bail, 2014; Chow-White et al., 2020, 2021; Van Dijck, 2014). One of the draws of big data in social science is that it is, as Bail (2014) argues, “naturally occurring” (p. 467), unlike surveys or interview data, which must be extracted by researchers or revealed by participants. Bail goes on to describe obstacles of big data, from the overwhelming volume, untidiness, and barriers to employing data science methods for someone not trained in the field. Bail also highlights “there is much that is of interest to cultural sociologists that is not easily reducible to text” (p. 467). The problems of nuance and context are why I chose to involve computer-assisted and manual sentiment analysis, as well as qualitative framing analysis in this work, even though all of my data for all strategies involve text. The cultural context and nuances of the gendered frames are problems I was not convinced that computational methods on their own would illuminate, even when it came to the sentiment analysis.

Cappella (2017) argues the amount of data researchers can access makes it difficult to examine without the use of computational approaches. For those who study social media, big data methods can “allow researchers to rethink interpersonal and mass communication” (Cappella, 2017, p. 545). For Cappella, the futures of big data, social media, and computational social science are intertwined, and the relationships between media and interpersonal influence should be key areas of research through these methods and these platforms.

Several researchers and scholars have set out on cultural inquiries with computational communication strategies, from endeavours to measure culture (Bail, 2014) to understand audiences’ engagement with popular culture (Babcock et al., 2019, 2020; Proctor, 2017) to explorations of both text and image social media data (Alam et al., 2018; Cornelio & Roig, 2020; Li et al., 2018). Social media data have been scraped and captured to answer myriad different research questions for scholars from across the communication field. Of particular interest for this research are explorations of questions of sexism, misogyny, and gendered discourses. Scholars have examined feminist and misogynistic hashtags and discourses (Banet-Weiser & Miltner, 2016; Boling, 2020; Linabary et al., 2020; Mendes et al., 2018) and posts responding to racialized women leaders during the early COVID-19 pandemic (Calasanti & Gerrits, 2021), and they have endeavoured to write code to detect misogynistic tweets through supervised and unsupervised machine learning strategies (Ahluwalia et al., 2018). Twitter in particular has been a rich site of study using big data and computational communication strategies. Research on Twitter includes early examinations of the purposes of retweets as conversation (boyd et al., 2010), network analyses of how topics and users are interrelated (Bruns et al., 2011), topic modelling (Al-Rawi, 2019; 2021; 2022), and automated frame analysis (Burscher et al., 2014). Researchers have also combined various computational methods to create rich analyses of integrated network and content analyses of exposure to different political opinions (Himbelboim et al., 2013).

Big data and computational methods present affordances and opportunities for communication scholars. With social media, people and therefore data, are everywhere. José van Dijck (2014) talks about datafication, as more and more people trade access to their data to corporations in exchange for communication services. Corporations have profited from this deluge of data. But data could also be used to delve into the why of people, to answer questions of interest to communication and social science scholars (to

make things better). Researchers can access more people and more opinions than with traditional qualitative methods or even than quantitative surveys. The computational communication studies referenced in this section so far show a wide range of ways these methods can be used, as well as what kinds of questions scholars have sought to answer with them.

There can, and should be, a balance. Working with large datasets can unlock an ability to identify larger patterns and contextualize more granular qualitative analyses. An *n* = all approach also increases the ability of cultural researchers to generalize their findings with a higher level of certainty than typically small datasets in qualitative analysis. This can enable cultural scholars to speak to a larger audience, both inside and outside the academy. Combining manual and computer-assisted analyses is an exercise in examining the limits of what researchers can know. Computers are intrinsic parts of our lives. I remember the first computer my family had, as well as connecting it to the internet for the first time. New generations of cultural scholars are seeking ways to integrate their familiarity with the digital into their professional practice. This research is a study in this balance, evaluating computational methods and examining the points of disagreement and tension with manual and computer-assisted methods of analysis.

6.2. My Computational Communication Study

Throughout the process of the research, as detailed in chapter three, it became clear I was not just analysing the data; I was also experimenting with and analysing the methodologies I was using and learning. This aligns with the methodological choices I made to anchor my analysis in data feminism, FCDA, and CTDA, which all call to analyze more than just the data, to include the researcher, missing data, and the processes and technologies used. Kjær et al. (2021) write about missing data having the potential to haunt research, and the analyses in chapters four and five are haunted by the processes I went through to get to them and the layers of sentiment analysis I built upon for the analysis therein, and this section brings those ghosts into the analysis.

From the beginning of this project, I wanted to bring different methodologies to my data. I position this part of the dissertation as a computational communication project within a cultural study. My research questions would require different methodologies to answer because some were ontological and others epistemological. Addressing the

cultural politics of the dataset, the sentiments present, and the gendered nature of the discourse, I decided my research questions were best answered using a mixed-methods approach. I looked to other scholarship approaching social media data with both qualitative and computer-assisted quantitative analysis (Alam et al., 2018; Andreotta et al., 2019; Chow-White et al., 2020; Cornelio & Roig, 2020; Guo et al., 2016; Su et al., 2016) to bring out a well-rounded and well-contextualized analysis of the data. My goal, grounded in my experiences working with an interdisciplinary research team at the GeNA Lab at SFU, is to apply more of my qualitative and communication-field thinking to questions and methods used to examine large social media datasets.

6.2.1. Data Collection

Communication scholars have used numerous methods to collect social media data. Some are tools developed in concert with other research software, like NVivo's NCapture. Academics created platforms for specific purposes, including the GENA Miner (Chow-White et al., 2021) and open-source platforms such as DMI-TCAT (Borra & Rieder, 2014), as well as social media platform's own tools they allow researchers to access. They are designed with various functionalities and deficiencies, as well as varying levels of integration with existing software. Such tools also require varying levels of technical ability and knowledge on the part of the researcher. For this dissertation, I collected Twitter data through two methods. The bulk of my analysis was done on data collected through the Twitter Research API, and that process is detailed in chapter three, but the first method I used was NCapture.

I collected preliminary data with NCapture as a practice run, exploring my options for what data would be available to me and what it would look like once collected. Although the *Captain Marvel* dataset was my intended focus of study, I knew there would be some barriers to acquiring data from months ago using existing Twitter access, because, at the time, the Twitter API restricted historical data collection (Mayr & Weller, 2016). Therefore, in December 2019, I used NCapture to collect tweets from the weeks that the first trailers for DC's *Wonder Woman 1984* and Marvel's *Black Widow* came out. This choice is supported by Moulton (2019) and Gilbert (2017), who highlight the important role movie trailers play for large studios in enticing audiences to these types of franchises.

On December 3, 2019, the first full trailer for Marvel's *Black Widow* solo movie was released online. I used NCapture to collect tweets about the trailer from the following search terms: Black Widow, #BlackWidow, #BlackWidowIsComing, #BlackWidowMovie, Scarlett Johansson, and Natasha Romanov. NCapture can collect up to 18,000 tweets for each search term, with these individual searches spaced out by 15 minutes to comply with Twitter's API. To collect these tweets over the course of the week following the trailer release, I ran these search terms on December 5, 7, and 10. In the collected tweets, I noticed many included elements of comparison to the *Captain Marvel* movie, so, on December 6, I also collected tweets from the following search terms: #CaptainMarvel, Captain Marvel, #CaptainMarvelMovie, #HigherFurtherFaster, Ms. Marvel, Miss Marvel, Brie Larson, Carol Danvers. The search terms I chose include official hashtags and many keywords from tweets about the film, containing the main actor's name and the main character's name.

On December 8, 2019, the first full trailer for DC's *Wonder Woman 1984* was released online. For this film, I chose analogous search terms including Wonder Woman, #WonderWomanFilm, WW84, Gal Gadot, #WonderWoman1984, and Patty Jenkins. In this set of searches, I included director Patty Jenkins because she had a more high-profile role in the Twitter conversations on this film than the directors of either *Black Widow* or *Captain Marvel*. Following the model I used with the *Black Widow* tweets, I ran these search terms through NCapture 15 minutes apart on December 9, 10, 12, and 14.

In total, between December 3 and 14, 2019, I collected 647,120 tweets. I intended this data collection to be a preliminary test of the data collection methods. If I could not obtain original *Captain Marvel* tweets from March 2019, I would plan to collect tweets from the 2020 releases of *Black Widow* (late April 2020) and *Wonder Woman 1984* (early June 2020). But then, of course, everything changed, and movies were not released in April or June 2020. Theatres were closed, and studios bided their time. *Wonder Woman 1984* was eventually released on streaming platforms in late December 2020, and *Black Widow* followed, released on Disney+ in July 2021. Although both of these films were released on streaming for an additional fee, neither had the same type of big buzz theatre release I had originally anticipated. Everything about the first few months of the COVID-19 pandemic was jarring, but I specifically floundered with my data. I was really glad I collected this preliminary, or pilot, dataset, and looking at it in

NVivo showed me I wanted to collect my actual data differently—but that was no longer an option.

This process highlighted for me the myth of “raw data” (Bowker, 2005; Gitelman & Jackson, 2013; Kitchin, 2014). Data are not waiting to be discovered. By our choices, researchers shape what we collect, and, by asking questions, we shape the answers. In different fields, data are conceptualized differently, and so, to collect data to be analyzed through different methodologies, I had to work through different forms of it. The NCapture data were in a different form than the *Captain Marvel* data from the Twitter API I used in chapters four and five. The NCapture datasets were organized differently through the processes of how they were collected, influenced by both my decisions and the structure of the machines (programs, software, tools) used to collect them. They were shaped by the Twitter platform and its users. The process of collecting the preliminary data allowed me to spend time understanding and thinking through the data collection process in terms of what kinds of data I would have to work with afterwards. Many researchers highlight the importance of thinking through the design of the data collection (Lorentzen & Nolin, 2015; Mayr & Weller, 2016), and this time helped me narrow down my criteria for the data, including how much data I needed, and develop a better understanding of what may be left out by any data collection strategy. In terms of collection, the process of collecting the *Black Widow* and *Wonder Woman* datasets helped me improve my focus and strategy when it came to collecting the *Captain Marvel* dataset. I was more specific with my search terms; I shortened and focused the time period I collected data from; and I used tools to collect the data that would shape it into a more manageable and malleable form once collected.

6.2.2. Data Cleaning

By fall 2020, I had this huge, unwieldy dataset of tweets from the release weeks of the first trailers for *Black Widow* and *Wonder Woman 1984.* Data cleaning is a critical step in the data processing workflow that must be done before one can use the data to answer research questions. Cleaning involves inspecting the collected data to mitigate any challenges or problems with the data that could affect the analysis later on in the process (Brown et al., 2017). A researcher cleans data to smooth out entry errors, the collection of duplicated data, and inconsistencies with formatting.

Cleaning 650,000 tweets collected with NCapture was a learning experience. NVivo was not well suited to cleaning a dataset of this size, although it did automatically remove duplicate tweets (not retweets) upon importing from NCapture. This reduced the 650,000 tweets to 459,601. There were so many tweets collected in duplicate because NCapture allows the collection of approximately 18,000 tweets every 15 min using only one search term. In many cases, tweets were collected in duplicate because they contained multiple search terms (#WonderWoman1984, #WW84). NCapture also scraped extraneous data I could not manipulate within NVivo because of the way NVivo stores the files. Although these automated features were helpful, there were other limitations and constraints on what I could do with the data in NVivo. The most limiting was it would not allow me to combine multiple searches into one main file. To mitigate this, I exported the NCapture data as individual Excel files and combined them to create three files:

Black Widow: 173,280 tweets

Captain Marvel: 32,949 tweets

Wonder Woman: 253,372 tweets

The total tweets in these Excel sheets was 459,601. However, the cleaning process had only just begun.

Many of these tweets were not in English. Because NCapture does not scrape a language indicator from Twitter, I could not easily separate the non-English tweets in the same format. I imported the datasets into Google Sheets, where I could run a "predict language" function to allow me to more easily sort the tweets. Starting with the *Wonder Woman* dataset, I was able to transfer the tweets, limited to 20,000 at a time, to Google Sheets and use the predict language function to guess at the language of the tweets. I then copied that column back into my Excel file. This back and forth allowed me to spot check the tweets to see if the predict language function was working. I then sorted the Excel file by the language column and was able to remove large chunks of reliably identified non-English tweets (most commonly Spanish, Portuguese,[10] French, Thai, Korean). I also was able to then go through the English tweets throughout the copying

[10] The *Wonder Woman* trailer was first released at a fan convention in Rio de Janeiro, Brazil.

and pasting process to check for tweets that were not on topic. One of my searches was for “wonder woman” without any of the hashtags. This was the most imprecise search I ran for this topic, and it yielded a lot of tweets not associated with the film.

After cleaning, the *Wonder Woman* file contained 170,801 tweets. I removed 82,571 tweets from the dataset over 3 days (Sept 20-22, 2020). In this process, I did not remove retweets, with the understanding that they serve as a conversational practice, which “can be understood both as a form of information diffusion and as a means of participating in a diffuse conversation” (boyd et al., 2010, p. 1). Other scholars have remarked on the balancing act when it comes to deciding whether or not retweets should be left in (Bogen et al., 2019; Bruns & Stieglitz, 2013; Linabary et al., 2020) because they can be both noise and signal, depending on what questions you are asking of the dataset. Retweets can illustrate the prevalence of or support for an idea or sentiment, or they can increase the noise in a dataset. Take, for example, thousands of retweets of the official studio account’s link to the trailer itself, with no additional comments. I could see these tweets as signal, showing support or interest or positive sentiment toward the discourse of the release of the film, or I could see these as noise, repetition of official sources stating a trailer exists and has been released. In this case, I chose to leave retweets in, agreeing with the discursive function of retweets in this instance.

I then repeated the same cleaning process to remove non-English tweets from the *Black Widow* dataset. This spreadsheet started with 173,280 tweets. A unique issue with this dataset was that another Scarlett Johannsen film, *Marriage Story* (2019) was also released on Netflix this same week. This meant some tweets collected because they contained references to Johannsen were not applicable to questions about *Black Widow*. This was a fine balance to keep up in that I was keeping tweets that mentioned Scarlett Johannsen’s other movies, nominations, and actions if they were included in a tweet about the *Black Widow* trailer release.

In manually sorting through the tweets, I noted many calling out Scarlett Johansson’s more “problematic” or faux-feminist tendencies (Matthews, 2018). These include previous acting roles playing characters from communities or with identities with which she has no connection, for example racialized and trans characters (Loreck, 2018). As with the *Wonder Woman* dataset, many tweets mentioned all three superheroes: Black Widow, Wonder Woman, and Captain Marvel. There were many

references to Brie Larson, the *Captain Marvel* actress, as well as many references to the four female-led, female-directed movies coming out in 2020 (*Black Widow, Wonder Woman 1984, Birds of Prey*, and the live action *Mulan*). At the end of the data cleaning process, I had 113,288 tweets in this dataset. I learned a lot from this process. There are better programs than NCapture to collect data. NCapture was not my first choice but was something I was looking at as an option. It is interesting how days of staring at spreadsheets can give you a feel for what is in the dataset. There were surprises I would not have expected, that I am sure I would have missed if I had done this cleaning in a more automated way. After this process, I felt very connected to my datasets, and I had an idea of what to expect when it came to what I would probably be seeing in my automated analysis.

It is also interesting to separate the tweets from the Twitter of it all in this way, reading row after row of tweets removed from their greater context. As a frequent Twitter user since 2008, I have my ways of reading and understanding my Twitter feed, the trending topics, and subtweets, retweets, and quote tweets. If you do not understand the context of something and you really want to, you can follow the threads to unravel the mystery. So how do large, automated, big data processes understand a body of tweets enough to draw conclusions about what is in their dataset? Sometimes one of my own tweets from a few years ago will come up in the memories app on my iPhone, and I will not be able to make heads or tails of it. Removing a tweet from its timeline removes it from its context: the context of the timeline, the current events, what was bothering me that day, what jokes I was making with my friends, what movie we watched that Friday night.

Cleaning these two datasets again was a good trial run and learning opportunity. In these datasets, I left retweets in, deciding their communicative function outweighed their noisiness. However, in working with the data, it became clear they were clouding my ability to examine all aspects of the dataset (as I go into in the next section). Therefore, when it came to the *Captain Marvel* dataset, I removed retweets to focus on how the individual tweets contributed to the discourses, rather than which discourses were amplified, a decision also made by many other researchers in this space (Babcock et al., 2020; Bogen et al., 2019; Linabary et al., 2020). I replicated my language predict and cleaning strategies in the final dataset to remove non-English tweets. I also maintained the process of removing extraneous data from the dataset that would not

contribute to my analysis to make the file easier to work with, including user account identification numbers, IP addresses, and repeated information.

6.2.3. Data Analysis and Learning Python

Computational tools have their own language. Different methods of coding are called “languages,” and to use them well one must learn how to translate ideas into that language. It is not so simple as feeding data into the computer and seeing what comes out. Each language, each tool, has their own benefits and drawbacks, affordances, and constraints. You must have an entry point, an idea of how to phrase what you want to do before you can proceed with analyses in a new language. For social media datasets like these, two of the major languages for analysis are R and Python. Many of the “introductory” explainer videos for R and Python on LinkedIn Learning and YouTube assumed a basic knowledge of programming terms. This was also the case in videos about using Python for content analysis. Explanations assumed users would know what the tests they wanted to run were called and understand the grammar to instruct the computer. I did not come into graduate school with a computational background. My previous coding skills were limited to some understanding of HTML from customizing the layout and colour scheme of my LiveJournal in high school. However, the Research Commons at the SFU Library offered online introductory workshops in both R and Python. I signed up for two, week-long, 2-hr-per-day introduction to coding classes, one for R and one for Python, to see what the differences were between the two and evaluate them for further use.

R felt very manual, very hands-on. Like SPSS, it was not a polished interface. It did not seem like it had had any major changes to how people were to interact with it in years and years. Although I had originally wanted to just go ahead and learn Python, it seemed smart to try R, when that workshop was happening earlier than the Python one. However, a couple weeks later I was back on Zoom again to take the Python workshop offered by one of the same instructors. Python had a whole new group of words and different ways to press enter to get to the next segment. Jupyter Notebook felt more polished, more like it was trying to appeal to the user, rather than just function. Although we did not get all the way to sentiment analysis in this series of workshops (I was the lone social scientist in the group, the only one who wanted to examine text rather than numbers). However, it did give me an understanding of what types of words to use in my

searches, how to find the instructions I needed in the online coding discussion forums, and how to ask my computer scientist colleagues for help.

In October and November 2020, I developed a Python script to do my data analysis on the *Wonder Woman* and *Black Widow* datasets. Researchers have developed many different sentiment analyzers to choose from, but I chose a popular one called the VADER Sentiment Analyzer. VADER has been used by other social science researchers to evaluate sentiment on Twitter and other social media platforms. Ilyas et al. (2020) use VADER to evaluate sentiments present in a dataset of 16 million tweets about Brexit, correlating Brexit sentiment to the price of the British pound. Ribeiro et al. (2016), evaluate VADER against several other sentiment analysis software/programs. Although they conclude there is no "gold-standard" of sentiment analysis, and that all existing methods have room for improvement, VADER was consistently in the top nine methods throughout the variety of tests they ran on multiple datasets. Interestingly, for Ribeiro et al. (2016), VADER never ranked first in effectiveness or accuracy for any of the datasets or tests, but it was the only one with a consistent high level of utility throughout all of the evaluations. This, combined with its open-source availability and ease of use for researchers with only some Python experience, made it an excellent choice for this research project. I downloaded the VADER Python package and instructions from the developers' GitHub (Hutto & Gilbert, 2014), and after much trial and many error messages, it worked. I started with the *Wonder Woman* dataset and ran the VADER Sentiment Analyzer to assign a sentiment score to each tweet. The tweets are each awarded a positive, neutral, negative, and compound score, which I was then able to add as an additional column on the CSV file and export.

Where I did run into more trouble was in trying to create word clouds to represent word frequencies within the dataset tweets. Other similar studies used word clouds to characterize different groups of tweets by topic (Babcock et al., 2020). The challenge with word clouds is in making sure the included words have relevant meaning for the questions under consideration. This can include adding irrelevant words to a "stop list" that tells the computer to ignore them in creating the word cloud. Often these stopped words will include web addresses, links, usernames, or articles. However, no matter how many words I added to the stop list, there was too much noise in the data. I brought the dataset back into NVivo in three parts: positive tweets, negative tweets, and the entire dataset. The words I added to NVivo's stop list function included my initial search terms,

character names, words like “film” and “movie,” other prominent hashtags, and usernames. After this undertaking, the generated word clouds did not yield any meaningful analysis. This process highlighted two main problems: The first is the dataset was too noisy, in part because of the retweets I had left in this dataset. For example, because the trailer was first released at a convention in Brazil, the *official Wonder Woman* Twitter account posted the trailer in a tweet including the words “Here in beautiful Sao Paolo.” The thousands of retweets left “beautiful” as the most common word in the dataset, overwhelming the word frequency clouds with a word not even characterizing the trailer itself. This example, among others, led me to understand my choice to include retweets in the dataset had caused VADER to read the dataset as more positive, when that positivity did not have relevance to the subject I was trying to examine. In my subsequent rounds of analysis, I removed retweets to focus the sentiment analysis, and I chose to characterize the dataset qualitatively to examine common words and phrases instead of using a word cloud.

The second problem this process illustrated was in the tensions of working within an interdisciplinary space. In my programming language workshops and one-on-one consultations, I had trouble adequately explaining what I wanted to be able to do in Python to instructors with no background in the social sciences. I am uncertain whether it was my lack of Python vocabulary, unreasonable expectations of what could be done with the tools at hand, or their lack of social science vocabulary. The situation emphasized the difficulties with trying to do something methodologically and interdisciplinary. Computational communication research is in some ways a space of convergence (Chow-White & García-Sancho, 2012), where people with different areas of expertise endeavour to speak in a shared language in a way that is mutually beneficial. This space can be a struggle over meaning and communication, with different understandings of research and data coming together in a way that can add value across fields.

The year of trial and error I spent learning how to explore my datasets and improving my processes and understanding along the way left me with data in a form that would allow me to do my analysis and draw conclusions, but I still felt the presence of my missing dataset. Then, in January 2021, Twitter changed its API, and suddenly I could access the data I had originally wanted. In the end, I did go with the original *Captain Marvel* dataset I had intended to study, with all the tools I had learned to use

and all the new skills I acquired over the process. My experiences with the *Black Widow* and *Wonder Woman* datasets made the *Captain Marvel* one more simple to run, as I had figured out what the best practices were to get the types of results I had intended, ones best suited to my research questions. I am sure my trial-and-error way of teaching myself to use Python was not the most efficient, but it left me with a more detailed understanding of the points of disagreement between manual and computer-assisted analysis in this space. Going into my analysis of the *Captain Marvel* dataset, I had a working framework for the Python script, and I knew what tools would be best to use afterwards (mainly SPSS and Excel). This made the bulk of my analysis more polished and proceed more smoothly.

6.3. Disagreeing Sentiments

In this section, I detail the different strategies I used for sentiment analysis in the *Captain Marvel* dataset, including computer-assisted and manual content analysis. As established in the methodology chapter, computer-assisted content analysis is used to analyze large amounts of data. In communication research, it is often applied to social media data, given its large scale and rapid pace of content creation. Sentiment analysis is entrenched within academic research and industry analysis. One of the earliest examples is the Harvard General Inquirer (GI), "a text analysis application with one of the oldest manually constructed lexicons still in widespread use" (Hutto & Gilbert, 2014, p. 2). Continually developed and refined since the mid-1960s, the Harvard GI has been the basis for many sentiment analyses and other systems of analyzing sentiment (Stone et al., 1966). If there is a simple way to encapsulate the work of academia in examining disagreements and tensions, it is perhaps visible in the statement that such a system has been continually developed and refined through seven decades.

Recently, scholars have written about the history of sentiment analysis in the social sciences (Chun, 2021; Li et al., 2018). Wendy Chun (2021) highlights the origin of the importance of the study of sentiment in social science research from Leighton's Bureau of Sociological Research (BSR) studies of internment camps. She emphasizes that "[a]t the heart of sentiment analysis - so key to current forms of social media analysis, manipulation, and research - lie unruly women workers and Japanese American internees" (Chun, 2021, p. 16). Others, like Li et al. (2018), argue the "concept of sentiment analysis should be extended and the knowledge of sentiment analysis

should be refreshed" (p. 6,940). This research illustrates why researchers should not take computer-assisted sentiment analysis as infallible, why researchers must continue to interrogate its disagreements, its tensions.

There are different models for evaluating sentiment in large-scale data analysis, and each of these both enable and constrain analysis. Because of its pervasiveness, I wanted to use an established method of computer-assisted sentiment analysis to understand what these programs interpret in this kind of data and compare it against my own interpretation of the sentiments expressed in the same data. Computational methods allow for the large-scale analysis of data but also potentially miss nuances in the dataset that a human-coded analysis would not. For my main dataset, I did four rounds of sentiment analysis, two computer-assisted and two manually coded. This comparison will allow me to draw conclusions about what types of affordances and constraints each strategy entails. Once I began working with the *Captain Marvel* dataset, I began exploring the way the VADER Sentiment Analyzer had categorized the tweets. First, I used Python with Jupyter Notebook to conduct a computer-assisted content analysis with the VADER Sentiment Analyzer (Hutto & Gilbert, 2014) package on my dataset. Using Python, VADER returned scores for the level of positive, negative, and neutral content for each tweet. Each tweet was then assigned a label that characterizes its overall sentiment level after combining all the scores. In evaluating my first results and seeing how the tweets were categorized by the program, I noticed some of the categorizations did not make sense to me. Therefore, I began my endeavour to explore this disagreement.

6.3.1. Accounting for Emojis

The first place where individual tweets appeared to be assigned a sentiment most different from what I interpreted was in tweets that featured emojis heavily. At this point, the use of emojis is an accepted part of social media, texting, and even emails. Logi and Zappavigna (2021) explain that "Emoji are widespread in social media discourse, involved in the expression of emotion, conveying stances, and negotiating interpersonal alignments" (p. 1–2). What makes emojis interesting, especially in terms of content analysis, is they do not necessarily convey the same meaning to everyone; they create a problem of "disambiguation" (Krippendorff, 1992). Many emojis even differ between different small groups, necessitating the reader, message receiver, or, in this

case researcher, to decode their meaning. When it comes to content analysis, researchers must consider how these elements may contribute to confusion or even obscure results.

According to Logi and Zappavigna (2021), the system that enables emojis across platforms and operating systems, Unicode Standard, "contained over 3300 emoji" (p. 2) in 2021. Although people might consider some emojis more straightforward than others—for example, a flag of a specific country or a simple smiley face—others can be harder to interpret without knowing the person using them or understanding the context for the conversation. This is similar to the problems caused by sarcasm, which can reverse the denotative meaning of a statement. Wagner et al. (2020) write,

> Yet, despite the seeming straightforwardness of seeing emotion in the emoji, difficulties and misinterpretation hamper the effectiveness of messages sent via online platforms, such as Twitter, Facebook, Messenger, Instagram, YouTube, WhatsApp, WeChat, Weibo, and others. (p. 305–306)

Emojis can add nuance to a statement or message but also make such a statement less interpretable to outsiders of a conversation. Logi and Zappavigna (2021) worked on a project qualitatively mapping the social and semiotics of meaning of emojis in messages among undergraduates in Australia. Their results are based on interviewing participants about specific text or social media messages they had sent to see what their meanings were, as well as what choices they made when it came to which emojis to use. The responses indicated to the researchers that emojis can be used to signify attitudes and ideas, as well as to intensify other messages that accompany the emoji. Dresner and Herring (2010) further detail many factors that go into the emotions and meanings signified by emoticons and raise problems with categorizing them as conveying only emotion, detailing examples where a smiley face is used to soften the severity of a sad statement, and so on.

For this dataset, the emojis were an interesting point of confusion for the computer-assisted content analysis. This was a problem of disambiguation; there were certain common emojis in the dataset that VADER found difficult to categorize. In this dataset, many tweets containing the crying face (😭) were marked by VADER as negative sentiment, but these tweets were not necessarily negative in sentiment. Rather, the 😭 emoji indicated strong emotion, often "happy tears" in tweets that were

proclaiming love or other positive sentiments toward the movie. This is especially interesting given my reading of these types of tweets as having a gendered dimension. Expressing strong emotions like crying with happiness is considered more of a feminized expression of emotion. Another emoji that caused VADER some confusion in this dataset was the fire (🔥) emoji because colloquially something being "fire" or "lit" is a good thing, whereas, denotatively, things being on fire is usually bad. After all you wouldn't *literally* want your house to be "🔥". Connotatively and culturally, this can be a positive sentiment for a tweet about a film, character, or costume.

To explore this confusion, I removed the emojis from the dataset and ran VADER again (Table 7) to see how much difference there would be in the results. As shown in the table, there was not a huge amount of change, but that removing the emojis did increase the number of neutral tweets and reduce the number of both positive and negative tweets. Although there was not a large amount of change percentage-wise when the emojis were removed, the tweets that contained many of the problem emojis changed dramatically in their sentiment scores, in some cases from –0.9963 (extremely negative) to 0.7935 (middle positive). However, because there was not a significant amount of difference between these two coding strategies, throughout the dissertation, where I have referred to the VADER sentiment analysis, it has been the dataset that includes the emojis as posted.

Table 7. VADER Sentiment Analysis Results

	VADER – All Tweets, Emojis Included		**VADER – All Tweets, Emojis Excluded**	
Positive	6,675	62.9%	6,362	60%
Neutral	2,375	22.4%	2,830	26.7%
Negative	1,556	14.7%	1,414	13.3%
Total	10,606	100%	10,606	100%

6.3.2. Sentiment Directionality

The two rounds of computer-assisted sentiment analysis, with and without emojis, left me with more questions about the validity and accuracy of the computer-generated sentiment labels. If emojis were causing this level of confusion in the VADER sentiment analysis, what else might be causing confusion for the computer? Because I was already manually coding for cultural and gendered frames, I decided to concurrently manually code each tweet in the dataset for sentiment. Although I had originally planned to validate a sample of the computer-assisted sentiment analysis, I would now assess each of the 10,606 tweets for positive, negative, and neutral sentiment in a "tweet sentiment" coding protocol.

In this process, I came across tweets that were clearly negative in sentiment, but, despite using the movie-related hashtags, this negativity was directed at others on the social media platform rather than toward the movie itself. I added an additional protocol of manually coded sentiment for sentiments expressed toward the film itself ("movie sentiment") as the intended "topic" of the dataset (as shown in Table 8). I found this to be another interesting disambiguation problem because many similar analyses rely on the research design and search terms to specify the research focus. With a large-scale study then, is there space for a margin of error when it comes to what subject the negative or positive sentiment in a dataset is directed toward?

Table 8. Manual Coding Sentiment Analysis Results

	Manual – Tweet Sentiment		Manual – Movie Sentiment		Change
Positive	5,542	52.3%	5,770	54.4%	+ 2.1%
Neutral	4,030	38%	4,178	39.4%	+ 1.4%
Negative	1,034	9.7%	658	6.2%	– 3.5%
Total	10,606	100%	10,606	100%	

For the manual movie sentiment coding protocol, the sentiment in the tweets had to be directed toward the movie. A tweet like "loved the *Captain Marvel* movie!" would be categorized as positive tweet sentiment, as well as positive movie sentiment, whereas a

tweet like “why are all the haters being so mean, the movie’s great!” is expressing negative sentiment as a statement, but positive toward the film itself. Similarly, there are some cases in which “positive” tweets tagged with the #CaptainMarvel hashtag are actually expressing support for boycotting or “truthfully reviewing” the film. Negative tweets in the movie sentiment code had to be negative toward the movie. As discussed in the cultural frames section in chapter four, there are some cases in which “negative” tweets are negative toward “haters” or “the boycott.” Neutral tweets were fairly consistent throughout the manual coding, with more of the negative and positive tweets changing between those two categories, depending on the subject of the sentiment.

The differences between the manually coded tweet sentiment and movie sentiment are not that significant, but there are some variances that are interesting. As compared to the tweet sentiment code, in the movie sentiment code, the negative tweets decreased by 3.5%, whereas neutral tweets increased by 1.4% and positive tweets increased by 2.1% (see Table 8). This means 3.5% of the dataset encompasses tweets in which negative sentiment was present but not directed at the subject of the search terms. That there is a difference between these two codes is not surprising, given there are no guarantees of subject matter when pulling social media data from sites like Twitter. Researchers can do their best to develop search terms that will yield the data they are looking for, but hashtags are voluntary, user-generated categorizations. Running sentiment analysis on these types of datasets, a degree of variance in subject matter and therefore accuracy of results, needs to be expected.

Both manual sentiment coding columns show a large proportion of positive and neutral tweets in the dataset and fewer negative tweets than in the VADER coding. For the manual tweet sentiment codes, positive tweets had to use positive sentiment words, such as liked, loved, great, good, for example. Positive tweets could use emphasizing punctuation that indicated enthusiasm, such as “just saw captain marvel” vs. “just saw captain marvel!!!!!!!”, for example. Meanwhile, negative tweets had to explicitly say something negative, including words like hated, disliked, bad, won’t watch, or don’t want to see, for example. Neutral tweets were ones that did not fit in either the positive or negative categories, or they could explicitly express neutrality, such as “This movie wasn’t that good but it wasn’t that bad either.”

6.3.3. Gendered Discourses and Disagreements

In chapter five, I included manual sentiment analysis as part of my descriptions of the gendered frames. I used the manual sentiment analysis rather than the VADER (computer-assisted) generated sentiment analysis for this chapter because there were various inconsistencies between the two regarding the tweets in the gendered frames. This was the main area of concern when it came to the validity of the computer-assisted sentiment analysis. Other scholars have noted difficulties with identifying misogynistic statements through machine-learning processes because of problems of context, ambiguity, and intention (Ahluwalia et al., 2018). My comparison of manual and computer-assisted sentiment analysis supports this statement because, although the tweets in the Popular Feminism frame were fairly consistent in terms of sentiment, I found many instances of disagreement within the sentiment analysis of the tweets identified within the Popular Misogyny frame.

The sentiment analysis in the Popular Feminism frame is consistent between the computer-assisted VADER sentiment analysis and the manual coding. As Figure 19 shows, the majority of the tweets in this frame express positive sentiment. There is a slight difference between VADER's labelling of negative tweets and manual coding tweets as neutral. However, for the most part, these coding strategies have yielded fairly similar results (Figure 19).

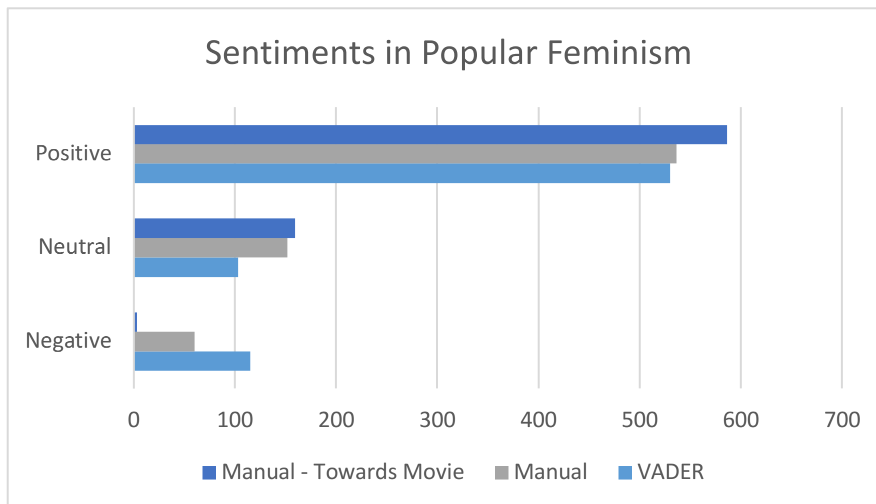

Figure 19. Sentiment in Popular Feminism

One place where there are differences in sentiment is in the third bar in Figure 19, labelled “Manual – Towards Movie.” This is the “movie sentiment” code characterizing sentiment expressed toward the *Captain Marvel* movie, rather than the overall sentiment of the tweet. This is the additional manual sentiment analysis coding to determine sentiment toward the *Captain Marvel* movie, rather than the overall sentiment in the tweet itself. For example, see tweets like these:

> The comments in every video review of #CaptainMarvel are pathetic. “Toxic feminism” is what I’m seeing a lot of and that Brie “put her foot in her mouth.” This is just abysmal. This society truly doesn’t deserve Wonder Woman or Carol Danvers if this is the response. [tweet]

> After having watched #CaptainMarvel just now, this whole boycott thing seems even more silly. There is literally nothing in this movie attacking men or against men. It’s just a really enjoyable movie and our cinema was packed out with guys and girls. #boycottfail [tweet]

Although, overall, the tweets above are clearly negative in sentiment, this negativity is not directed at the film itself. The majority of the negative sentiment expressed in the tweets in the Popular Feminism frame is directed elsewhere than the *Captain Marvel* movie. For example, this can be from tweets that express negative emotions toward “haters” and misogynistic takes about the film or the character.

The sentiment analysis in the Popular Misogyny frame is very interesting in that it is dramatically different between the VADER and manual coding. Figure 20 shows the differences in the two coding methods. There is a major swing from VADER coded positive sentiment to manually coded negative sentiment, with some changes to the neutral category as well. What these differences tell me is the VADER program is not effective at identifying sexism in tweets, or that it is not aware sexism is a “negative” sentiment. This difference between the two coding strategies emphasizes the importance of context when it comes to automating cultural analysis. Computer-assisted content analysis is still programmed by people. People tell the computer what to look for, supervise the work it does, and interpret the results. These baked in biases are important to interrogate and investigate when it comes to machine learning and other ways researchers incorporate computers into their research.

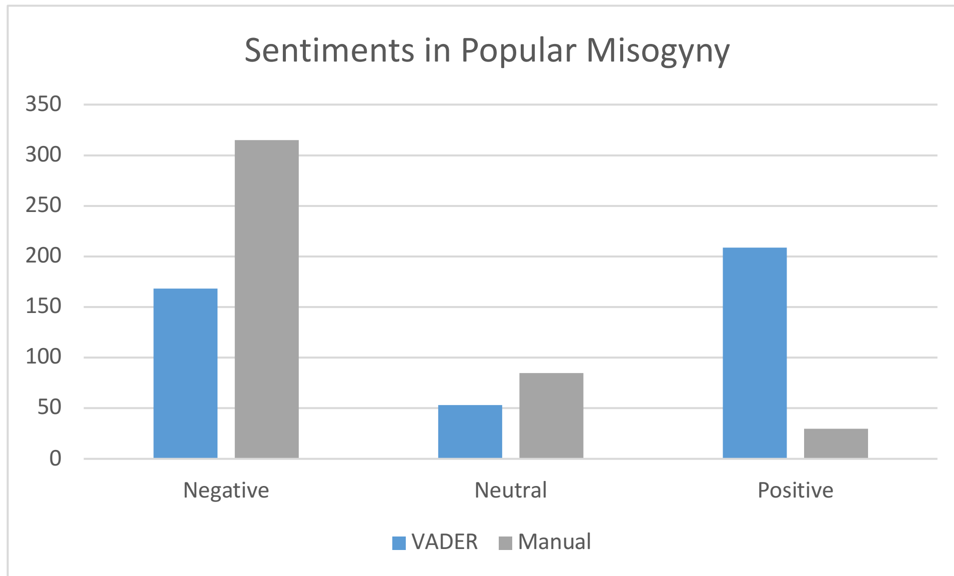

Figure 20. Sentiments in Popular Misogyny

There were also some interesting instances of positive sentiment tweets orienting that positive sentiment toward the backlash rather than toward the film. This frame has tweets defending the anti-*Captain Marvel* stance. Some of these tweets are "positive" and using the movie hashtags but not positive about the movie. "People telling the truth about this SJW movie are great." There were not many of these tweets, but they were helpful in terms of thinking about automated analysis and the problem of understanding what the subject of any given tweet is. As I have talked about before, these sorts of dog-whistle terms and phrasing really do rely on context to be interpreted for what they really mean.

6.3.4. Reconciling Disagreeing Sentiments

Looking at all four coding protocols of sentiment analysis (Table 9), there is a level of difference between each of these categories—though within each method (VADER and manual) there is not a huge level of difference. The most noticeable difference is between the original VADER coding (with emojis) and the manual coding of tweet sentiment. There is more than a 10% difference, between 62.9% and 52.3% in the tweets labeled as positive. This shows there is a disconnect between the two in how positivity is perceived, by the computer and by the researcher. The biggest difference is almost 16% between the 22.4% of tweets labeled neutral by VADER and the 38% of

tweets labeled as neutral in the manual coding stage. The previous section explored possible explanations of disambiguating emojis, misogyny, and subject confusion in the dataset.

Table 9. Four Sentiment Analysis Codes

	VADER – with Emojis		VADER – Emojis Removed		Manual – Tweet Sentiment		Manual – Movie Sentiment	
Positive	6,675	62.9%	6,362	60%	5,542	52.3%	5,770	54.4%
Neutral	2,375	22.4%	2,830	26.7%	4,030	38%	4,178	39.4%
Negative	1,556	14.7%	1,414	13.3%	1,034	9.7%	658	6.2%

In this examination of results from both computer-assisted and manual-sentiment analysis, I illustrate the challenges and affordances of both methods. By categorizing the sentiments in this one dataset in four different ways, I have shown the potential for variance in interpretations between and within methods. Often there is a taken-for-granted-ness in the validity of results from computer programs. However, how and what is counted has an impact on the story researchers tell with any given dataset (D'Ignazio & Klein, 2020). Other scholars have explored the differences in effectiveness between human and computer coding for various analyses. Su et al. (2016) emphasize the importance of comparing methods in three ways: reliability (agreement between coders, or one coder over time), validity (how well does the coding reflect the real meaning of what is being measured), and efficiency (when dealing with speed and volume of social media data, for example).

Computational sentiment analysis is a blunt tool that can give us a sketch of the content of a dataset, but some cultural questions require more precision. Another consideration is the potential pitfalls of solely using computational communication methods, including problems of generalizability, ethical concerns in terms of privacy, and theoretical scope (Oboler et al., 2012; Shah et al., 2015). Su et al. (2016) argue the "inherent tension between human- and computer-based coding is nothing new, but is only beginning to be adequately addressed by communication scholars" (p. 407). They further emphasize "Human coding methods maximize the validity of measurement, but

are often limited in their ability to deal with large databases" (Su et al., 2016, p. 407). In particular, they find the fixed nature of dictionary-based analyses can be a detriment when it comes to social media data, which moves at a rapid place and comes from many different contexts. Similarly, Armstrong and Towery (2022) and Guo et al. (2016) found significant differences between the interpretations of manual and computer coding in their examination of content analysis tools.

Like me, scholars have found a hybrid model of coding allows for a more well-rounded exploration of social media datasets (Alam et al., 2018; Baden et al., 2020; Chow-White et al., 2020; Guo et al., 2016; Punziano et al., 2022; Su et al., 2016). Social media platforms, like Twitter, are interactive, and it can be difficult to say with certainty what a tweet is doing without context—and sometimes even with context. There are subtweets and sarcasm, and tweeting in response to events or other tweets without replying directly to them or without explaining the contexts of the day. Even looking back at some of my tweets or Facebook posts from years ago, I have no idea what the contexts of some of them are.

Throughout all methods of coding, there are many more positive and neutral tweets than negative ones. One contributing factor to this relative lack of negative tweets is related to the way Twitter data searches are accomplished. Social media is expansive in scope, and, to examine any given topic, the conversations must be located. On Twitter, one of the main ways is by using hashtags, but, as previously discussed, hashtags are voluntary and user-generated. Movie studios can promote an official hashtag, but not every user chooses to identify their tweets with these hashtags—or at all. I argue this is especially the case for those who have a negative reaction to a topic being promoted by a large company with a large following. As discussed in chapter three, as a way to mitigate this type of subjectivity, I included a range of official and affiliated hashtags, as well as individual words and word combinations (like "captain marvel") in my search terms while gathering this dataset. However, the Twitter Researcher API is most reliable in returning results using hashtags. In the preliminary datasets, discussed earlier in this chapter, I included words like "wonder woman" in my searches, but they returned a number of results that were not about the *Wonder Woman* film, but were more likely to be tweets including "wonder" and "woman" anywhere within the 280 characters. These types of constraints make it hard to capture negative tweets,

so the types of tweets that are included are intended to be visible to people who did not post negative tweets.

6.4. Conclusion

In this chapter, I set out to address questions regarding the role of computational methods in cultural studies or communication studies, including what there is to learn from the tensions between computational and manual sentiment. Computational methods in communication are still relatively new, and the need for them is also still relatively new. Communication scholars study media, but social media is as much media as it is technology—as it is code—and it is all so much more volume than is possible to understand from examining it with human eyes. At the same time, computational methods cannot replace a human researcher; they cannot identify all the types of meanings and inferences we have trained ourselves to identify. It is a balancing act, a place for computation in communication and a place for context, cultural understanding, the human element of communication, and the exchange of meaning in the computation.

You see sometimes the divide between the types of research done in the academy. There is prevailing thought that the “hard sciences” do not know what the social sciences do or what kind of value they contribute—and this goes both ways. For some cultural scholars, social science scholars, it is almost like they think the computational side does not have heart, complexity, nuance, or context. I think the more one side learns to appreciate the other, the more benefit there is to all science. There are exceptions; there are people in all sorts of fields who appreciate the work of others’ fields, but we must learn to speak each other’s languages. When I was learning Python, I had to take a few introduction classes to even acquire the vocabulary to google the questions I had that came up along the way. I had to learn that language to translate my research questions into something that made sense to the people I was asking for help with the computational side. I learned to express my questions and instructions in a new way of speaking, to make myself understood, to tell my computer what I wanted it to do, when the scale of the data I had was much too big to use the tools I had always relied on before.

Combining these two types of methods in this study has been very successful, and I absolutely think there is room for both in this type of research. Computers and all that that means now—algorithms and cyber-attacks and bots and influencers and big business—it is all a part of culture, and one cannot truly be separated from the other. "The field of Internet research is cross-disciplinary and interdisciplinary. Researchers come from different academic lineages, and approach puzzles with a multitude of assumptions" (Karpf, 2012, p. 655). These different perspectives and lineages and ways of approaching puzzles are all necessary. The world is a puzzle, and no one cannot figure it all out on their own, by asking one type of question, by using one type of method, using only the language they understand. By asking good questions, with care, we all can work to find some of the answers.

In the studies I have found that deal with communication and computational methods, I have seen there are a variety of approaches. Some are using NCapture (NVivo's social media scraping tool) to pull datasets (usually smaller than the ones I pulled for the *Wonder Woman* and *Black Widow* trailers) from social media platforms like Twitter (Bogen et al., 2019). Others are using much more manual systems, collecting data by screenshotting individual tweets and replies to controversial tweets the researchers identify through Twitter's search function (Calasanti & Gerrits, 2021). This I found particularly interesting because I had originally conceptualized doing something similar with my *Captain Marvel* dataset before I understood the limitations of the programs and systems I was using. Still other researchers are using in-depth interviews with social media users to examine users' understanding of the context of their digital messages (Logi & Zappavigna, 2021). Others more closely resemble big data methods, including network analysis (Babcock et al., 2020), explorations of memes and Instagram hashtags (Boling, 2020), and mapping of online controversy using large datasets (Burgess & Matamoros-Fernández, 2016). Still others combine analyses of frames and sentiment in discourses of new technologies (Chow-White et al., 2018, 2020, 2021). There is value in both large-scale breadth studies and in-depth studies when it comes to social media, gender, and discourse, especially in something like this, combining legacy media and new media together into one field of discourse.

This chapter has been an exploration of the methodological journey I went on in conceptualizing and working on my dissertation project. That journey helped me develop a number of opinions about this kind of work, the place of this kind of work, and the

shortcomings. I have shown here the ways that methodology can be and perhaps should be interdisciplinary or at least multi-faceted—and that these types of studies can all inform each other when it comes to better understanding discourse, media, our field, or questions about society or the world overall. These findings have implications for social media and gendered discourse on a broader scale.

Chapter 7.

Conclusion

After spending so much time with this methodology and this analysis, I am left with a variety of questions and some themes I would like to work toward reconciling. Sentiment analysis has a long history in communication, social sciences, and now data science, with AI and machine learning programs being pointed toward analyzing the "sentiment" of many things through the bevy of social media data available. However, elements such as emojis, or images (when it comes to text-based analysis), it seems, are not accounted for adequately. "Sentiment" seems like such a sanitized way of characterizing emotion. There needs to be a way to include more emotion into the study of sentiment or into what communication scholars mean when we talk about sentiment, especially when it comes to feminist analysis. For me, I have tried to include more emotion throughout my analysis chapters in a way that lends more context to the analysis and the topic at hand. In this chapter, I have illustrated the different ways in which sentiment can be analyzed and accounted for in a large dataset, both with the assistance of computers and by manual coding. I aim to present this as a baseline from which I can now further explore the ways these sentiments work with and against emotions.

In the conclusion of *Empowered*, Sarah Banet-Weiser (2018) writes about rage. Specifically, "the very popularity of popular feminism, as something that is all the rage in the contemporary moment provokes the violent rage of misogyny" (p. 171). She also refers to popularity as a spotlight on media platforms that "brings into bold relief gender asymmetries in culture, politics, and economics" (Banet-Weiser, 2018, p. 171). As I discussed in chapter six, the 2019 *Captain Marvel* film is a clear example of this. The media storm of an MCU film like this, on International Women's Day, was meant to grab the spotlight. However, this spotlight also illuminated the rage apparent in the gendered discourse about this movie on Twitter (and elsewhere online).

The online discourse about *Captain Marvel* is one of a series of similar discourses to emerge from other popular film and television releases over the last few years. Films including the all-female *Ghostbusters* (2016), *the Force Awakens* (2015),

the Last Jedi (2017), and *Mad Max: Fury Road* (2015) have all been accompanied in their release by online controversy in the form of gendered social media discourse. Included with Banet-Weiser's discussion of rage are themes of vulnerability and resistance, which are also at play in these cases. The pervasive thought in Hollywood that female- or minority-led films do not do as well positions these films as risky, each one as a monetary referendum on the value of comic book or action movies not staring straight white cis men. This is a position of vulnerability for those involved in the film and the fans who have pushed for this type of representation. There are two forms of resistance in these cases. The first is the positioning of these films, where women and people of colour, as the main protagonists, serve as resistance to the norm of Hollywood "nerd" films based on comics or established fantasy or science fiction franchises, seen as dominated by male fans. For *Captain Marvel* in particular, the overtly feminist positioning of the film as constructed as a story told for women (by women) is a form of resistance. The second form of resistance is the vehemence with which the traditional audience of the superhero movie reacts online to any film that does not centre them as the status quo, resisting narratives that do not centre them.

7.1. Concluding This Study

I started this dissertation with research questions in three general areas: culture, gender, and technologies of research. I collected three Twitter datasets, focusing on female-led superhero films, and analyzed them through qualitative framing analysis and quantitative sentiment analysis. The qualitative framing analysis illustrated the discursive cultural frames about female-led superhero films on social media platforms and examined how gendered frames, through concepts of popular feminism and popular misogyny, manifested in these discourses. The quantitative sentiment analysis employed both manual and computer-assisted coding strategies to answer questions about how these discursive frames interacted with positive and negative sentiment. Furthermore, I was able to use the manual and computer-assisted sentiment analysis to evaluate the affordances and constraints on research offered by both these methodological strategies.

In chapter four, I outlined the discursive cultural frames Twitter users constructed about the release of *Captain Marvel* in March 2019. Using discourse analysis strategies, including feminist critical discourse analysis and critical technocultural discourse

analysis, I identified cultural frames within two main themes. The first set of frames fell into the theme of “hype” and engaged with positive reactions to or anticipations of the film’s release. Although these reactions can be classified as those typically expected of “fans” of such a media property, the other theme of frames was their antithesis. The anti-fan themed frames were much more negative, bringing together storylines of improper reviewing of films, negativity toward the actors in the film, suggestions of a boycott, and how the film held up poorly compared to others in the genre.

In chapter five, I explored the gendered frames present within the dataset. Using Banet-Weiser’s concepts of popular feminism and popular misogyny, I evaluated my *Captain Marvel* dataset for gendered discourse. I classified approximately 11% of the tweets in the dataset into either the Popular Feminism or Popular Misogyny frames. Taking up only 11% of the dataset, these gendered frames drove much of the discourse throughout the cultural frames.

In chapter six, I evaluated the current role of computational methods in cultural studies of communication. Through an exploration of the progression of the role of computational methods in social science and humanities research, I presented some of the key ways communication scholars use computational methods to their advantage in research. I provided examples of how these methods are used, as well as the ways in which these methods can be enabling or constraining. Using an autoethnographical exploration of my process of learning Python and employing computational methods on three Twitter datasets, I illustrated the ways these methods can be used to answer cultural questions about communication studies.

7.2. Knowledge Contribution and Impact

My goal with this dissertation was to offer contributions to knowledge in two areas: (a) to illustrate that discourses of popular culture can be political in nature in that they work to shape and impact society, especially along the lines of our understandings of feminism and misogyny; and (b) to contribute to knowledge in terms of methodology for cultural communication studies. This feminist social media study offers contributions in terms of the relationship between social media discourse and the concept of “hype” that movie studios employ in marketing their films, as well as the anti-fan backlash that often accompanies it. I want people to take “popular” culture seriously when it comes to

politics. What people have to say about fictional women on the internet has an impact on how people treat women "in real life" (as if the internet is not real life these days). If people spend so much time in these parts of the internet being this misogynistic to this degree about a movie character or an actor's comments about diversity, this will affect how they treat women, how they vote, and how they relate to people who are different from them.

Part of my dissertation is also a computational communication project within a larger cultural study. I want this part of the dissertation to have an impact on machine learning and algorithms—or at least in how scholars and readers of my work understand the limitations and histories of computational methods. I want to show that, if researchers and developers program machines to think about negative and positive sentiments but do not tell them elements like sexism and racism are negative sentiments, then endeavours to understand large-scale discourses on social media will fail. If the big social media companies and researchers cannot see with their tools the truth of how women and minorities experience the internet, then how can these platforms be changed? How can discourse and politics change for the better? Additionally, although it has been an interesting moment to be writing a dissertation on Twitter, as the platform is changing profoundly, I want this dissertation to have an impact on how we understand all social media platforms, not just Twitter, but whatever the next one will be and wherever users and audiences next talk about popular culture with people they know and people they do not.

Methodologically, I want to have an impact on how researchers in technology, society, communication, and culture think about research problems. I want to bridge the gaps between discrete understandings of how research is done. I want to illustrate how there can be space for qualitative and quantitative understandings and investigations. If I had only looked at the computer-assisted content analysis, I would have only one piece of an answer, and if I had only looked at the gendered frames, I would only have the other. However, by examining everything I did in every way I did, I found this story, and I believe it is closer to the truth than the other two ways could have told on their own.

7.3. Reflections, Limitations, and Future Research

Cultural and gendered discourses like those I examined in this dissertation, echo through the internet. Online cultures and discourses are ingrained in the everyday lives of large numbers of people. To be at a point where, after years of underrepresentation of women in superhero films, for the backlash in social media discourses of popular misogyny to be this visible, this noticeable, it tells us something about society, about popular culture, and about how these issues are intertwined and interrelated. Before the release of *Wonder Woman* in 2017, it had been 12 years since the previous superhero film starring a female character (Taylor & Glitsos, 2021)—12 years in which a total of 23 superhero films starring male characters were released by Marvel and DC. In a film market absolutely saturated with superhero films, especially by the big studios, this is a staggering failure to consider diversity, even from a standpoint of diverse audiences as untapped markets.

In researching the background for this analysis, work by Neal Curtis (2021), as well as Jessica Taylor and Laura Glitsos (2021) resonated very strongly:

> In other words, the issues that the lead male characters face (institutional overreach, powerful corporations, wars still to come) and the values that they hold, are positioned as our issues and values. Contemporary or future settings open up the space of possibility rather than shutting down that possibility in the past. However, if, as Neal Curtis (2019, 8) argues, "the stories we tell in superhero comics become a projection of the world we wish to live in", then these films culturally indicate that the world we wish to live in is male/male-led. (Taylor & Glitsos, 2021, p. 4)

This is the key element of the matter. When we engage with popular culture texts as audiences, when we post about them as users, when we feel about them as fans, we are participating in societal discourse with real importance and real ramifications.

In July 2013, I attended my third San Diego Comic Con (SDCC), and, on the Saturday, I found myself in the biggest room in the venue, waiting for all the big movie presentations. To get into Hall H, you have to line up for hours, starting early in the morning, and once you make it inside, you cannot leave. There are no in and out privileges; you stay there all day so you can still be there to see the headlining panels by the big studios. You sit through presentations you do not necessarily care about to make it to the biggest events of the day. That day, among the big studios' panels,

Entertainment Weekly presented a panel called “Kickass Women in Film.” I later found out it was the first female-moderated panel in Hall H in SDCC’s 40+ year history (Jaffe, 2013). Stars Katee Sackhoff, Maggie Q, Danai Gurira, Michelle Rodriguez, and Tatiana Maslany spoke about their time in the business, their favourite characters, the sexism they had experienced, and what kinds of stories they would like to see told through movies one day. This panel was fantastic, and so important to be included in this day’s programming in a venue like this. Because this panel was in the middle of the afternoon, it meant many people who would not have sought out this programming would have been there to listen to it anyway, including the group of guys in front of us who spent the whole panel sighing and making jokes about the content of the panel. When the panel ended, my friends and I called these guys out, and what started fairly confrontationally on both sides turned into a really productive conversation. I would like to think that, in this room of 6,500 people, there were others who spoke up against sexist comments during the panel, and that the people sitting around them within hearing distance learned something too.

For Banet-Weiser (2018), competing narratives of popular feminism and popular misogyny are overt struggles over meaning online. In both theories, power is about who has the ability to define themselves without intervention; this includes meaning construction, ideology, and discourse, as well as who has the freedom, power, or ability to control or influence those discourses. This is supported by Powers (2022), who argues popular culture cannot be assumed to be “benign or progressive. . . . Instead, popularity itself can be used as a tool to promote viciousness and hate, and popularity can be a net negative” (p. 8). Interrogating social media discourse about popular culture also has important implications on our social media and technology-mediated landscapes**.** These apps and platforms enable and constrain gendered discourses in certain ways, and this is hugely important when they play an enormous part in how society interacts and shares information. Cultural power is what is at stake in these social media discourses and in the legacy media texts that spawn these discourses.

Of course, Twitter has its limitations as a site of study. Compared to the behemoths under the Meta banner, Twitter is a small social media platform with a limited number of users. Ownership changes and restructuring in 2022/2023 have also resulted in a drop in active users (Dang, 2022; Sweney, 2022). Combined with limitations of how data can be collected from this platform, this means that a study like mine, is only

examining a relatively small portion of Twitter discourse, and therefore only a small portion of social media discourse overall. However, Twitter has served an important role in North American cultural discourse because of how visible it is and because of the reach and makeup of its users. Often, Twitter discourse will be reiterated across the internet through users' roles as journalists, pop culture reporters, and other access to online pulpits.

At the conclusion of this project, I still have questions. I have questions about the differences between sentiment and emotion; I have questions about the other ways computational communication methods can be brought to further cultural studies; I have questions about what will happen to Twitter next. I think this work can continue into other ways of studying social media discourse and how studios and fans react to it, including what role social media discourse has on creators, from small creators to large studios. I also have so much data I could use to explore further questions. For example, do the *Wonder Woman* and *Black Widow* datasets show similar patterns to the *Captain Marvel* dataset?

In terms of avenues for future research more broadly, there are four categories following this dissertation that I would suggest. First, social media discourses about popular culture. The relationship between popular cultural discourses and their connections beyond pop culture is one that should be examined further. The way people discuss and interact with pop culture media texts is indicative of and perhaps reflective of how they feel about and treat other (real) human beings. These links between pop culture and politics warrant further study. Second, research practices of locating this discourse needs to be further explored. In this dissertation I examined readily available Twitter data from 2019 using specific hashtags as a collection guide. Today, similar studies may necessitate researchers to design collection mechanisms that capture data not bundled using hashtags. Similarly, as social media becomes more fractured, more research must be done on how to examine discourses on Discord servers and other harder-to-reach social media platforms. A third avenue concerns computational methods of understanding gendered discourses. I would like to see more research pursuing how computational methods can be trained to more clearly identify and "understand" sexism and misogyny and reconcile that understanding with ideas of negativity and positivity. And finally, a theoretical pursuit of how communication and media scholars can

conceptualize people when they interact with a complex media ecosystem as audiences, publics, fans, anti-fans, and technology users.

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