

The Navigator

Excellent Student Writing Across the Disciplines

Volume 1



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A special thanks to the WAC committee for their input and support as we created *The Navigator*. We are especially grateful for your help and expertise in choosing the submissions for this first volume and the winner for the Best Writing Award.

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The Navigator's Cover Art Contest Winner: **Blake Noll**

Blake Noll is a geography major with a minor in military studies. He will graduate from Park University with his bachelor's next summer and hopes to commission as an officer in the Air Force. He is currently enlisted and teaches atmospheric dynamics and weather forecasting at Keesler Air Force Base in Biloxi, Mississippi. Noll picked up photography as a hobby when he moved to Mississippi two years ago and has fallen in love with it.

Contents

Volume 1 • 2021

About ParkWrites _____ 6

Letter from the Editor _____ 6

English

Winner of The Navigator's Best Writing Award
High Fantasy's Gender Binary: Gender and Power
in the Wheel of Time
Grant Hunsaker _____ 8

Mathematics

Richardson's Prediction
Jerry Keeney _____ 27

Women in Mathematics
Molly Soltis _____ 35

Political Science

Authoritarian Influence: The United States and France
Andrea Lucas _____ 43

Communications

Public Apologies in the Age of Internet Influencers
Camelin Cochran Sampson _____ 48

Women, Politics, and the Media
Baily Robinson _____ 73

Social Psychology

How Does LGBTQ+ Culture Affect Body Image?
Bryce Reeves _____ 80

Marketing

Starbucks and the Siren Call Roschel Schmigotzki _____	87
---	----

First-Year Writing

Writing Notes is Not Enough Evan Chambers _____	92
--	----

Author Biographies _____	95
--------------------------	----

Information for Contributors

Call for Submissions _____	97
----------------------------	----

Submission Guidelines _____	97
-----------------------------	----

About ParkWrites

ParkWrites is a university-wide Writing Across the Curriculum (WAC) program aimed at improving writing and writing instruction across the university. Writing Across the Curriculum is an educational approach used by a majority of universities to develop student learning about content (writing to learn) and to develop student learning about writing across all disciplines (learning to write). WAC programs increase student engagement and retention, critical thinking, effective communication across a range of audiences and purposes, and better prepare students for communicating in the workplace. These benefits are even greater for international students and students from underserved populations. ParkWrites consists of multiple initiatives including faculty development and support, a journal of excellent student writing called *The Navigator*, a student writing fellows program which places trained students in classes for extra writing support, and a curricular initiative, the Writing Intensive program. In addition to taking 3 required writing courses at Park, students also take at least 2 writing intensive courses both inside and outside their majors ensuring students get effective instruction in writing throughout their entire degree program.

From the Editor...

Dear Readers,

Welcome to the very first volume of *The Navigator*. To be honest, I wasn't sure what to expect from submissions this academic year. I knew our students had been doing quality work, but I also knew that, like everyone else on the planet, they'd been facing a unique set of challenges, some challenges our world hasn't seen in 100 years and others that have persisted for centuries. In short, our students have had a lot on their plates. In spite of that, our students tackled the difficult questions and submitted insightful, engaging writing. I am thrilled to share with you nine pieces of writing across the disciplines from the 2020-2021 academic year that showcase the ideas, discoveries, and connections that are being produced right here at Park University by undergraduate students.

In this volume, you'll find two papers on gender, one from a communications perspective and one from a literature perspective, that critically examine how gender is portrayed in the media and in a best-selling fantasy series, respectively. Each points out the broad reach and influence of these mediums. Another paper digs into the effects of heterosexism and minority stress on body image of the LGBTQ+ community. An analysis on Starbucks's use of social media and an analysis on cancel culture and YouTube apology videos proves that students aren't just using social media; they're paying attention to its effects. A political science paper proposes ways to protect democracy by comparing the government structures of the U.S. and Russia. Two history of mathematics papers remind us that real people are responsible for bringing us new knowledge, people who wrestled with discoveries and fought to share them with the world. Finally, a first-year writing paper comes to terms with the overabundance of information we are presented with in the age of Google and offers some solace in our ability to be self-disciplined in our search for reliable information.

What these selections prove is that higher education and the real world are not separate. They're inextricably entwined, the one influencing and reflecting the other. Students here at Park are being educated while actively engaging in the world. If that's not a liberal arts education, I don't know what is.

This first volume wouldn't have been possible without the skills and creativity of our editorial intern Taylor Lucas. In addition to designing our cover, copy editing papers, and creating *The Navigator's* brand new website, Taylor came to every meeting with enthusiasm and innovative ideas. I'd also like to thank Dr. Jamie Els for her support, expertise, and patience as I bombarded her with questions about the editing and publishing process. She has been a huge help and gave me the confidence to do the job. Many thanks go to Dr. Amy Mecklenburg-Faenger, fearless leader of ParkWrites, whose idea it was to create an undergraduate research journal. Her vision for this journal was an ambitious one, and her guidance helped us rise to the challenge. Finally, to our contributing authors, thank you for sharing your remarkable work.

After a year and a half of online classes and virtual meetings –hours and hours of screen time—one of the things I'm most looking forward to is holding this volume in my hands and smelling the paper and ink. If possible, I'd like to place a copy directly in your hands, so we can flip through it together, marveling at the insight and knowledge shared by our students.

--Brandi Handley, MFA

More Acknowledgements...

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Winner of The Navigator's Best Writing Award

High Fantasy's Gender Binary: Gender and Power in the *Wheel of Time*

Grant Hunsaker

Introduction

Fantasy is one of the most misunderstood genres in literature. It is often maligned by “serious” critics and academics as derivative, immature, or problematic. Not long ago a professor pointed out that I could have read *War and Peace* in the time it had taken me to work through one lengthy fantasy novel. And to be fair, he had a point, just like the genre’s harshest critics do. Many fantasy texts are highly derivative. Many of them feel juvenile and engage in problematic racial and gendered stereotypes. But there is a hidden depth to fantasy that is only acknowledged in a small handful of texts by legendary authors like Tolkien or LeGuin that I would argue is present in all throughout fantasy. These hidden depths and complexities are part of the draw of fantasy fiction. It’s a genre that allows authors and readers to explore social issues in a safe space, both by reflecting real life issues and exploring the possibility of new social constructs.

One of the best examples of the genre’s potential is Robert Jordan’s series *The Wheel of Time*. Jordan explores issues of class, culture, warfare, and, most importantly, gender throughout his series. His representation of women and depiction of gender relations was highly complex and ambitious, especially at the time he began publishing the series, and demonstrates what the genre is capable of at its best. Jordan also fails at his ambitious task in many ways and indulges in the baser instincts of fantasy stories. *The Wheel of Time* represents the flaws in the genre, especially regarding gender. These contradictions are what make *The Wheel of Time* stand out to me. Never have I had an experience like I had reading these books where I would so often go from amazement at the complicated weave of characters, themes, and plot being used to deconstruct the fantasy genre’s relationship with gender and sexuality to rolling my eyes at the outdated depictions of gender. *The Wheel of Time’s* (and fantasy as a whole) conflux of sheer popularity (especially among young readers) and propensity to tackle social issues head on makes it an obvious choice to analyze in order to fully grasp what kind of worldview these stories are presenting to their readers. The best place to start is with the literary canon of fantasy fiction and the unique position *The Wheel of Time* takes in that canon.

***The Wheel of Time* and the Canon of Fantasy Literature**

Contemporary fantasy is the latest movement in a canon that dates back to the very beginning of human storytelling. Fantasy carries on the tradition of our oldest myths, fairy tales, and folklore. In the west, fantasy evokes Arthurian legend: knights and wizards, kings and queens, and all the medieval trappings. But the connection with the fantastic—with the epic—goes further and wider than medieval Europe. Contemporary fantasy authors are drawing from a well that includes Gilgamesh and the *Ramayana*, *The Tale of Genji* and *Journey to the West*. Despite this tradition, fantasy as

a genre (especially high fantasy such as *The Wheel of Time*) is seen as being exclusively about white men in medieval European settings. Much of this can be attributed to the reactions of writers and readers following the success of Tolkien's classic *The Lord of the Rings* in the 1950s. Fantasy, and even epic fantasy, existed in some form prior to *The Lord of the Rings*, but it was Tolkien who became a phenomenon. Audiences were eager to devour more epic fantasy, and publishers were more than willing to oblige them. This led to a long period between Tolkien being published and the diverse fantasy scene of the 2010s and now the 2020s where pulp fiction and shallow imitations of Tolkien dominate the genre. And while there were exceptions such as Ursula K. LeGuin and Anne McCaffrey in the years following *The Lord of the Rings*, their influence was not enough to stop the genre from moving to shirtless barbarian heroes and chainmail bikini clad women by the time Robert Jordan arrived on the scene in the 1980s. Indeed, Jordan began his career by authoring several *Conan the Barbarian* novels, perhaps the most stereotypical, trope-ridden fantasy books in existence. The experience of writing and reading these stories are what informed Jordan as he set out to create *The Wheel of Time*.

The Wheel of Time's position in the canon of fantasy literature is that of a transition out of the era of Tolkien imitation, pulp fiction exploitation, and nostalgia and into the far more diverse (both in terms of stories and authors) era of contemporary fantasy.

At first glance, *The Wheel of Time* looks the same as the decades-worth of Tolkien imitators and sword & sorcery pulp fiction that preceded it. In the early books, Jordan very deliberately calls back to Tolkien as his cast of characters are whisked from their idyllic agrarian life by a mysterious wizard and a hardened swordsman. The fact that *The Wheel of Time* positions itself as a response to Tolkien and his imitators (Jordan's contemporaries and colleagues) is concealed by its extreme length and over the top high fantasy cover art. The first three novels in the series play out the classic fantasy travel narrative, down to the hero claiming a magic sword from a stone (the stone here being a

...as a transitional text, *The Wheel of Time* finds itself bogged down in the trappings of the past just as often as it looks forward, and that often undermines Jordan's themes of unity, equality, and progress, especially in its representation of women.

fortress called the Stone rather than a literal stone.) In many ways, Robert Jordan revels in the genre's tropes and takes them to excessive heights, but he uses those tropes to morph his tale from a simple adventure story to a sprawling, complex tale of political struggle and systemic change far more in line with the texts that would follow in its wake than the ones from the past, and it was those complex elements that made the series stand out in the 1990s. Of course, as a transitional text, *The Wheel of Time* finds itself bogged down in the trappings of the past just as often as it looks forward, and that often undermines Jordan's themes of unity, equality, and progress, especially in its representation of women.

When Robert Jordan began work on *The Wheel of Time* in the late 1980s, female characters in popular fantasy ranged from nonexistent to shallow and tropey

archetypes that existed largely in service of male characters. The major exceptions came from the obvious sources like LeGuin while the male authors receiving the major publicity and awards in the genre were building a tradition of excluding female stories in fantasy. In her essay "'We Have Always Fought': Challenging the 'Women, Cattle, and Slaves' Narrative,'" contemporary science fiction and fantasy author Kameron Hurley explains the importance of positive representation and the harm done by lack of representation through a story about scaly, cannibalistic llamas:

And then there came a day when you started writing about your own llamas. Unsurprisingly, you didn't choose to write about the soft, downy, non-cannibalistic ones you actually met, because you knew no one would find those "realistic." You plucked out the llamas from the stories. You created cannibal llamas with a death wish, their scales matted in paint. (Hurley)

It was this cycle of misrepresentation that Jordan was trying to break when he wrote *The Wheel of Time*. Jordan's cast of characters is dominated by a diverse group of women, and not just the stereotypically "strong" female character that gets her strength from rejecting her traditionally feminine traits in favor of masculinity. The women of *The Wheel of Time* are both heroes and cowards; warriors and scholars; rulers and peasants. The variety of roles played by women in *The Wheel of Time*, along with the sheer number of women in the series, is a major aspect that sets the series apart from its contemporaries in the 90s. However, Robert Jordan's own southern, religious worldview built from a lifetime in Charleston, South Carolina, interrupted only for tours in Vietnam, color his depiction of these women, and as will become clear, this real-world influence undermines and even outright contradicts the themes of the series.

When discussing fantasy, there are a multitude of ways to classify texts within the genre, and pinpointing—to the closest possible degree—*The Wheel of Time's* classification within the genre is just as important as understanding its context. Brian Attebery's concept of a prescriptive "fuzzy set" is one that comes up consistently in analysis of the genre. This prescriptive method is most helpful when selecting texts or comparing them, but I find this method lacking. *The Wheel of Time* is similar to more recognizable texts like *The Lord of the Rings* or *A Song of Ice and Fire*, but it is also different in fundamental ways, and Attebery's method lacks specific terminology to define these texts and help in analyzing them. Another method is delving into subgenres. High fantasy versus epic fantasy or urban fantasy, and on and on. This presents the opposite problem to the "fuzzy set," as it becomes too specific. Thankfully, Farah Mendlesohn offers a solution in her book *Rhetorics of Fantasy*, where she presents four modes of fantasy in which to classify texts: the portal-quest fantasy, the immersive fantasy, the intrusion fantasy, and the liminal fantasy. *The Wheel of Time* falls firmly in the category of the immersive fantasy, which Mendlesohn describes as "...a fantasy set in a world built so that it functions on all levels as a complete world...as if it is impervious to external influence..." and a fantasy that "must assume that the reader is as much a part of the world as those being read about (59)" This definition provides further context for what kind of text *The Wheel of Time* is and provides a framework from which to start analyzing the series. As a textbook immersive fantasy, *The Wheel of Time* contains detailed and often complicated political, cultural, economic, and magical systems to

build its immersive world. As such, I want to begin my analysis with the world and the systems Jordan constructs within it.

The Age of Legends: Utopia and Gender in *The Wheel of Time*

In *Archaeologies of the Future*, Fredric Jameson compares the genres of science fiction and fantasy as they relate to the subgenre of utopianism. Jameson claims fantasy is less equipped to be a vehicle for utopianism, and one of the reasons he cites is the “Christian (or even Anglican) nostalgia” that is so often inherent in fantasy. Traditionally Christian values relating to gender roles and sexuality, along with heavy-handed Christ allegories, are common in fantasy. In *The Wheel of Time*, Robert Jordan’s Christian beliefs come out in many of his characters and imagined cultures, especially in regards to sex and sexuality. Jordan’s conservative, arguably prudish nature, is evident when the books fade away from sex scenes and when characters dance around conversations about sexuality even when it makes no sense given their cultural background. Especially going beyond the religious element to a more broad sense of nostalgia, it is clear how Tolkien’s hobbits and their “love of good-tilled earth...and all things that grow” have popped up in fantasy for decades in different forms. Fantasy is about maintaining systems and status quos rather than reimagining them. Fantasy heroes set out to put the rightful king on the throne, not to abolish the monarchy. This is where *The Wheel of Time* sets itself apart from other fantasy books, and in many ways imitates utopian fiction.

At its core, *The Wheel of Time* is a story about changing the world. The heroes in Jordan’s books abolish classist caste systems and thousand-year-old traditions. They shift the balance of social and political power, and in the end manage to establish something akin to world peace. Jordan’s characters live in the ruins of utopian society and set out to rebuild that society rather than maintaining the status quo of their world. One of the most necessary steps in rebuilding that utopia is repairing the world’s broken gender dynamics. In the Age of Legends, the name for the utopian period in the history of *The Wheel of Time*, men and women were wholly equal. They wielded power together in perfect balance. By the time the series begins that balance has been gone for thousands of years. The world has regressed from a high-tech paradise to a pre-industrial feudalistic society, and the reason for that regression is the divide between men and women. Instead of men and women collaborating and wielding power—both political and magical—together as equals, women now rule most of the world. In the parts of the world where men and women still share power, they either do so as separate entities, with men and women ruling over their own specific spheres of influence or forming recognizable classist feudal societies where a wealthy aristocracy exploits a peasant underclass. Essentially, this imbalance between men and women creates a matriarchal parallel of our own deeply patriarchal society, where history and culture reinforce women as inherently stronger or superior to men, just as our own history and culture subtly position women as secondary to men. Because of this, *The Wheel of Time* ultimately becomes the story of a generation of people repairing their broken, imbalanced world.

Gender, Power, and Magic in *The Wheel of Time*

To understand the nature of how gender is portrayed in *The Wheel of Time*, you must understand how deeply it's ingrained into Robert Jordan's work. Gender, along with a binary division between men and women, is present in nearly every aspect of *The Wheel of Time*. This notion of balance between men and women being the key to building a perfect (or at least better) world goes down to the actual laws of nature in Jordan's world. The universe is built by the turning of a literal force called the Wheel of Time. As the wheel turns, it builds time and space from a power called the True Source. The True Source makes up every aspect of space and time and is split in two gendered halves. The female half is called *saidar* and the male half *saidin*. Jordan's conceit about the balance between men and women refers not only to social constructs but to the building blocks of all creation. "'Saidin, the male half of the True Source, and saidar, the female half, work against each other and at the same time together...'" (*The Eye of the World* 170-171)." This idea of the masculine and feminine simultaneously pushing against each other and working together will come up not only in the magical and fantastical elements of the series, but in virtually every interaction between men and women.

This gendered magic system is a major point of contention among critics of the series, and rightly so. As fantasy author Marie Brennan points out in her article about gender in the series, this implication of an inherent binary division between men and women and certain fundamental truths about the nature of masculinity and femininity undermines otherwise positive representations of women. Another critic, Sylas K. Barrett points out the problematic nature of the system's utter disregard for nonbinary people as well as the ways the supposedly fundamental natures of men and women contradict the characterization of the women in the series, specifically the idea that feminine power is derived through being yielding or surrendering. These are all good points and fair criticisms of the series. The problem that arises is that many critics stop at the gendered magic system, often declaring it—and the series as a whole—inherently sexist. Jordan's magic system is a fundamental building block of the world and it is absolutely emblematic of Jordan's views on gender, but it is just one aspect of a complex depiction of gender and Jordan's concept of balance between the masculine and the feminine and to declare the series sexist (or especially progressive) without considering the whole text is a flawed method of analysis.

Interestingly, the idea of balance is part of the legacy of Tolkien in Jordan's work. While there are almost no significant female characters in Tolkien's work, the concept of some supposedly perfect balance between the masculine and feminine is present. In "The Feminine Principle in Tolkien," Melanie A. Rawls argues that Tolkien codes various traits as masculine or feminine, and that taking on too much masculinity or femininity becomes a source of evil or chaos. Like Jordan, Tolkien applies this gender balance to the building blocks of his secondary world:

Through *The Silmarillion* runs this theme: in Arda and in the Heavens, the Feminine and the Masculine are present; when they are in equilibrium and in harmony, there is Good, but Evil is the result of an insufficiency or a disharmony of the attributes of one or the other of the genders. Concepts of Feminine and Masculine and their attributes and roles are thus tied to concepts of Good and Evil... (Rawls 1)

This quote applies almost exactly to the depiction of balance between men and women in Jordan's work, but where the examples Rawls pulls from Tolkien are individuals, Jordan depicts an entire world that is fundamentally broken, with various nations and cultures displaying various forms of imbalance.

But what do these elements of Jordan's world building have to do with the way the series portrays the relationship between gender and power? The answer lies in its connection to magic. Like any great fantasy story, *The Wheel of Time* is full of magic, and like other fantasy texts magic simultaneously represents both a force for change and reinforces cultural and social structures. In "Magic as a Tool of Social Construction: Cultural and Gender Identity in Contemporary Fantasy," Matthew Elder writes:

...magic acts as both a force of shaping and as a force of change; another way to look at this is that magic both binds and divides identities on both the large and small scales. It is binding in the way that societal and cultural values form around it, and it is divisive in the way that it excludes those without magic or those with a different type of magic. However magic can also be the force that bridges the boundaries that it apparently maintains; just as it can be the force that demolishes societal or individual cohesion. (Elder 25)

In *The Wheel of Time*, magic is tied to those gendered aspects of the True Source, which positions magic in *The Wheel of Time* as a tool that upholds the divisions between men and women and a tool to abolish the systems and traditions that maintain them. Women channeling *saidar* and men channeling *saidin* have access to a force known as the One Power. In the utopian age of legends, men and women worked together to channel the One Power to perform miracles and create a society without war or poverty. When the *saidar* and *saidin*—and the men and women channeling them—are in balance, the result is peace and prosperity. Magic is used to provide for all people equally. This is all abstract, however. The age of legends is just the backstory to *The Wheel of Time*. It lays the foundation for the actual story. By the time the narrative begins, the age of legends has been over for three thousand years, any semblance of balance between *saidar* and *saidin* is a distant memory, and magic is the sole dominion of women.

Within the actual narrative, the One Power is the key to the exclusively female Aes Sedai maintaining their power. Because of their ability to wield *saidar*, almost everyone in the world of *The Wheel of Time* fears or respects the Aes Sedai. Kings and queens defer to their judgment or outlaw their presence in order to avoid ceding any influence to them. Everywhere the Aes Sedai go, they carry the implicit threat of using the One Power as a tool of violence. The fact that the Aes Sedai willingly make themselves incapable of using the One Power as a weapon hardly matters; the mere possibility of entering conflict with an Aes Sedai is enough to give them almost unchecked influence wherever they go. Across all the different cultures in *The Wheel of Time*, women are able to gain and hold political and military power through their ability to use the One Power. The queens of Andor train to become Aes Sedai. The secretive Wise Ones of the Aiel lead their people. The captains of Sea Folk ships wield the One Power to control their vessels. And the Seanchan Empress commands a massive army of enslaved channelers to spread her empire and destroy her enemies.

All throughout the *Wheel of Time* women use the One Power in various ways to exert their will on the world.

Just as women use magic to gain power, they use it to deny power, both to men and to women who are unable to channel. Any woman unable to channel, or who channels weakly, is inherently lesser than an Aes Sedai in any part of the world. They use the status granted by channeling to bully and coerce other women. They use their status to claim any magical artifact that might help people. They use their power to force any woman who can channel into their ranks, regardless of what the woman wants. The Aes Sedai represent the imbalance between men and women taken to the extreme. Their power has corrupted them, and they abuse that power in order to maintain it. They have been so twisted by their unchecked power that magical strength is the only way they judge influence within their ranks. Age, experience, and knowledge do not enter into the Aes Sedai hierarchy. In *New Spring* the first thing a sister learns when she becomes Aes Sedai is how the hierarchy operates:

“Now you must learn to compare your strength to that of every sister you meet...If a sister stands higher than you in the Power, whatever her Ajah, you must defer to her. The higher she stands above you the greater your deference.” (173)

The only thing that matters is strength in the One Power. Their obsession with strength comes out when they interact with people outside their order, as they consistently think of themselves as inherently better than anyone with less or no strength in the One Power. In many ways, they are identical to entrenched patriarchal cultures in the real world. For the women of *The Wheel of Time*, this is the way things always have been, and by extension the way they always will be. Further, women—especially the Aes Sedai—have no interest in changing any status quo as they benefit from the status quo just as powerful men in the real world do.

There are other groups of female channelers besides the Aes Sedai. They also represent the flaws with an imbalance between men and women, though not as extreme as the corruption of the Aes Sedai. Among the Aiel, the exclusively female Wise Ones hold most of the power. Many of them can channel, but not all, and strength in the One Power is irrelevant to one’s standing. However, they operate in a sphere totally separate from the male leadership in their culture. The male and female leaders only collaborate in the most desperate instances. The Sea Folk use the One Power to manipulate the weather when they sail. Men and women on their ships work together, but the Sea Folk channelers are forced to work alone. Then, of course, there are the Seanchan, whose channelers are enslaved. They are the backbone of the Seanchan empire’s power, but they have no agency. Every major culture in *The Wheel of Time* has a group of female channelers in a position of power, and that power is somehow flawed due to a lack of equivalent male channelers.

On the part of men, the Aes Sedai hunt down and kill any man who channels the One Power. Men go in fear of Aes Sedai. They are wholly unable to trust any sister at her word, despite the fact that the Aes Sedai are ostensibly meant to serve and defend them. While death and madness are inevitable for any man who channels, the Aes Sedai never give them the opportunity to determine their own fate and take it as a given that there is no cure for the Dark One’s corruption. Even when the Dark One’s taint is cleansed from *saidin*, the Aes Sedai conspire to subjugate or destroy the

protagonist's newly formed order of male channelers. The Aes Sedai are so committed to the divide between men and women, and the ways they benefit from it, that they outright reject their chance to restore the balance. In *Crossroads of Twilight*, one Aes Sedai argues that working with the male channelers goes against everything the Aes Sedai stand for. Even Egwene, the protagonist whose actions are responsible for smashing much of the Aes Sedai's traditions sees alliance with male channelers as antithetical to the mission of the Aes Sedai:

The Black Tower was a blight on the face of the earth, as great a threat to the world as the Last Battle itself. The very name suggested connections to the Shadow, not to mention being a direct slap at the White Tower. The so-called Asha'man—no one used the name without adding “so-called,” or saying it with a sneer; “guardians” it meant in the Old Tongue, and they were *anything* but guardians—the so-called Asha'man were men who could *channel*! Men doomed to go insane if the male half of the Power did not kill them first...Men like this had *destroyed* the world, destroyed the Age of Legends and changed the face of the world to desolation. This was who they were being asked to make *alliance* with. If they did so, they would be anathema in every nation, and rightly. They would be scorned by every Aes Sedai, and rightly. It could not be. (573-574)

Here, we see the entrenchment of the gender divide in action. Egwene does not even consider collaborating with the Asha'man. Her preconceived notions regarding male channelers are so deeply ingrained that she rejects the possibility outright, instead deciding the only course of action is to manipulate the Asha'man until they served their purpose, then kill them all. Egwene cannot entirely be blamed as she spent her entire life raised to consider men who can channel the most dangerous thing in the world and to consider the Aes Sedai the supreme power. But this is a huge blind spot for Egwene, who otherwise spends the series working to enact massive change among the various orders of female channelers.

Most telling is Egwene's reaction to the name Asha'man, and the fact that it means “guardians.” Her reaction mirrors the way men react to the name Aes Sedai: “servant of all.” Just as Egwene and the Aes Sedai cannot imagine male channelers being guardians, the men of the world cannot imagine Aes Sedai serving anyone other than themselves. Of course, the Aes Sedai and other female powers are not solely to blame for the imbalance in the world. The Aes Sedai are the most powerful group in the world, so their flaws are magnified. The men—especially the male channelers—are just as responsible for the state of the world. After all, it was the ancient male channelers who went off without the women and got the world destroyed in the first place.

As far as the Asha'man are concerned, Egwene and the Aes Sedai are somewhat justified in their mistrust. The male half of the Source has only been cleansed for a matter of days at the point of that last quote, and before that male channelers were guaranteed to go violently insane. Also, the leader of the Asha'man is not only evil, but he and the story's protagonist Rand are very intentionally setting up the Asha'man as a challenge to the power of the Aes Sedai. Rand's ultimate mission is to rebuild the utopian Age of Legends, but his defining characteristic in this stretch of the story is that he is cold and calculating, only concerned with political maneuvers and shoring up his

power. Rand's intention from the start was to use the One Power to usurp the influence of the Aes Sedai and reinforce his own growing power over the world. Just as the Aes Sedai and other women use magic to uphold the status quo of the world, Rand and his male channelers use it to tear that status quo down, and they do so violently. The first scene depicting the Asha'man using their power is the perfect example of this, and in many ways it is a microcosm of all the various gender conflicts at play in the series.

When the Asha'Man come on the scene at the end of book six, *Lord of Chaos*, the actions of the male channelers upend the balance of power that has existed for thousands of years. In this scene, the protagonist Rand has been kidnapped by the loyalist faction of the Aes Sedai (the opponents of Egwene's rebel faction). A massive battle ensues as various forces try to rescue Rand or capture him for themselves. The Aes Sedai find themselves at the center of the battle and wholly unable to defend themselves with the One Power. The Aes Sedai are only permitted to use the One Power as a weapon in the last defense of their lives (note that the "servants of all" are never allowed to use the One Power to protect someone else's life), so until the fighting draws close, the most powerful women in the world are forced to rely on their bodyguards and common soldiers. The other channelers in the battle have no such limits. The Aiel, with their slightly more balanced gender roles, wield magic as a weapon against the Aes Sedai. And when the Asha'man finally arrive, they unleash the One Power against their enemies without mercy:

"Asha'man, kill!" The front rank of the Shaido exploded. There was no other way to put it. *Caidin'sor*-clad shapes burst apart in sprays of blood and flesh. Flows of *saidin* reached through that thick mist, darting from figure to figure in the blink of an eye, and the next row of Shaido died, then the next, and the next, as though they were running into an enormous meat grinder. Staring at the slaughter, Rand swallowed. Perrin bent over to empty his stomach, and Rand understood fully. Another rank died. Nandera put a hand over her eyes, and Sulin turned her back. The bloody ruins of human beings began to make a wall. (*Lord of Chaos* 979-980)

This is, perhaps, the defining moment of the Asha'man until the very end of the series. What we see here from the male channelers is the exact opposite of the philosophy of the female channelers. The Asha'man show up and massacre thousands with *saidin* while the Aes Sedai willingly limit their ability to use the power as a weapon in order to make themselves more trustworthy to regular people. In one instant, the Asha'man have completely shattered the world's power structures. They are not only able to use their magic as a tool of violence where the women are not, they are more than willing to do so. On one side of the divide we have women artificially limiting their own power, and on the other we have men wielding their power with absolute impunity. The ramifications of this shift in the balance become clear almost immediately. Rand and his followers take twenty-three Aes Sedai prisoner, and when the Aes Sedai aligned with Rand arrive, he orders them to join the prisoners. "Kneel before the Lord Dragon, or you will be knelt," says the leader of the Asha'man, and the balance tips too far in the opposite direction. The corruption and complacency of the Aes Sedai is replaced with violent revolutionary male channelers bent on claiming the power that had been denied them for thousands of years. In attempting to fix the world by himself,

without the influence of women especially, Rand only succeeds in fracturing it even more.

Gender, Violence, and Power

What stands out about this scene is the way it displays the complex relationship between femininity, masculinity, and violence. Violence and masculinity go hand in hand in fantasy. In the time between Tolkien and the contemporary texts in the genre, these masculine displays of violence were largely displayed in a positive light. At best they invoke images of knightly chivalry in the tradition of folklore and Arthurian legends. At its worst it becomes a hollow, titillating spectacle, like we see in the books Jordan wrote prior to *The Wheel of Time*. There are exceptions to this of course, and I do not intend to claim that Jordan and *The Wheel of Time* were the first to offer more complex depictions of violence in fantasy. However, *The Wheel of Time* does represent a mix of mainstream success, influence in the genre, and critical acclaim that previous texts never achieved. We can see a rapid influx of more complex fantasy texts in the years following *The Wheel of Time*, and the success of Jordan's books are a reason for that.

In her thesis *Cripples, Bastards, and Broken Things: Masculinity, Violence, and Abjection in A Song of Ice and Fire and Game of Thrones*, Tania Evans describes this relationship in George R.R. Martin's *A Song of Ice and Fire* series. While Evans is focused on a different text, her claims about Martin's books apply directly to *The Wheel of Time*. Not only were Jordan and Martin friends and colleagues, but Martin's books are directly inspired and influenced by Jordan's series, both in their themes and plots. Evans claims that Martin portrays violence in his books as both "inherently masculine" and "inherently monstrous" and the same principle applies to *The Wheel of Time*.

Violence in *The Wheel of Time* is tied to maleness and masculinity, and just as Evans describes in her thesis, Jordan consistently codes violence as being reprehensible or "monstrous." The Asha'man unleashing the male half of the power with such brutality is one of the most prominent examples, but the principle rings true throughout the series. In the climax of *Lord of Chaos*, the Asha'man are technically the heroes. They come to the rescue of the protagonists at the last second to save the day. But their triumph is immediately undercut by the revulsion of Rand and Perrin and the subjugation of the Aes Sedai, which itself invokes imagery of sexualized violence. Outside of this scene, violence is portrayed as a corrupting influence for both men and women, even when it is done for supposedly noble or heroic reasons. For the men, the effects of violence appear in familiar ways. Almost all the male characters are traumatized by the violent acts they commit, witness, and receive. Rand becomes cold and closes himself off from the people closest to him. He and Mat both lay awake, haunted by the faces of the people they've killed. Lan is willing to throw his life away because of the influence of his patriarchal upbringing that values masculinity. One young man, Aram, is shunned by his family after rejecting their pacifist beliefs. All of them fight and kill for admirable reasons, but the ramifications of their actions are never ignored.

The portrayal of the relationship between violence and toxic masculinity are one of the elements of the series where Jordan's experiences and worldview shine

through. His own experiences, both in Vietnam and growing up in the conservative American south, give Jordan a profound understanding of the connection between masculinity and violence. However, that conservative worldview and decidedly masculine perspective causes Jordan's portrayal of the relationship between women and violence to take some strange turns and contain some large gaps relative to his writing about men.

Jordan portrays violence and toxic masculinity as corrupting the psyches and souls of his male characters. For the women in the series, there is little portrayal of the traumatic effects of violence. Jordan almost never portrays any kind of domestic abuse or sexual violence against women, at least beyond threats, and as such the series never deals with the effects of this kind of violence. There are dozens of female point of view characters in the series, and Egwene is the only one who displays evidence of trauma after being captured and imprisoned. But where Rand and the other male characters display the effects of acts they commit and acts committed against them, Egwene only displays trauma as a victim rather than as a perpetrator of violence. This is partly due to a failure in representation in the series. Even though there are plenty of female soldiers and warriors and women in every other role, these women are tertiary, serving as set dressing rather than fully realized characters. The roles the principle female characters take, from central protagonists like Egwene to many of the lesser point of views who have only a handful of chapters, fulfill typical feminine roles in fantasy. Laura Măcineanu lays out some of these stereotypical roles in her essay "Feminine Hypostases in Epic Fantasy: Tolkien, Lewis, and Rowling." She outlines roles like the virginal "white goddess," the shieldmaiden, the wise woman, or the temptress. By a wide margin, Jordan's main female characters fall into the wise woman or temptress category. The women who would find themselves suffering from trauma after committing acts of violence simply do not have their perspectives explored. Most of the female point of view characters are Aes Sedai or members of the nobility. These women are rarely forced to use violence, and when they do commit acts of violence, it is never portrayed as monstrous in the same way male violence is. Instead of being traumatic as it is to men, women committing acts of violence is portrayed as a corruption of their femininity.

When it comes to female warriors and fighters and soldiers, this corrupting or destroying of femininity comes up in predictable, stereotypical ways. Two of the most prominent examples are Min and Birgitte, who embody the trope of the tomboy character. They both fight and kill, and Birgitte ends up commanding an army. Both Min and Birgitte eschew traditional feminine traits. Instead they dress in men's clothes, they swear and drink and hang out with the guys. In short, they're not like other girls. The other female warrior we spend time with is Aviendha, an Aiel Maiden of the Spear. Aviendha can maintain her femininity as a warrior due to the Aiel culture having fluid gender roles. Aiel men and women have their own spheres, especially when it comes to leadership and politics, but in most cases what we would recognize as masculine or feminine roles are shared by men and women among the Aiel. When it comes to warfare and violence, women are not just permitted to fight, they are encouraged to. For Aviendha, being feminine or taking on traditionally masculine roles like warfare are not a binary choice the way they are for Min and Birgitte. She is both a woman and a warrior, and there is an entire subculture of women just like her. However, even the

Aiel have limits to moving between men and women's spheres. If Aviendha wants to get married and start a family (she does), she must give up the spears and the found family she has in the Maidens of the Spear. If she wants to become a Wise One and lead her people (she does), she must give up the spears. Aviendha and the rest of the female Aiel warriors in the series can maintain their feminine identities as warriors, but they cannot fully embrace all the aspects of their identity.

For the Aes Sedai, using their power, at least their magical power, for violence is not just forbidden, it is impossible. Every Aes Sedai takes a magical oath that makes her physically incapable of harming someone with the power unless she truly believes her life is in imminent danger. Even in times when their lives are in danger, Aes Sedai avoid fighting with the One Power on principle. Instead, they use their power to intimidate or distract rather than fight, often convincing people they are both willing and able to attack them with the One Power when they are not. The Aiel channelers again represent a middle ground. The Wise Ones are technically permitted to use magic as a weapon, but they find it inappropriate and distasteful. Again, we see that using this purely feminine power source for violence is regarded as inherently wrong or unnatural. Perhaps the best example of this is the Seanchan. The Seanchan enslave every woman who can channel and use them as the backbone of their colonial empire's military. The Seanchan channelers use the One Power to maim and kill without hesitation or remorse, but their ability to do so is the result of a truly abominable act—an absolute corruption of the natural order. A woman must be enslaved and brainwashed before using *saidar* for violence becomes natural.

Seizing vs. Surrendering: Men and Women Wielding Power

The different ways men and women wield magic or violence, or some combination of the two, helps reveal Jordan's perspective on the ways men and women exercise power. However, perhaps the most revealing aspect of the series in this regard is the language Jordan uses to describe magical power and the ways men and women exercising other forms of power upholds the principles he outlines. Robert Jordan describes the process of channeling *saidar* and *saidin* as being essentially polar opposites. In order for women to channel *saidar*, they must first "surrender" to the power's flow. Meanwhile, male channelers must "seize" *saidin* and fight against it before they can channel its power. When the women in the series begin learning to use *saidar*, Jordan uses traditionally feminine imagery, comparing the act of channeling to flowers blooming in the sun. Men are described as wrestling with a torrent of power and bending it to their will. And while this idea of women surrendering themselves to gain power while men seize power is only explicitly laid out within the magic system, this dynamic is present all throughout the series as men and women gain and wield various forms of power and influence.

This dynamic plays out in many ways throughout the series, sometimes very subtly. Luckily, it also plays out very obviously in the arcs of Rand and Egwene, the two most important characters in the series. Rand is the embodiment of seizing power. Everywhere Rand goes he takes power through overwhelming magical power, military force, or political capital. Once Rand seizes power, he immediately uses his power to enact sweeping, systemic changes in whatever city-state or nation he is in. Rand gets

his first taste of seizing power in a very literal way in the third book, *The Dragon Reborn*, when he conquers the nation of Tear. Rand enters the impregnable fortress the Stone of Tear with an army of Aiel warriors and takes the magical sword Callandor, marking him as the Dragon Reborn and granting him unprecedented magical power. With this power in hand, Rand immediately begins changing Tear's classist, caste-based society. Once in charge of Tear, Rand takes power from the aristocracy and merchants and grants the peasant underclass previously unheard-of rights and legal protections. He opens Tear to the Aes Sedai for the first time in thousands of years, forcing the people of Tear to confront their fear and hatred of women who can channel. Rand does all of this unilaterally. Most of the Tairen nobility opposes him, only following him out of fear or begrudging respect. Rand has little concern for the politics of Tear, and less understanding. He simply took power, then used it to do what he thought was right.

This pattern plays out with Rand a few more times between *The Dragon Reborn* and the seventh book *A Crown of Swords* as Rand conquers and reforms huge swaths of the world. Rand's next destination is the Aiel waste, where he proclaims himself the chief of all the Aiel. Once he becomes the leader of the Aiel, he decides to reveal a three-thousand-year old secret that immediately fractures their society and upends their worldview before opening up their holy city to be settled and using the One Power to bring water to their desert home. In Cairhien, he again topples the aristocracy through conquest and begins reforming their government to put an end to the political "game of houses" the nobles of Cairhien are famous for so he can hand the whole country to his lover, the heiress of their rival nation, which he has also conquered and subjugated. There is a scene in *A Crown of Swords* where Rand's opponents in Cairhien have installed a new queen in his absence (the kidnapping sequence examined earlier). Rand enters the palace and gives an example of what his method of taking and wielding power looks like:

...Colavaere made a visible effort not to flinch as Rand reached out and took hold of the Sun Crown. There was a loud crack of metal snapping, and the crown flexed...slowly straightening...He held up the stretched arc of metal, and slowly it bent back on itself until the ends met...one moment the crown was broken, the next it was whole again...No one among the nobles made a sound...Perrin thought they might be afraid to... "Whatever can be done," Rand said softly, "can be undone." (142-143)

Rand walks in and overthrows a queen by sheer force of will. He ignores customs, laws, and politics, and simply acts. He unilaterally decides the future of nations. He unilaterally decides that the influence of the Aes Sedai no longer matters and offers amnesty for male channelers. Rand seizes power and uses it however he wants, making him the personification of Jordan's idea of the natural way men come into power.

Egwene parallels Rand in many ways. Both are ambitious and grow to become the most powerful rulers in the world. But Egwene's method is the exact opposite of Rand. Where Rand ignores systems and cultures to force radical change, Egwene steps herself in different systems and finds a way to create radical change from within those systems. Egwene learns this method early under the harsh tutelage of the Aes Sedai. Egwene has to learn all the intricacies of White Tower customs and politics. Shortly after her training with the Aes Sedai commences, Egwene finds herself captured and enslaved by the Seanchan and her method of immersing herself in

cultures to claim power truly takes shape as she performs the role of a meek captive in order to learn about the strange Seanchan society and how best to undermine their growing power. These experiences in the first books are learning experiences that solidify Egwene's views on how best to come to power.

Egwene takes her first real steps toward power among the Aiel. While Rand is destroying their ancient customs and worldview, Egwene is engaging with it. She learns the ways of the Aiel, and her dedication to and respect for their beliefs wins the respect and friendship of the Wise Ones. Egwene enters the Aiel Waste as just another outsider, then engages with their culture in order to learn from them, and ultimately becomes an influential voice among the Aiel and forges a powerful alliance between the Aiel Wise Ones and the Aes Sedai that not only enforces Egwene's power and influence, but undermines Rand's. After becoming an honorary member of the Aiel, Egwene returns to find herself in the middle of a civil war between rival factions of the Aes Sedai. Upon Egwene's arrival among the rebel Aes Sedai, the leadership elects her to the position of Amyrlin Seat, ostensibly making her the leader of the faction. But the rebels only elected Egwene as a symbolic gesture to curry favor with Rand, intending her to be a puppet for the more powerful members of the faction. Instead, Egwene learns every detail of Aes Sedai law and custom, every obscure precedent in history, and weaponizes the laws of the Aes Sedai against the people trying to manipulate her. Among the rebel faction Egwene is able to use these systems to open up Aes Sedai training to thousands of women the Aes Sedai would have considered too old or too weak and finally gain almost complete control of the war against the opposing faction. Where Rand or one of the other male characters would have thrown around magic or military power to gain influence and change customs, Egwene quietly manipulates laws and customs in her favor.

Everything comes to a head when Egwene is captured by the loyalist Aes Sedai faction. Egwene is stripped of her ranks and titles and put back into training in an effort to humiliate her and force her followers to surrender. At this point, Egwene puts together her Aes Sedai training, her time as a Seanchan prisoner, her time with the Aiel, and her detailed understanding of Aes Sedai laws and customs to withstand a silent, peaceful protest against the tyranny of Elaida, the loyalist Amyrlin. Egwene surrenders to the humiliation and torture, biding her time until she can shore up her growing number of allies and overthrow Elaida. Every time Egwene suffers and refuses to lash out or fight back, she undermines Elaida's authority and gains the respect of more Aes Sedai. In the end, when crisis strikes the White Tower, Egwene is able to use the respect she's gained to save the White Tower, usurp Elaida, and end her war without firing a shot. She becomes the leader of a unified White Tower and the only person whose power rivals The Dragon Reborn.

Egwene and Rand's different experiences in coming to power give us some insight into Jordan's view of masculine and feminine power. For men, power comes from raw strength and force of will. For women, power comes from deception, manipulation, and coercion. This is one of the aspects of the series that leans into fantasy literature's past rather than looking toward its future. For all Jordan's efforts to put women in diverse roles throughout the series, his depiction of a world ruled by women is steeped in typical real-world sexism and genre tropes. To be fair, neither Jordan nor Sanderson (who wrote the scenes of Egwene unifying the Aes Sedai after

Jordan's death in 2007) depict women ruling this way as inherently negative. It's depicted as natural and inevitable. Men are rash and foolish, women are cold and manipulative, so you need them both in power to effectively run a society.

There is another method of gaining power in *The Wheel of Time*, and that is by divine intervention. Jordan introduces a phenomenon called ta'veren, which is essentially the concept of plot armor or plot convenience made into a codified element of the magic system in the series. The three principal male protagonists Rand, Mat, and Perrin, are ta'veren, which means fate and chance twist themselves around them to make increasingly unlikely events occur. These three male characters are handed this magical power while the female characters have to work and train for every scrap of magical ability or political power they gain. In her essay "Transgendered Magic: The Radical Performance of the Young Wizard in YA Literature," Jes Battis points out that similar situations play out in other fantasy stories. One of her examples of male characters being given (or at least having some natural disposition magic or other talent) abilities while women have to work for them is from *Harry Potter*: "there is also a sort of transparent gender binary of male/female at work throughout the texts. There seem to be two critical poles of magic in Rowling's world: there is *learned* or competent magic, as embodied by Hermione Granger, and then there is *intuitive* or creative magic, which Harry himself demonstrates on several occasions" (316). The mechanics of how this plays out is different in *Harry Potter* and *The Wheel of Time*, but the principal is the same: men are given what women have to work for.

The Turning of the Age: Restoring the Balance

Thus far we have seen many of the ways *The Wheel of Time* portrays an imbalanced, unequal relationship between men and women. But, as previously stated, *The Wheel of Time* is all about fixing those issues and building a better world. The characters find ways to create social change both by working with in the systems of their world and by smashing those systems outright. The fascinating choice Jordan (and Sanderson) make is to not show the reader the ultimate result of those changes. In *Archaeologies of the Future*, Fredric Jameson says that the utopian—the authors, the texts, the actual revolutionaries—are focused on finding ways to repair the broken elements of society rather than detailing new descriptions of "bourgeois comfort" (12). Along these lines, *The Wheel of Time* stops short of detailing this potential utopia. It shows us the problems, it shows us the ways people fought to change them (or fought against changing them), and leaves the reader to decide if their efforts were enough to build a new Age of Legends.

In the previous sections I examined the relationship between male and female magic users and the parallels between Egwene and Rand's rise to power throughout the main body of the series. In this section, I will re-examine these relationships in the final chapters of the series. The best place to start is where I just left off, with Rand and Egwene. The two characters enter book fourteen, *A Memory of Light*, as the most powerful rulers in the world. Everyone fighting for the light is split between their two factions, between loyalty to The Dragon and loyalty to the Amyrlin Seat. The fate of the world rests on these two characters—the most powerful man and the most powerful woman—finding a way to compromise and share their power. The two enter

the negotiations displaying the same traits they used to get to this point. Egwene is quiet, calm, calculating power balances and using her friends to gather information on Rand. Rand comes in making demands. He insists on having supreme, unilateral authority over every aspect of the upcoming conflict as well as forcing every nation in the world to halt all attempts at expansion and enter a peace treaty. He even threatens to refuse to fight The Last Battle and let the world be destroyed if all the other rulers refuse any of his demands. Predictably, they make no progress and come dangerously close to going to war with each other. What turns the tide is Rand and Egwene taking on strategies that Jordan previously coded as inherently feminine or masculine, respectively. Rand stops making demands and begins making compromises for the first time since coming to power. He relents on many of his demands, even surrendering possession of the seals to the Dark One's prison (the largest point of contention in the conflict) to Egwene. Egwene, meanwhile, abandons subtlety and manipulation. She makes her demands and she refuses to back down for any reason. Rather than biding her time and letting her opponents move against her, she uses Rand's tactics against him and uses the full weight of her power without concern for the reaction of Rand and his allies. She is prepared to go to war with The Dragon Reborn to do what she thinks is right.

Neither Egwene nor Rand get to the point where they can work together on their own. They both see their own friends and allies taking on these traits and making these same compromises to their "natural" roles in the lead up to the last book. Egwene witnesses Aes Sedai eschewing their traditional cold, manipulative methods to great success. Characters like Nynaeve and Cadsuane go against both Aes Sedai custom and Jordan's constructed natural gender roles, and their influence shows her that women (and Aes Sedai) don't need to move in the shadows or manipulate people to gain and exercise power. Rand watches his friend and arguably closest ally Perrin come into his own as the ruler of their home the Two Rivers, and Perrin could not do that without the influence of his wife Faile. Faile shows Perrin that there is more to masculinity than being "strong" or hard and that there is nothing wrong with stopping to think and examine a problem instead of rushing in and smashing everything the way Rand does. Rand sees Perrin and Faile's method of leadership grow his sleepy farming village into a massive, diverse, prosperous city. And this speaks to the larger theme of *The Wheel of Time*: it's not about Rand or Egwene. It's about everyone, from the most powerful to the weakest. All their efforts come together to change things.

For the Aes Sedai and Asha'man, a restored balance means finding new roles and identities in a changing world. Among the Aes Sedai, this means reclaiming the duties they had abdicated. The Aes Sedai are split into different groups called Ajahs, each with a different focus. The Green Ajah exists to fight the armies of the Dark One, the Yellow Ajah are healers, the Brown Ajah are scholars, and the Red Ajah hunt down male channelers. Yet when the series starts, there are no green sisters fighting Trollocs, there are no yellow sisters healing the sick, and the brown sisters hide their knowledge behind the walls of the White Tower. It's only at the very end that these groups of Aes Sedai are seen fulfilling their supposed roles. Only the red sisters maintain their duty to the world, and in the end, they are forced to rebuild their identity in a world where *saidin* is no longer tainted. Where the other sisters simply take the step of engaging directly with the world instead of pulling the strings of rulers from the shadows, the

Red Ajah have to build a new identity and role from the ground up. What that role will be is not entirely clear. Some sisters take Asha'man as warders. Some change ajahs. One sister and one Asha'man—Pevara and Androl—discover something new. They find a way to link together and share their powers. It redefines the relationship between the Aes Sedai and male channelers. Prior to their discovery of an equivalent sharing of control while linking together, circles (the name for groups of men and women linking their powers) had to be controlled by men. This was true even in the supposedly balanced utopia of the Age of Legends. It is only through the collaboration of a red Aes Sedai and a male channeler—two natural enemies—that a truly equal form of sharing power is discovered.

Like the Aes Sedai in the Red Ajah, the Asha'man must find a new identity after The Last Battle. When Rand created the Asha'man, he created them for the sole purpose of fighting the Dark One; little more than warm bodies to throw at the war effort. They were specifically trained to be living weapons and put through grueling, dehumanizing training to prepare them for their mission. With the fight against the Dark One coming to an end, Logain, the leader of the Asha'man, is forced to confront what the future means for him and the men he is responsible for. Throughout the fighting, he is obsessed with claiming a weapon that will allow him to protect the Black Tower from a world built to hate men who can channel. He becomes obsessed with maintaining the Black Tower at the cost of everything else, which is exactly the mindset that led to the Aes Sedai abdicating their roles as servants of the whole world. In the end, though, Logain rejects his obsession and chooses to embrace the role of being guardians, the same thing Egwene refused to believe before. He abandons his chance at ultimate power to rescue innocent people, and one of the women he rescues tearfully promises to have her son tested for the gift (not the curse) of channeling, and Logain declares, “the Black Tower protects. Always” (*A Memory of Light* 1119). In that moment, the Asha'man and Aes Sedai are positioned to protect and serve the world, together, and the balance between women and men—between *saidar* and *saidin*—can begin to be restored.

Conclusion

The focus of my analysis of *The Wheel of Time* has been on gender, but the changes the characters enact on their world also concern race, class, and technology. *The Wheel of Time* is a massive, complicated series, and even my focus here has barely scratched the surface on gender politics in the series. There are positive and problematic representations of gender politics and women in *The Wheel of Time* that I missed here. One omission I want to address is the lack of analysis of the changes in the series once Brandon Sanderson took over writing after Robert Jordan's death. While there are fairly significant changes to the style and even structure of the books, Sanderson was ultimately a hired gun. Any decisions or changes he made to Jordan's notes and drafts had to be approved by Jordan's editor (his wife) and others from TOR Fantasy. I ultimately decided that Sanderson's contributions had very little change to the representation of gender in the series—especially in relation to the most important characters.

With that addressed, I want to return to the complexity of *The Wheel of Time*, because that is what draws me to the series and the fantasy genre as a whole. Further, I think it's what makes fantasy books worth analyzing. Books like *The Wheel of Time*, *The Lord of the Rings*, *Harry Potter*, and on and on sell millions of copies to a diverse audience. They represent a space to explore our ideas about the world and our society, and they in turn reflect our values back to us. In the case of *The Wheel of Time*, we're discussing a series with millions of readers—many of them young and impressionable—being fed a specific view of gender, and as Kameron Hurley describes in "We Have Always Fought," readers internalize the worldview fed to them by literature. Fantasy is a wildly popular genre. *The Wheel of Time* has sold millions of copies. *Harry Potter* and *The Lord of the Rings* and *A Song of Ice and Fire* have sold millions of copies. There is a demand for these stories, and these stories are informing the worldview of their readers. I believe it is the responsibility of scholars to understand what popular texts like this are telling their readers, and what draws people to them in such large numbers.

The Wheel of Time serves as a perfect case study of the genre. Its position in the history of fantasy as a transitional text means it provides elements of the genre's past as well as making overtures to the genre as it stands today. It shows the potential for the genre as a space to challenge cultural norms and imagine new ones as Robert Jordan works to reconcile his traditional worldview with the rapidly changing world of the 1990s and early 2000s as ideas surrounding gender and sexuality rapidly shifted.

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Richardson's Prediction

Jerry Keeney

Every day, people rely on accurate, up-to-date weather forecasts to help them plan their days and weeks. Meteorologists are counted on to inform their viewers on whether they will need to dodge rain showers during their Sunday brunch, bring a heavier coat to work in response to colder temperatures, or when they will need to postpone football games or other activities and stay sheltered while a severe thunderstorm passes through their area. While the viewers receive the forecast in simplified language on television, they often don't get exposed to the mathematics that is involved behind the scenes in making weather forecasts. Without mathematics, these forecasts could not be made with much certainty. Despite its essentialness, the use of mathematics in forecasting the weather is a relatively young and overlooked concept. The first successful mathematics applications in the field of weather forecasting would be made in 1922, by a man named Lewis Fry Richardson. By utilizing complex mathematical concepts, namely partial derivatives, Richardson would break barriers in, among other fields, the creation of short- and long-term weather forecasts, providing a template for numerical weather prediction that meteorologists in the coming decades would be able to make stark use of.

Richardson was born in Newcastle, England on October 11, 1881 in a Quaker family. He attended Bootham boarding school in York, England at age 12, receiving a science education with an emphasis in natural history. He attended Durham College of Science in 1898 for math, physics and chemistry; he then moved to King's College in Cambridge, England to study physics, graduating first in his class in 1903 [8]. He held off on graduate school until later in his life, receiving a doctorate in Mathematical Psychology in 1947 from the University of London. Richardson had constantly changing interests in the fields of natural science [8]. This led him to work at a variety of scientific institutions during his career, including The National Physical Laboratory in the United Kingdom and The Meteorological Office—the UK's equivalent of the United States National Weather Service. His pacifist beliefs passed down to him from his family allowed him to avoid military service during World War I. Richardson's son, Stephen, wrote about his father's pacifistic character in a personal biography [8]. According to Stephen, Richardson's unwillingness to participate in World War I would bite him in the future, not allowing him to receive tenure nor a high academic position at any university [8]. Richardson died on September 30, 1953 at the age of 71.

Prior to the 1920's, mathematical weather forecasting was still a fairly unprecedented concept. Efforts to predict the weather have been recorded as early as the days of the ancient Greeks, Chinese, and Babylonians. For many centuries, the art of weather forecasting was basically to observe the sky and make a prediction based on what the forecaster saw and what conditions he or she knew to have taken place in that area previously. According to an archive from NASA's Earth Observatory, the Babylonians tried to predict short-term weather changes by observing the appearances of the clouds and the presence of other visible phenomena [14]. In ancient Greece, the philosopher Aristotle attempted to describe the properties of various weather phenomena, including lightning, hurricanes, and tornadoes. According to NASA, his writings were considered to be the standard for weather prediction by the general

society for nearly two millennia [14]. His ideas were largely discarded in the 1600's when it was found that many of his findings about the formation of the various weather phenomena were severely inaccurate [14]. While such methods for weather prediction seem rather simplistic today, they were the best means available to civilizations for weather prediction in earlier centuries. It was only with new innovations and research that better techniques would develop and better understandings of weather would become prominent.

The next real innovations in weather forecasting came throughout the late 1800's, as scientists came up with a way to illustrate weather conditions and changes: surface maps. An example of an early surface map is given in Figure 1.

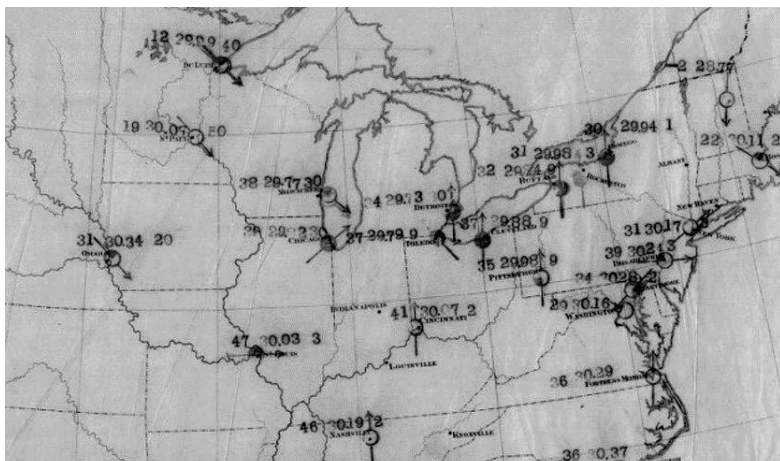


Figure 1. Surface weather map created in 1871 by the National Weather Service [6].

Despite this innovation, there still wasn't a well-established, effective means of predicting the weather. Scientists could illustrate weather conditions and future changes on a map. But making accurate predictions for short-term and long-term weather conditions to draw on those maps was still an unprecedented task. Therefore, starting in the 1900's, the attention turned to mathematics as a viable option for forecasting weather. Richardson himself, writing in his book *Weather Prediction by Numerical Process*, did state that he was not the first person to attempt a weather forecast via mathematics [15, p. 43]. According to Richardson, an attempt at mathematical forecasting was made in 1908 by Felix Exner [15, p. 43]. However, Exner derived a prediction equation using observed temperatures and mean zonal wind calculations to showcase the advancement of a surface pressure pattern, which would not turn out to be of much practical use in making an actual forecast. Therefore, with no real established weather prediction model up to that point, Richardson was delving into new territory with his use of mathematics in forecasting the weather. And in 1922, Richardson would become the first known person to find success in applying mathematics to predicting the weather.

Richardson's first series of weather-related mathematical computations involved changes in pressure at a given location over a 6-hour period that ended in little success. However, the equation most associated with Richardson became known

as the Richardson number, named after Richardson himself [7]. The Richardson number is a value that Richardson derived to show the relationship between buoyancy and wind shear in the atmosphere. Buoyancy refers to the upward force applied by a fluid on an object based on the density difference between the object and the air around it [1, p. 150]. Wind shear refers to the rate of changing of wind speed and direction with height [1, p. 233]. The Richardson number equation, in its most basic variation, is written as follows:

$$Ri = \frac{\text{Buoyancy}}{\text{Wind Shear}} = \frac{g}{\rho} \frac{dp/dz}{\left(\frac{du}{dz}\right)^2}$$

where ρ equals density, g equals gravity, z represents depth and u represents wind speed [7].

The Richardson number is critical in weather forecasting, as it provides a mathematical means of depicting the density of the air in the various levels of the atmosphere, along with the wind speeds in those layers as well. Tornadoes, for instance, are one phenomenon that rely heavily on buoyancy and wind shear for their formation. In fact, according to the National Weather Service, buoyancy and wind shear, along with instability, are the primary ingredients that are measured by forecasters to predict tornado activity [13].

Richardson's mathematical techniques heavily involved the use of derivatives, especially partial derivatives. A regular derivative of a function shows a rate of change of a variable with respect to another variable. Partial derivatives, in contrast, are used in functions of more than one variable, only taking the derivative of one variable while holding the others constant [9, p. 633]. The Richardson number equations shown above is an example of an equation in which the rate of change in one variable can be shown by taking its derivative while leaving the other variables constant.

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A sample problem demonstrating the use of partial derivatives will follow, but it is first important to understand why a partial derivative is an effective mathematical concept to use for predicting weather. Consider the variable of temperature, for instance. It would be fairly simple to determine the temperature at a given location by just reading a thermometer. If it reads 47 °F, then that's the temperature at that given time. However, that information won't tell how the temperature in that location will change one hour from now, one day from now, or one week from now. To aid in this prediction, consider a function for temperature:

Let the temperature T be dependent on a couple of variables a and b . The function for this setup is

$$T = f(a, b)$$

The partial derivative of the function with respect to a is

$$f_a(a, b) ,$$

and the partial derivative of the function with respect to b is

$$f_b(a, b) .$$

Suppose that $f(a, b) = ab^3$ and that we want to solve for $f_b(a, b)$. To do this, just take the derivative with respect to b and leaving a constant.

$$f_b(a, b) = 3ab^2$$

Taking the partial derivatives of such functions allows meteorologists to evaluate the rate of changes in certain meteorological variables with respect to other variables, such as the rate of change in temperature in relation to humidity or change in wind speed with atmospheric height, thus allowing them to see patterns or trends and ultimately predict how much or in what ways the weather will change for a given location on a given day or time. Richardson's number is just another one of those functions.

Now, the Richardson number formula is just one equation used in making a single weather forecast, and it's not one that can be easily solved in a short period of time. As demonstrated in the sample problem above, many variables are considered when determining the change in various weather phenomena. Most of the calculations that are used routinely by government weather forecasters, private sector forecasters, and even television meteorologists, would take days, weeks, or even years to perform by hand. For the first twenty years following his meteorological discoveries, Richardson, and weather forecasters like him, would have to perform these tedious mathematical calculations by hand. Even when making his first computations for pressure, according to NOAA, Richardson took six weeks to complete his calculations and only had the help of a slide ruler and a table of logarithms [11]. However, starting in the 1940's, computers would come along and begin to save many scientists a lot of time.

In 1946, the first digital programmable computer was introduced. Constructed at the Moore School of Engineering at the University of Pennsylvania, the Electrical Numerical Integrator and Computer (ENIAC) pioneered technology that would be able to perform mathematical calculations too tedious and time-consuming for humans to perform on their own [3]. In the coming years, more computers like the ENIAC, and better, would be more widely distributed and available for use at universities and at government weather offices.

In the 1960's, supercomputers would hit the scene, making even faster and more complex mathematical calculations possible. These supercomputers made their way into the National Weather Service offices, allowing the NWS to make the short-term and long-range weather forecasts that many people rely on to this day. According to the National Weather Service page on supercomputers, these supercomputers take data that is collected from radar, weather balloons, satellites, and other technology and perform the mathematical calculations that allow humans to predict every type of

weather hazard, including severe weather, extreme temperatures, and even space weather [12]. In addition, according to the National Weather Service, the data that is collected is distributed across the United States and around the world, assisting forecasters in other countries in making their own respective weather forecasts [12].

The addition of computers and supercomputers clearly saved scientists a lot of time and hard mathematical work that otherwise would have taken years to perform. While Richardson did not live long enough to experience the impacts that computers had on weather forecasts, he was made aware of the advancements made by the ENIAC and eventually supercomputers. Peter Lynch wrote about Richardson's response to the release of computers in his book, *The Emergence of Numerical Weather Prediction: Richardson's Dream* [5]. According to Lynch, Richardson responded by saying that, despite the initial batch of calculations produced by the ENIAC taking almost a day to create, the computer was a major advancement in the field of science [5, p. 290].

Richardson's research in mathematics, as it applies to weather forecasting, is arguably what he is best known for. However, Richardson used similar mathematical techniques to make contributions in other areas outside of weather. His pacifistic beliefs led him to not want to be involved in any wars. He did, however, find much interest in researching the causes of war and ways to prevent them. It's believed that he was able to find success in applying similar mathematical techniques to these areas as he was able to in the field of meteorology. However, few records of his mathematical success in this field are known to still exist. Thomas Körner wrote about Richardson's life in his book, *The Pleasures of Counting* [4]. According to Körner, Richardson had found out that his findings could be of value to chemical weapons designers in creating weapons to help further the war causes, and he did not want to contribute to those efforts [4, Chapter 9]. In response, according to Körner, Richardson seized all his research efforts in the field of war and had his findings destroyed before any of them could be made public [4, Chapter 9]. This likely explains why hardly any records of Richardson's mathematical contributions to causes and prevention of war are known to exist.

In addition, Richardson was credited for developing his own method for solving a system of equations. The method he came up with is known as a type of iterative method, a method in which successive estimations are used to draw closer to a solution for a system of equations [2]. The basic concept for the Richardson iteration method is expressed as follows:

If given a linear equation, written as

$$Ax = b,$$

then the equation in Richardson iteration is written as

$$x^{(k+1)} = x^{(k)} + c(b - Ax^{(k)}),$$

where c is a scalar of the equation such that $x^{(k)}$ is convergent.

Being an iterative method, the idea is that the person doing the calculations will repeat their process, using their estimation again and again to come closer to an approximate solution to the system of equations or, alternatively, determine that the system does not converge. According to David Strong writing for the Mathematical Association of America, an iterative method such as this one is likely the only means of finding a solution for non-linear systems, although it's highly effective for finding the solutions to linear systems as well—particularly equations with several variables that would take a long time to solve by more common methods such as the elimination or substitution methods [10].

While credited with mathematical contributions in various fields, discoveries by Richardson, such as the modified Richardson iteration or the war research, are mostly explored only by the most enthusiastic math hobbyists. Richardson is most widely known to modern-day audiences for his contributions in the field of weather forecasting, and his mathematical techniques and expertise are still applied by meteorologists in numerical weather prediction to this day. Richardson's equations are some of the many series of equations that are programmed into the computers and supercomputers used by meteorologists today. According to NOAA, more than 200 million observations are taken each day and processed into regional and global models, which then generates forecasts of various weather phenomena (hurricanes, tornadoes, volcanic eruptions, etc.) as the final products [11]. The result of this processing power and access to data is an average computational speed of 14 trillion calculations per second, nearly 15 million model runs generated each day, and almost 6 million global model runs [11]. An example of a 48-hour United States model run is given in Figure 2.

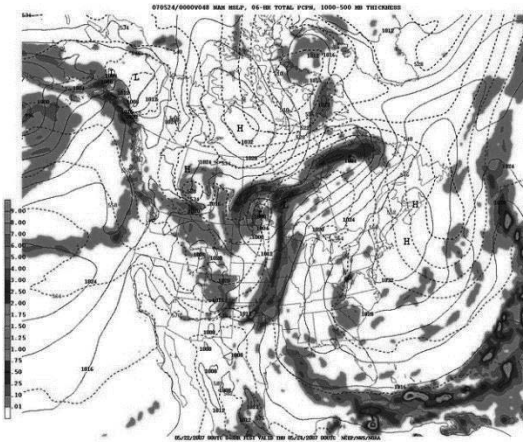


Figure 2. A 2-day forecast run from the North American Mesoscale model showcasing average sea level pressure (in millibars), temperature of the atmosphere and total precipitation (in inches) over a 6-hour period [11].

With daily, weekly, monthly, and even yearly weather forecasts becoming more accessible, albeit being accurate no more than 7 days in advance as of this writing, the next major focus for scientists is to create accurate regional and global weather and climate models that can predict the weather conditions a year or more in advance and predict the state of the Earth and its various climates over the periods of years, decades, or even centuries.

The study of meteorology is still a relatively young science. The majority of scientific developments and advancements in the field of meteorology have only come about within the past century. Richardson broke ground in 1922 with his application of differential equations to predicting the weather. He was not the first person to attempt using mathematics towards weather prediction. But he was the first known person to find success in doing so and the first to make such contributions that would prove useful to future meteorologists. With the addition of supercomputers, calculations that took Richardson months to perform can now be done in a matter of milliseconds and several of them at a time. As important as Richardson was in contributing to the study of meteorology, he is not well-renowned outside of the weather community. In the mathematics community, he is nowhere near as recognized as such established great figures as Archimedes or Leonhard Euler. This is understandable, as Richardson was not known to have created a new mathematical theorem or have really made contributions to the well-established fields of mathematics, such as number theory or calculus, outside of his method for solving a system of equations. Richardson is also overlooked likely in part to the fact that much of his work is no longer known to exist and thus can't be analyzed or studied. However, Richardson still deserves a mention when discussing the greatest mathematicians, as his mathematical contributions continue to be used by meteorologists to this day in their efforts to help the general public plan their days. Richardson may be a lower profile, if not underrated, mathematician, in retrospect. But his research and scientific endeavors resulted in mathematical equations that have made it possible to create accurate short-term and long-term weather forecasts that nearly all people rely on. Whether those people realize it or not, it was Richardson who made the art of weather prediction possible.

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Women in Mathematics: A Historical Account of Women's Experiences and Achievements

Molly Soltis

Throughout history, women have been looked down upon and seen as insubordinate and incapable. Women were never viewed as equal to men until about the 1950s. It is quite uncommon to hear, see, or read about many women and their additions to the field. History will also tell us that men dominated the mathematical scene and have made the biggest contributions in that field, yet this does not seem to be the case. Women have had just as big an impact on math as men have, if not a bigger contribution. They still continue to change the mathematical world today. Various women such as Hypatia from the ancient Greeks, Maria Gaetana Agnesi from the Modern Enlightenment in Italy, Mary Fairfax Somerville from the Imperialist English, and Grace Chisholm Young from England at the turn of the century have all contributed in major ways to the mathematical community.

Hypatia of Alexandria (370 CE - 415 CE) was a female philosopher and mathematician, born in Alexandria, Egypt possibly in 370 CE. She was the daughter of the mathematician Theon, the last Professor at the University of Alexandria, who tutored her in math, astronomy, and the philosophy of the day which, in modern times, would be considered science (see, e.g., [1]).

Nothing is known of her mother and there is little information about her life. As the scholar Michael A. B. Deakin writes, "The most detailed accounts we have of Hypatia's life are the records of her death. We learn more about her death from the primary sources than we do about any other aspect of her life (see, e.g., [1])."

In a city which was becoming increasingly diverse religiously, Hypatia was a close friend of the Roman prefect Orestes and was blamed by Cyril, the Christian Archbishop of Alexandria, for keeping Orestes from accepting the "true faith." She was also seen as a "stumbling block" to those who would have accepted the "truth" of Christianity were it not for her charisma, charm, and excellence in making difficult mathematical and philosophical concepts understandable to her students, concepts which contradicted the teachings of the relatively new church (see, e.g., [1]).

By all accounts, Hypatia was an extraordinary woman not only for her time, but for any time, and she was a popular public speaker. Michael Deakin cites the ancient historian Damascius describing her public lectures: "Donning the tribon [the robe of a scholar, and thus an essentially masculine item of apparel], the lady made appearances around the center of the city, expounding in public to those willing to listen on Plato or Aristotle or some other philosopher... There was a great crush around the doors [of her house], a confusion of men and horses, of people coming and going and others standing about for Hypatia the philosopher was now going to address them and this was her house (see, e.g., [1])."

Her father, Theon, refused to impose upon his daughter the traditional role assigned to women and raised her as one would have raised a son in the Greek tradition, by teaching her his own trade. Scholar Wendy Slatkin writes, "Greek women of all classes were occupied with the same type of work, mostly centered around the

domestic needs of the family. Women cared for young children, nursed the sick, and prepared food (see, e.g., [1])."

Hypatia, on the other hand, led the life of a respected academic at Alexandria's university, a position to which only males were entitled previously. Deakin points out that she surpassed her well-respected father as evidenced by ancient testimonies to her brilliance. She never married and remained celibate throughout her life, devoting herself to learning and teaching. The ancient writers agreed that she was a woman of enormous intellectual power, even the Christian writers such as John of Nikiu who were hostile toward her. Deakin comments, "[t]he breadth of her interests is most impressive. Within mathematics, she wrote or lectured on astronomy (including its observational aspects - the astrolabe), geometry (and for its day advanced geometry at that) and algebra (again, for its time, difficult algebra), and made an advance in computational technique - all this as well as engaging in religious philosophy and aspiring to a good writing style. Her writings were, as best we can judge, an outgrowth of her teaching in the technical areas of mathematics. In effect, she was continuing a program initiated by her father: a conscious effort to preserve and to elucidate the great mathematical works of the Alexandrian heritage (see, e.g., [3])."

Devastatingly, Hypatia was murdered in 415 CE by a Christian mob who attacked her on the streets of Alexandria. The primary sources, even those Christian writers who were hostile to her and claimed she was a witch, are generally sympathetic in recording her death as a tragedy. These accounts routinely depict Hypatia as a woman who was widely known for her generosity, love of learning, and expertise in teaching Neo-Platonism, mathematics, science, and philosophy (see, e.g., [3]).

Maria Agnesi (May 16, 1718 – January 9, 1799) was a female mathematician, born in Italy. Maria was the eldest of 21 children. Her father was Pietro Agnesi and because of his wealth he was able to afford her the best tutors in the land. He earned his wealth through silk, but many sources have also said he was a mathematician. Maria did many things, but her most notable accomplishment is known as "the witch of Agnesi (see, e.g., [4])."

Maria Agnesi was known for being a child prodigy (called the "oracle of the seven tongues"); by the time she was nine years old she knew many different languages and would give performances on her knowledge in a special room of her father's home. She was very shy, but she wanted to please her father, so she continued to show her talent to many others. Due to the time and the fact that she was a female, higher education for women was not practiced, so at the age of nine she published a Latin discourse defending education for women. This was done with the help of one of her tutors (see, e.g., [4]).

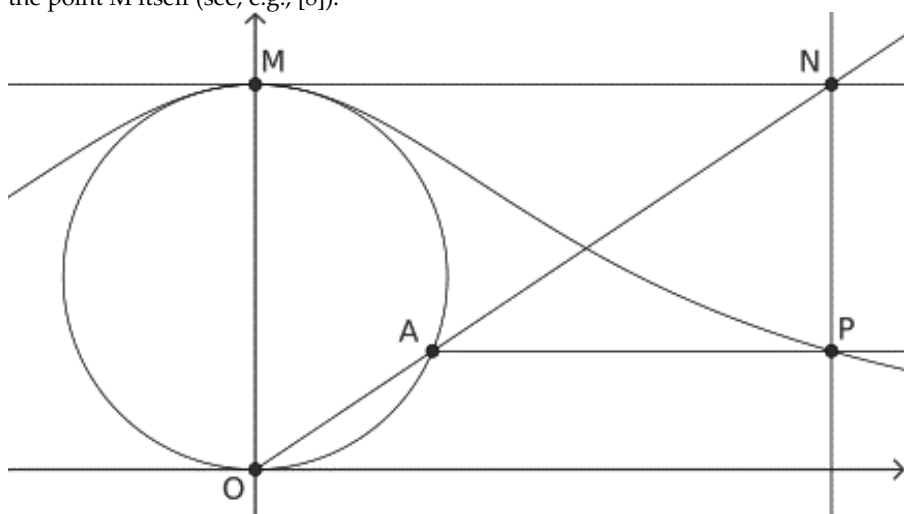
When she was twenty, she published "Propositiones Philosophicae" which was a series of essays on philosophy and natural science. These essays would be a topic of discussion many times, and she would defend them with all her knowledge. Her free time was spent studying religious books and learning mathematics. She wrote a commentary that was never published on de L'Hopital's "Traite analytique des section coniques." Another book that she had published was "Istituzioni analitiche ad uso della gioventu italiana" (Analytic Institutions for the Use of Italian Youths). This book was written in Italian, published in her home and was meant to be used as a textbook for her brothers. Her next book, "Istituzioni analitiche ad uso della gioventu italiana,"

had two volumes and was published in 1748. This brought her much fame (see, e.g., [8]).

Pope Benedict XIV honored her by appointing her to be honorary reader at the University of Bologna; later she was asked to accept the chair of mathematics. No one knows with certainty if she accepted or not, but her name remained on the rolls for many years (see, e.g., [8]).

Another book she wrote "Instituzioni Analitiche" did not have original works from her, but it was full of examples. In this book Maria discussed a cubic curve now known as the "Witch of Agnesi." The name "witch" derives from a mistranslation of the term *aversiera* ("versed sine curve," from the Latin *vertere*, "to turn") in the original work as *avversiera* ("witch" or "wife of the devil") in an 1801 translation of the work by Cambridge Lucasian Professor of Mathematics John Colson (see, e.g., [8]).

To construct this curve, start with any two points O and M, and draw a circle with OM as diameter. For any other point A on the circle, let N be the point of intersection of the secant line OA and the tangent line at M. Let P be the point of intersection of a line perpendicular to OM through A, and a line parallel to OM through N. Then P lies on the Witch of Agnesi. The curve consists of all the points P that can be constructed in this way from the same choice of O and M. It includes, as a limiting case, the point M itself (see, e.g., [8]).



Now suppose that point O is at the origin and point M lies on the positive y-axis, and that the circle with diameter OM has radius a . Then the curve constructed from O and M has the Cartesian equation $y = \frac{8a^3}{x^2+4a^2}$. This equation can be simplified, by choosing $a = 1/2$, to the form $y = \frac{1}{x^2+1}$. In its simplified form, this curve is the graph of the derivative of the arctangent function. The Witch of Agnesi can also be described by parametric equations whose parameter θ is the angle between OM and OA, measured clockwise: $x = 2a \tan \theta$ and $y = 2a \cos^2 \theta$ (see, e.g., [8]).

The main properties of this curve can be derived from integral calculus. The area between the curve and its asymptotic line is four times the area of the fixed circle, $4\pi a^2$. The volume of revolution of the Witch of Agnesi about its asymptote is $4\pi^2 a^3$.

This is two times the volume of the torus formed by revolving the defining circle of the witch around the same line (see, e.g., [8]).

The curve has a unique vertex at the point of tangency with its defining circle. That is, this point is the only point where the curvature reaches a local minimum or local maximum. The defining circle of the curve is also its osculating circle at the vertex, the unique circle that "kisses" the curve at that point by sharing the same orientation and curvature. Because this is an osculating circle at the vertex of the curve, it has third-order contact with the curve (see, e.g., [8]).

The curve has two inflection points, at the points $(\frac{2\sqrt{3}a}{3}, \frac{3a}{2})$ and $(\frac{-2\sqrt{3}a}{3}, \frac{3a}{2})$ corresponding to the angles $\theta = 60^\circ$ and $\theta = 120^\circ$. When considered as a curve in the projective plane there is also a third infinite inflection point, at the point where the line at infinity is crossed by the asymptotic line. Because one of its inflection points is infinite, the witch has the minimum possible number of finite real inflection points of any non-singular cubic curve (see, e.g., [8]).

Lastly, the largest area of a rectangle that can be inscribed between the curve and its asymptote is $4a^2$, for a rectangle whose height is the radius of the defining circle and whose width is twice the diameter of the circle (see, e.g., [8]).

Maria's life was not a glorious one. She once asked her father to let her enter the convent, yet he denied her. During the remainder of his life, she did as he wished, but she lived in closed rooms of his house and helped old sick women. When he died, she turned her life over to helping ill and poor women, never wanting to talk of mathematics again. Later she became the director of a facility but turned all the earnings over to the facility. Maria later died in the poorhouse and is buried in a mass grave for the poor with fifteen other bodies (see, e.g., [4]).

Mary Fairfax Somerville (December 26, 1780 – November 29, 1872) was born Mary Fairfax in Jedburgh, Scotland, the fifth of seven children of Vice-Admiral Sir William George Fairfax and Margaret Charters Fairfax. Only two of her brothers survived to adulthood and her father was away at sea, so Mary spent her first years in the small town of Burntisland being home-schooled by her mother. When her father returned from the sea, he discovered 8 or 9 year-old Mary could neither read nor do simple sums. He sent her to an elite boarding school, Miss Primrose's School in Musselburgh (see, e.g., [5]).

Miss Primrose was not a good experience for Mary, and she was sent home in just a year. In addition, she took music and painting lessons and instructions in handwriting and arithmetic. She began to educate herself, learning to read French, Latin, and Greek largely on her own. At age 15, Mary noticed some algebraic formulas used as decoration in a fashion magazine, and on her own, she began to study algebra to make sense of them. She surreptitiously obtained a copy of Euclid's "Elements of Geometry" over her parents' opposition (see, e.g., [5]).

In 1804 Mary Fairfax married (under pressure from family) her cousin, Captain Samuel Greig, a Russian navy officer who lived in London. They had two sons, only one of whom survived to adulthood, future barrister Woronzow Greig. Samuel also opposed Mary's studying mathematics and science, but after his death in 1807 (followed by the death of their son) she found herself with the opportunity and financial resources to pursue her mathematical interests (see, e.g., [5]).

She returned to Scotland with Woronzow and began to study astronomy and mathematics seriously. On the advice of William Wallace, a mathematics teacher at a military college, she acquired a library of books on mathematics. She began solving math problems posed by a mathematics journal, and in 1811 won a medal for a solution she submitted (see, e.g., [6]).

She married Dr. William Somerville in 1812, another cousin. Somerville was the head of the army medical department in London and he warmly supported her study, writing, and contact with scientists (see, e.g., [6]).

Four years after marrying, Mary Somerville and her family moved to London. Their social circle included the leading scientific and literary lights of the day, including Ada Bryon and her mother Maria Edgeworth, George Airy, John and William Herschel, George Peacock, and Charles Babbage. Mary and William had three daughters (Margaret, 1813–1823; Martha, born 1815, and Mary Charlotte, born 1817), and a son who died in infancy. They also traveled extensively in Europe (see, e.g., [6]).

In 1826, Somerville began publishing papers on scientific subjects based on her own research. After 1831, she began writing about the ideas and work of other scientists as well. One book, "The Connection of the Physical Sciences," contained discussion of a hypothetical planet that might be affecting the orbit of Uranus. That prompted John Couch Adams to search for the planet Neptune, for which he is credited as a co-discoverer, along with Somerville (see, e.g., [5]).

Mary Somerville's translation and expansion of Pierre Laplace's "Celestial Mechanics" in 1831 won her acclaim and success: that same year, British prime minister Robert Peel awarded her a civil pension of 200 pounds annually. In 1833, Somerville and Caroline Herschel were named honorary members of the Royal Astronomical Society, the first time women had earned that recognition. Prime Minister Melbourne increased her salary to 300 pounds in 1837. William Somerville's health deteriorated and in 1838 the couple moved to Naples, Italy. She stayed there for most of the remainder of her life, working and publishing (see, e.g., [5]).

William Somerville died in 1860. In 1869, Mary Somerville published yet another major work, was awarded a gold medal from the Royal Geographical Society, and was elected to the American Philosophical Society (see, e.g., [5]).

By 1871, Mary Somerville had outlived her husbands, a daughter, and all of her sons: she wrote: "Few of my early friends now remain—I am nearly left alone." Mary Somerville died in Naples on November 29, 1872, just before turning 92. She had been working on another mathematical article at the time and regularly read about higher algebra and solved problems each day (see, e.g., [5]).

Her daughter published "Personal Recollections of Mary Somerville" the next year, parts of a work which Mary Somerville had completed most of before her death (see, e.g., [6]).

Grace Chisholm Young (March 15, 1868 – March 29, 1944) was an English mathematician, born in Haslemere, England. She was educated at Girton College, Cambridge, England and continued her studies at Göttingen University in Germany, where in 1895 she became the first woman to receive a doctorate in any field in that country. Her early writings were published under the name of her husband, William Henry Young, and they collaborated on mathematical work throughout their lives (see, e.g., [7]).

For her work on calculus (1914–1916), she was awarded the Gamble Prize. She was the youngest of three surviving children. Grace and her sister were taught at home by their mother and a governess which was customary during that time. Her family encouraged her to become involved in social work by helping the poor in London. She had aspirations of studying medicine, but her family would not allow it. However, Chisholm wanted to continue her studies. She passed the senior examination for entrance into Cambridge University at the age of 17 (see, e.g., [7]).

Later in life Grace had a tutor by the name of William Young, whom she married the year after she received her Ph.D. at Göttingen. Grace and William spent the next 44 years together having six children together in a span of nine years. Chisholm entered Girton in 1889, four years after she passed the senior entrance examination. At the end of their first year, when the Mays list came out, she was top of the Second class right below Isabel Maddison. In 1893, Grace passed her final examinations and scored the equivalent of a first-class degree. She also took the exam for the Final Honours School in mathematics at the University of Oxford on which she out-performed all the Oxford students. However, women were not awarded formal degrees at that time and Chisholm remained at Cambridge for an additional year to complete Part II of the Mathematical Tripos, which was unusual for women at this time. Chisholm was still interested in continuing her studies and since women were not yet admitted to graduate schools in England, she went to the University of Göttingen in Germany to study with Felix Klein. This was one of the major mathematical centers in the world. The decision to admit her had to be approved by the Berlin Ministry of Culture (see, e.g., [7]).

In 1895, at the age of 27, Grace became the first woman to attain a doctorate in any field in Germany. Again, government approval had to be obtained to allow her to take the examination, which consisted of probing questions by several professors on sections such as geometry, differential equations, physics, astronomy, and abstract algebra, all in German. Along with her test, she was required to take courses showing broader knowledge as well as prepare a thesis which was entitled "Algebraisch-gruppentheoretische Untersuchungen zur sphärischen Trigonometrie" (Algebraic Groups of Spherical Trigonometry.) Grace and William had six children together in a span of nine years; most of their children went on to become mathematicians. In addition to her career as a pioneering woman in what was then a discipline with significant barriers against entry, Grace completed all the requirements for a medical degree except the internship (see, e.g., [7]).

She also learned six languages and taught each of her children a musical instrument. With the approach of World War II, Grace left Switzerland in 1940 to take two of her grandchildren to England. Grace was to return immediately, but because of the fall of France, she could not. In 1944, Grace passed away. Of their six children, three continued on to study mathematics, one daughter became a physician, and one son pursued a career in finance and business. One of Grace's fourteen grandchildren, Sylvia Wiegand, is a mathematician at the University of Nebraska and is a past president of the Association for Women in Mathematics (see, e.g., [7]).

In 1991 the Mathematical Association of America published a book titled *Winning Women Into Mathematics*. The beginning of the book starts off with a list of goals for the 1990s set by the Committee of Participation of Women. It is interesting to

look at the goals set up in the 1990s and compare them with the progress that has been made since then. The goals were listed as follows (see, e.g., [2]):

- Increase public appreciation of the role of women in mathematics, their achievements and problems
- Increase public awareness, especially among parents, teachers, and counselors, of the advantages of mathematics-related careers for women
- Increase the national commitment to supporting mathematical education for girls and women
- Increase the number, not just the percentage, of American women earning a Ph.D. in the mathematical sciences, and of those Women in Mathematics [increase those] achieving advanced academic ranks and other high-prestige positions
- Increase the number of women mathematical professionals of all types
- Increase the percentage of women among MAA members, officers, editors, authors, committee members, and presenters of both invited talks and contributed papers
- Increase support services for minority women and others with special needs
- Decrease both macro- and micro-inequities that women experience
- Investigate the special challenges women face and explore their solutions
- Make more information available for those wanting to help women fulfill their potential in mathematics.

Along with the incredible work provided by Hypatia, Maria, Mary and Grace, there have been incredible strides taken when it comes to the conditions for women in the mathematics field. However, while all of the goals listed by the Committee of Participation of Women have been addressed at some point, none of them have been completely achieved. This list of goals is still very pertinent to the situation for women in the mathematics field today. Whether it has to do with having children or just simply empowering women to rise above the stereotypes, all the articles and books that have been read agree that although much progress has been made, there is still a long way to go to reach equality for women in the field of mathematics.

...there have been incredible strides...when it comes to the conditions for women in the mathematics field. However, while all of the goals listed by the Committee of Participation of Women have been addressed at some point, none of them have been completely achieved.

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Authoritarian Influence: The United States and France

Andrea Lucas

There is no greater threat to democracy around the world today than that of authoritarian influence. The offenses of Russian President Vladimir Putin and the Russian state have been responsible for some of the most detrimental assaults on democracy today. What tactics are Russia and Putin employing to achieve their goals, and how do their results differ between different democratic states? The characteristics of a democracy can make it more or less susceptible to the threats of authoritarians. The structures of democracy in the United States and France as well as recent election outcomes will give insight into this dilemma and the necessary defenses to utilize in order to resist these influences.

In order to understand this complex issue facing democracy, the United States and France will serve as the primary subjects. The methods used will be the comparison of the structural similarities shared by the two states. The causality of the different outcomes will be based on contrasting systems of governments that are used in coordination with differing electoral practices. The recent election outcomes of 2016 and 2017 will provide evidence to this theory.

To understand how authoritarians gain power, we must also understand the playbook autocratic regimes utilize. According to the logic of political survival, in order for autocrats such as Putin to gain influence, they must be able to divide society to seize power. Authoritarian regimes cannot simply decide one day to take control and influence an established democracy. Well-executed strategies recognizing how to infiltrate different democracies to fracture society, undermine government, and gain power are all employed. How well each democracy is able to withstand these threats is another matter.

In recent years, the threat of authoritarianism, particularly from Russia, has been increasing in democracies around the globe. How have these tactics employed by the Russian state been received in the United States and France? These two states share many striking similarities within their governments, as well as distinct structural differences. The most important contrast, however, is the response each democracy has had on Russia's global assault, and thereby the effect it has had on its own democratic strength.

The 2016 election interference by Russia on the US is noteworthy. Russia has meddled in elections before, but the tactics and scale seen in 2016 proved just how precise and widely executed their plan has been and continues to be. Similar tactics have been witnessed in France, in particular the presidential election in 2017, which resulted in less than desirable outcomes for Putin and Russia. What accounts for this difference? With the many similarities France and the US share structurally, there is a crucial distinction that allows the authoritarian regime to more broadly infiltrate American Democracy than that of France: their system of government in coordination with electoral practices.

Variables:	United States	France
Form of Government	Democracy	Democracy
Head of State	President	President
Type of Legislature	Bicameral	Bicameral
Judiciary	The Supreme Court	The Constitutional Council
Type of Constitution	Strong	Strong
HDI Rating	10th. Very High Human Development	21st. Very High Human Development
	<u>Outcome:</u>	<u>Outcome:</u>
Vulnerable to Authoritarian Influence?	Very likely	Much less likely
	<u>Cause:</u>	<u>Cause:</u>
Hypothesis: System of Government	Federal	Unitary
Hypothesis: Presidential Electoral System	Indirect, Electoral College System	Direct, Two-Round Voting System

Today, both states' governments have very distinct similarities. For example, the US and France both have a strong constitution. Why is this an important focus? Neither democracy has the luxury of relying on a long constitutional history filled with tradition and customs. Without this presence of tradition, as seen in the United Kingdom for example, a strong constitution with specific instructions as well as numerous checks and balances on the government keep the democracy stable. These precautions assure that it will be relatively difficult to alter the constitution. To put this into context, since the US constitution was drafted, "It has been amended only twenty-seven times since its passage, and only seventeen times since 1791" (Dickovick and Eastwood, 2019, pg. 180). France's modern-day constitution, adopted on October 4, 1958, has been amended twenty-four times. While this may seem like considerably more amendments in a shorter timeframe than the US, France still has a detailed process the government must undergo in order to pass a constitutional amendment. "A constitutional amendment can be proposed by the President on advice of the Prime Minister or by members of parliament. It must be passed by both houses of parliament sitting separately and ratified by referendum. If the amendment is a government proposal, it may be ratified by a three-fifths majority of a joint session of parliament" (Constitutional History of France, 2016, para. 10).

Each state also possesses a judiciary that acts as a check on government. In France, this is the Constitutional Council. "This branch oversees review of statutes before they are enacted as well as overseeing national elections and answering questions from citizens regarding the constitutionality of laws" (Layout of French Legal System, 2018, para. 7). The Supreme Court of the United States also acts as a check on the US government with its ability to strike down any law the President or

Congress passes if it is deemed unconstitutional. In addition, the bicameral legislatures present in both France and the US work as another defense against tyrannical decisions made if the executive and legislative branch of government are controlled by the same party. This secondary legislative body exists to provide yet another check on the balance of power.

Another similarity in both states is that of development. Both states rank highly on the Human Development Index (HDI). Most recent figures rank the US 10th in the world on this index with very high human development. GDP per capita averages approximately \$57,400. France ranks 21st in the world on this index and averages approximately \$42,300 GDP per capita. Within the larger context, this is an important consideration as it clearly demonstrates that both states invest in institutions such as public education, healthcare, and social welfare. This contributes to the economy, the development of a middle class to exert pressure on government and institutions and thereby cementing legitimacy of the state. Why then has the US been subject to the ramifications of subversive tactics by Russia while France has proven to be more resilient?

What is it that most predominantly differentiates the structures between the US and France? In particular, why is this difference so important when we look at the global assault facing democracy today? While the issue is a complex one, the answer is simple: the logic of political survival. Authoritarians must first and foremost be capable of dividing a society in order to garner power. If division is difficult, so is the accumulation of power and influence. Putin and the Kremlin are employing complex contemporary methods in order to achieve division. "They hack into computers or phones to gather intelligence, expose this intelligence (or false data they manufacture out of whole cloth) through the media to create scandal, and thereby knock an opponent or nation out of the game. At some point Russia apparently decided to apply these tactics to the United States and so American democracy itself was hacked" (Nance, 2016, preface). There is a definitive structural difference between the United States and France regarding their abilities to withstand such drastic methods of division.

The French government and their elections are set up differently than that of the United States. The United States is a federal government that widely practices First Past the Post (FPP) electoral outcomes. The lack of proportional representation in elections facilitates a two-party system that, by its very nature, lends itself to division. In addition, the Electoral College in the US is another complex addition to the scenario that perpetuates the division seen within the state. By contrast, France has a unitary government that practices a two-round system for electing the President. These governing and electoral distinctions prove vital in the fight against autocratic regimes.

How does a federal government, like the US, facilitate the ability for authoritarians to gain power? By revisiting the logic of political survival, autocrats must determine how to divide. Federal governments, by their very nature, are divided. Local communities, counties, states, and the federal government each have a set of laws. What might work for one state may or may not be appropriate for another state, thus encouraging division. For instance, take the example of using face coverings during the current global pandemic. Local jurisdictions make their own judgements and laws according to what is recommended at the time for their respective locations.

However, this can perpetuate division between counties, states, political parties, and eventually the entire country. Russia and other authoritarians will then pinpoint this and other issues that divide society and further exacerbate those divisions.

The electoral practices in the US also do not facilitate protection against Russian influence. The President of the United States is not directly elected by the people and does not even require a majority of votes to win the presidency. The Electoral College, which was once a useful way to equalize power between small and large states, is now an antiquated system that no longer establishes an effective pattern of representation. Besides the obvious dilemma of not electing a president via the popular vote, the Electoral College allows autocratic actors to figure out which states might “decide” an election, employ their strategy in those specific states, and further divide the electorate on hot-button issues. In 2016, “The Russian operatives’ research guided them to target voters in swing states, especially Florida. Their Facebook ads exploited hot-button social and racial issues” (Diamond, 2019, pg. 115). In addition, these tactics were sophisticated enough to encourage “would-be Clinton voters” to vote third party or not cast a ballot at all, thus inflicting enough influence in the election to Russia’s preferred candidate.

By contrast, France has been more successful in recent years in protecting itself against Russian meddling. The unitary government lends itself to unity by its design. France has a central authority under which all local laws are subject to its authority. The less obvious political cleavages there are within towns, districts, and society as a whole, the more difficult it is then to create the division necessary for autocrats to gain power. Thus, the implications of a unitary or federalist government can be significant.

As an additional shield against authoritarian influence, France has a unique electoral system, specifically regarding that of the president. In France, attempts at influence are more obvious and pronounced. Rather than attempting to influence a particular constituency, such is the case in the US Electoral College system, it is more obvious when a particular candidate is targeted. In France, the president is directly elected by the people. According to the Center for Strategic and International Studies, “Most importantly, the French election has two rounds, which creates an additional difficulty for a malign actor to determine which two candidates will make it to the second round. The second round of voting also permits the population to dramatically shift their support to another candidate to block an unexpected result after the first round” (Vilmer, 2018, para. 1). The article continues on to explain that the 2017 French election was the most pronounced failed attempt at Russian election interference in recent history. “The Kremlin neither succeeded in interfering with the presidential election nor in dividing French society” (Conley, 2018, intro). This is absolutely key when it comes to defeating authoritarian influence within a democratic state. Without division, there is no increase in power for the autocrats. In the case of France, the united unitary form of governing, alongside its electoral practices, appear to have saved its democracy from significant division and subsequent foreign autocratic influence.

What can the United States learn from France without turning its federalist and electoral systems upside down overnight? During the 2017 French elections, the institutions in France proved to be strong. France has a National Commission for the Control of the Electoral Campaign as well as a National Cybersecurity Agency. “French

institutions have better protected the integrity of elections than those in the U.S., where, according to Heather Conley, ‘elections are managed at the state level with federal oversight of campaign financing’” (Bulckaert, 2018, para. 5). If the United States could transition to a centralized supervision for elections, this could work to defend against states becoming compromised and less susceptible to foreign influence. Advanced technological warfare is the weapon of choice against democracies around the globe. Every democracy must now learn how to counter these global assaults.

What is truly important as we consider why Russia is interfering in Western democracies, is that for Russia, they are attempting to equate their form of authoritarian leadership with that of democracy. If they are able to sow discord in enough democracies and undermine this system of government, their form of authoritarian government becomes no different by means of rule of law, human rights, and state development. Whichever type of government structure is used, or electoral systems implemented, there will always be strengths and weaknesses of the chosen system. The key to avoiding authoritarian influence is to consistently use strong defense measures, establish effective patterns of representation, and learn from fellow democratic allies how best to win the war against division, disinformation, electoral attacks, and ultimately, authoritarian influence.

If the United States could transition to a centralized supervision for elections, this could work to defend against states becoming compromised and less susceptible to foreign influence.

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Public Apologies in the Age of Internet Influencers

Camelin Cochran Sampson

Abstract

With the rise of cancel culture on the internet, apology videos are becoming more popular by YouTubers and social media influencers. These videos are used to apologize for their wrongdoings. This research analyzes the use of image repair theory in apology videos and how these techniques affect viewers' response to the video. These responses are either positive or negative. This research seeks to gain understanding of how image repair theory has an impact on the effectiveness of cancel culture on influencers or YouTubers on the internet. Using content analysis, it was found that certain image repair techniques did have an impact on the negative or positive response to the video. It also found the amount of apology videos published by the influencer had an impact on viewers' reactions.

Keywords: cancel culture, YouTube, influencers, image repair theory, apology, social media, Social Blade, content analysis

Introduction

Influencers have been a large part in the growing popularity of cancel culture. Cancel culture is defined by CNN (2019) as “diminishing someone’s significance by personal boycott, public shaming, or ostracization”. An inevitable result of cancel culture in an era of social media influencers is YouTube apologies. YouTube has evolved into a place where anyone can speak their mind and have a platform. This led to the growing popularity of YouTube influencers. YouTube influencers have a larger impact on their audience than other celebrities because they are able to make a

Popular YouTube celebrities have multiple apology videos published on their channel, and yet after each video they still have a fan base who continues to help the influencer make money.

connection with their audience (Cohen, 2020). These influencers are viewed more as regular people than traditional celebrities. This makes them marketable to large companies. Cohen (2020) also found “70% of subscribers say that YouTube personalities change and shape pop culture and 60% of them say they would make buying decisions based on the recommendation of their favorite YouTube star over the recommendation of a TV or movie star.”

These influencers are influencing the decisions people make which makes them role models for their audience. This means there is a large backlash when they make a mistake, leading to a YouTube video apology. Popular YouTube celebrities have multiple apology videos published on their channel, and yet after each video they still have a fan base who continues to help the influencer make money. This shows there is no change in their actions. These apology videos are used as a scapegoat for their inappropriate actions. The problem lies with the reason for the apologies and the

size and age of their audience. According to Dredge (2017), there are over 17,000 YouTube channels with over 100,000 subscribers. Dredge (2017) also stated that teenagers were more influenced by “YouTubers” than traditional celebrities. If they are automatically forgiven for their actions, it shows their impressionable audience that these are appropriate actions. Understanding the makeup of these apologies allows viewers to make a more informed decision on who to follow and when apologies are genuine. Through this research, researchers seek to gain understanding of how image repair theory has an impact on the effectiveness of cancel culture on influencers or YouTubers on the internet.

Literature Review

Social Media Persuasion

To have a large following on any social networking site, it requires persuasion of the audience. Riboni (2017) analyzes the language used by beauty video creators to attract their audience: “Makeup application flaws are revealed by makeup gurus as another strategy to build rapport with the audience, to show that they can be self-ironic and also to minimize the risk of losing viewers” (p. 198). Building a relationship between the viewer and the creator is key to an increase in viewership. In the case of beauty YouTubers, it is about acting like a real person with real flaws. If they struggle to do things right in makeup application, it makes viewers feel as if they are one and the same. Riboni (2017) equates the growing viewership in beauty channels to their knowledge of makeup and their ability to create a channel distinguishable from the others. The large quantity of videos makes it difficult for viewers to choose between them, so being creative persuades viewers to click (Riboni, 2017).

Another paper discussed a YouTuber named Zoella and her rise to fame. Her fame can be attributed to her ability to communicate with her audience: “Zoella is careful in the tutorials to communicate a sense of equality with her audience and, hence, to accentuate ordinariness. Repeatedly, she emphasizes that she is not a professional expert but simply an amateur who wants to share her personal interests” (Jerslev, 2016, p. 5242). Her ability to make her fans feel like friends creates a bond with creator and viewer, persuading them to watch her videos. Researchers also found that her vulnerability gave them a reason to click, “...she performs authenticity through straight confessional videos” (Jerslev, 2016, p.5243). These videos included being open about her panic attacks and her struggle with hate on the internet.

Creating this connection can persuade users to donate money or even buy products the creator endorses. In a study from 2019 researchers stated, “...we find that blogger expertise, campaign intent, hedonic value, and interactions among these variables influence engagement on blog and Facebook platforms” (Hughes, Swaminathan, & Brooks, p.89).

Other YouTubers use comedy and shock value to persuade viewers. Researchers Pereira, Moura, & Fillol (2017) searched for an explanation as to why viewers are persuaded to watch YouTubers. They found two key indicators: humor, which was offensive or immature, and self-centered behavior (Pereira et al., 2017). Personality also persuades users. It creates brand trust, the brand being the creator.

Kim, Kwon, and Kim (2018) did research on creating brand trust. Their findings concluded that positive personality dimensions like conscientiousness and agreeableness created brand trust.

For social media influencers it is all about the brand. Lifestyle bloggers use open communication as their brand through vlogging. T. Lewis (2010) researched the branding of lifestyle experts stating, "Through their instructional role as life specialists as well as through their own highly visible lifestyles as exemplary consumer-citizens, celebrity lifestyle experts play a pivotal role in affirming certain modes of consumption-based personal values and ways of living" (p. 594). A lifestyle expert's brand is also about selling a product to make them money. If they do not live up to this brand, they will not make money.

Influencer/YouTuber Communication

The way internet celebrities communicate is important to understand how someone becomes canceled. They work to create a brand for themselves. This brand is then communicated to their viewers through the use of language, body language, and editing of their videos. Some researchers suggest there is a formula to influencer communication. "The adoption of formulas which are repeated in all tutorials seems to suggest that, in order to promote their channel, popular beauty vloggers aim at making their videos easily distinguishable from the plentiful similar ones featured on YouTube, by (among other means) using language strategically" (Riboni, 2017, p. 195). Part of the formula involves "...frequently occurring engagement markers to be found in makeup tutorials are conversational features, questions and directives, evaluative items, and finally deictic expressions which are typical of face-to-face interaction" (Riboni, 2017, p. 196). This formula leads to connection with the viewers' that other celebrities never develop with their audience. This form of communication with their audience makes influencers seem like normal people giving them the ability to influence their audience more effectively.

Other researchers found it more difficult to predict how audiences would react to the creators' online persona. Duffy and Hund (2019) interviewed bloggers who revealed that it was difficult to make users feel content with the content being posted. Followers wanted influencers to be real and authentic but not too authentic (Duffy and Hund, 2019). This leads to users censoring themselves to their followers as explained by Duffy and Hund (2019):

..social media users' activities are structured by a command to project themselves as 'real.' But many of our interviewees—as highly visible content creators facing intensified scrutiny and policing—took considerable measures to stay within the perceived boundaries of this authenticity ideal... social media users sought to avoid posting images that could cast them in a negative light" (p. 4989).

Authenticity in communication from the creator is exhibited in Jerslev's (2016) research on Zoella: "Zoella's communication with her followers, whom she addresses directly, straight to camera, thereby giving the impression of connectedness, with continuous updates on her life." and a temporality of presence and continuity" (p. 5241).

Internet celebrities contrast with traditional celebrities. Their communication is direct and immediate with supporters (Jerslev, 2016). Direct and immediate communication comes from the ability to have intimacy with followers, "...[PewDiePie's] use of slang as a practice of social swearing, which not only simulates casual conversation between friends, but actively reduces social distance, creates the illusion of intimacy, and ultimately helps to establish his unequaled status on YouTube" (Pereira et al., 2017, p. 113).

Unlike traditional celebrities, internet celebrities show more of their life. Their life is on display because it is what made them famous. The "vlog" is a popular format for internet celebrities. Vloggers carry a camera with them during their life and upload it to YouTube. Hou (2018), a researcher from the Netherlands, focused on the internet celebrity. They stated, "the 'slice of life' vlog creates a situation where celebrity practitioners play the role of themselves in their own lives for the sake of staging their lives" (p. 548). This is different from the original celebrity who can separate their life from their character, while internet celebrities are playing a character of themselves. Hou (2018) described this connection, "social media celebrities maintain managed connectedness with viewers and subscribers" (p. 551).

YouTubers come in different forms. News YouTubers are more popular in recent years. R. Lewis (2019) researched the way political YouTubers communicate. R. Lewis (2019) stated that these YouTubers view themselves as a balance to regular media "by building intimate trust with their viewers over time, partaking in long conversations, and maintaining a level of transparency about their production process; they claim to counter the mainstream media's perceived sensationalism and suppressive tactics."

Crisis Communication Through Social Media

In the research on crisis communication, studies found source credibility was important for the audience. Van Zoonen and Van der Meer (2015) stated, "These findings shed light on the importance of strategically matching the crisis-response strategy and the source for organizations to optimize their crisis responses" (p. 382) and "the employees as an online source of information can provoke favorable effects on reputation through source and content credibility" (p. 382). Negative forms of crisis communication were also found: "the negative effect of denial and diminish strategy on organizational reputation was found to be less profound when communicated by employees" (Van Zoonen and Van der Meer, 2015, p. 382).

Image repair theory, originally called image restoration theory, has been used by celebrities, politicians, and athletes for years to avoid the consequences of their mistakes. Image repair theory consists of techniques to repair one's image, including denial, evasion of responsibility, reduce offensiveness, corrective action, and mortification (Benoit, 1997b). Image repair is popularly used in the entertainment industry as a way to apologize for one's actions. In researching the use of image repair by the entertainment business, it was found that denial and evasion of responsibility were popularly used first followed by mortification (Oles, 2010). Oles (2010) analyzed Oprah Winfrey's use of Benoit's theory when apologizing for her actions on her show and the use of a controversial book in her book club. Oles (2010) found that she used

an evasion of responsibility technique and defeasibility. Oprah stated she was “unaware” of the damage she caused by airing an episode about the dangers of red meat (Oles, 2010). Oprah also chose to deny the claims by shifting the blame to others, including her staff in both incidents (Oles, 2010). After these did not work, she moved to mortification which seemed to work in her favor (Oles, 2010).

Benoit (1997a) analyzed how Hugh Grant got his image back after being caught with a prostitute while in a serious relationship. Hugh Grant focused on mortification. His main use of this was to accept responsibility for his actions and express concern for the people he hurt through his actions. He did use denial at one point: “The strategy of denial was useful in limiting the scope of the charges against him. His use of mortification meant that he did not issue a blanket denial, and the fact that his denial was limited to certain accusations may have made it sound truthful” (Benoit, 1997a, p. 262). This choice of using denial would not work if mortification had not been used as well. The mortification downplayed the denial because he still admitted to doing something wrong while denying claims by the media that made it a larger scandal than it was. During this crisis, Hugh Grant appeared on multiple late-night talk shows to talk about this scandal. This was considered bolstering. He used this method again by expressing concern for his girlfriend and their family. These things made his apologies more sincere according to Benoit (1997a).

In 1994, Benoit used image repair theory to analyze the interviews with Tonya Harding after the suspected hit placed on her competitor Nancy Kerrigan. The main strategies Tonya Harding used were bolstering, denial, and attacking one’s accuser (Benoit & Hanczor, 1994). She used bolstering to help her reputation. She explained in her interview that she was verbally and physically abused by her ex-husband and her mother. She also talked about her dream of going to the Olympics, expressed concern for Nancy Kerrigan and promised to donate to the Special Olympics (Benoit & Hanczor, 1994). She used denial by rejecting the accusations that she put a hit on Nancy Kerrigan. She then resorted to attacking the accuser, who was her ex-husband by stating he would do anything to hurt her. She said, “I just want to know why. I never did anything to hurt him. If I ever did anything it was to stick up for him and protect him. And he does this to me” (qtd. in Benoit & Hanczor, 1994, p. 424).

It was decided in this paper that her use of these strategies did not repair her image the way it was intended to. Her statements were contradictory to her actions and her image. According to Benoit and Hanczor (1994), “Tonya Harding was a brash, independent rebel. She was headstrong and proud, a strong competitor who went her own way regardless of what others may have thought” (p.425). The image she portrayed through her image repair was of “a meek, tentative, frightened person who tried her best to meet the expectations of her husband” (Benoit & Hanczor, 1994). Benoit and Hanczor (1994) also found her strategies were less effective because there was no proof to her words, “... all of Harding’s defense rested (only) on her words. Consider her attempts at bolstering. Her apparent attempts to gain sympathy rested on her assertion that Gillooly and her mother had abused her. No corroborating evidence was presented” (Benoit & Hanczor, 1994, p. 426).

Defeasibility as a form of denial is popular with apologies. Benoit (2006) found this was common for President George W. Bush when discussing the results of foreign policy decisions he made while president. He denied he misled the American people

about why the U.S. went to war in Iraq. In Bush's defense, Bush stated, "there is no such thing ...[as] ironclad, absolutely solid evidence" (Benoit, 2006). He did not believe he should be held responsible because there was a lack of accurate information. During John F. Kennedy's campaign for president, there was scrutiny about his religious beliefs. He was a devout Catholic and used image repair to convince voters that his beliefs would not affect his ability to become president. He used denial, explaining, "I am not the Catholic candidate for President. I do not speak for the Catholic Church on issues of public policy" (qtd. in Benoit, 2019, p. 5). Though he was a Catholic, he used denial to show his faith would not affect his presidency.

Lastly, image repair is not used by just celebrities; it is used by whole organizations. Two popular grocery stores in Australia applied image repair to their own scandals. Woolworths used sensitive topics to market their products. This was considered inappropriate by consumers. Grimmer (2017) analyzed these strategies and found "Woolworths used the strategy of reducing offensiveness, specifically bolstering, in response to the crisis. At no stage did they apologize for the campaign; instead they reinforced their positive qualities" (p. 24).

Coombs and Schmidt (2000) researched which image repair strategies were more effective to receive a positive response from the public. In this study, they used corrective action, bolstering shifting blame, and mortification. The research stated, "Any one of the four strategies alone or the combination separation strategy, would produce the same effect on the organization's reputation and potential supportive behavior, whereas all but shifting blame would produce similar effects" (Coombs & Schmidt, 2000, p. 173).

Discrimination and Racism

A common theme among apologies is the use of discriminatory language and racism. Celebrities commonly apologize for using discriminatory language and for being racist. In 2013, Furgerson and Benoit analyzed Rush Limbaugh's "apology" for calling a Georgetown law student Sandra Fluke a "slut" for advocating for birth control health care coverage. His use of image repair for this was to reduce effectiveness. He did this by claiming he meant well. Limbaugh stated, "And who's the villain? I am. I'm the villain for pointing out the consequences of women giving over control of birth control to the government. I'm the villain for pointing out the absolute insanity of all of this" (qtd. in Furgerson & Benoit, 2013, p. 281). He also used denial to explain that he did nothing wrong. He also attacked the accuser stating that what she was asking for was "stupid" and attacked Barack Obama for "violating the Constitution" (qtd. in Furgerson & Benoit, 2013, p. 282). While he used image repair theory, the researchers concluded this was only persuasive to people who were not offended by the original statement. This is because he never offered a formal apology for using the offensive word "slut."

In 2015, Len-Ríos, Finneman, Han, Bhandari, and Perry used image repair to analyze Paula Deen's comments on race including her use of the "n-word." She released official apologies and three YouTube videos. The image repair strategies used were mortification, minimization, attacking one's accuser, and bolstering (Len-Ríos et al., 2015). When minimizing the racist rhetoric, Paula Deen used a colorblind approach

of defeasibility to minimize the issue of race. The researchers explained that, “the defiance strategy, in effect, claims that putting ‘race’ into the equation is unfair, that it absolves public figures of having to address the complexity of racial inequality by arguing that if they did address race, it would lead to a biased, unfair outcome” (Len-Ríos et al., 2015, p. 151). This worked positively for Paula Deen’s apology.

With the changing of communication in the past 10 years, social media and YouTube have become a popular form of communicating to large audiences. This opens up a new pathway to research for image repair theory, its uses in modern society, and usage by social media influencers. These influencers are profiting off of their scandals and these apologies. It is important to understand the results of image repair theory in influencer communication.

Research Questions

RQ1: What image restoration techniques are most popularly used by influencers when having to apologize to their viewers?

RQ2: Do these techniques result in a positive or negative reaction to the apology from their audience?

RQ3: Does the amount of apologies on their channel have an effect on the reaction to the apology?

Methodology

This study will apply Benoit’s image restoration theory to YouTube apologies by popular influencers. This will be done by doing a content analysis of six videos from popular influencers on YouTube or “YouTubers.” Qualitative content analysis is used to categorize qualitative data into predetermined groups (Given, 2012). According to the SAGE Encyclopedia, “qualitative content analysis can be helpful in answering ‘why’ questions and analyzing perceptions” (Given, 2012). This is different from the original quantitative analysis which is less used in communication research (Given, 2012). In this research these groups use the image repair techniques of denial, evasion of responsibility, reducing offensiveness of event, corrective action, and mortification (Benoit, 1997a).

Table 1. Image Repair Strategies. (Benoit, 2006)

Strategy	Definition
Denial	
Simple Denial	Did not perform act
Shift Blame	Another performed the act

Evade Responsibility	
Provocation	Responded to another's act
Defeasibility	Lack of information or ability
Accident	Mishap
Good Intentions	Meant well
Reducing Offensiveness	
Bolstering	Stress positive traits
Minimization	Act less harmful than believed
Differentiation	Act less harmful than similar acts
Transcendence	More important values
Attack Accuser	Reduce accuser's credibility
Compensation	Reimburse victim
Corrective Action	Plan to repair/prevent recurrence
Mortification	Apologize and express remorse for acts

Using image repair theory, the researcher will do a content analysis to find out which techniques from this theory were used more frequently across all six videos. By doing this it will allow a view of which techniques worked and which didn't based on what "YouTubers" used which techniques. The reaction from the video will then be analyzed using features from YouTube and the website Socialblade.com.

To answer RQ2 the YouTube "like" and "dislike" feature will be used. A larger dislike ratio is assumed to mean it was taken negatively and a larger like ratio is assumed to mean it was positively received. Another way to gauge audience reaction is the use of Social Blade. Social Blade is a website that tracks the statistics of almost all YouTube channels. This website allows users to see subscriber count and view count for each week. This will allow the researcher to see how the apologies were received based on how many people unsubscribed. RQ3 will be answered by looking at each influencer's channel to see how many times they have apologized for their actions and where these videos fall in the timeline.

The results section will include a brief summary of each controversy, an analysis of their use of image repair theory, and their subscriber analytics before and after the posting of their apology. The videos being analyzed are "So Sorry" by Logan Paul, "A Long Overdue Apology" by Tana Mongaeu, "Doing What's Right" by Jeffree

Star, "Taking Accountability" by Shane Dawson, "A Message" by Jenna Marbles, and "No More Lies" by James Charles.

Results

Logan Paul

"So Sorry" by Logan Paul was the shortest video at 1 minute and 44 seconds. This video is in reference to a video Logan Paul posted of the Aokigahara Forest in Japan. In the video he showed the body of a man hanging from a tree in this forest after committing suicide. This video used the least amount of image repair techniques. It focused on mortification. He apologized for his actions, explaining he thought his actions were inappropriate and disrespectful. He also used evasion of responsibility. He used the accident form of this technique stating, "I've made a severe and continuous lapse in my judgement" (Paul, 2018). He also explained that this was "unplanned."

Since the video was posted on December 31, 2017, Logan Paul steadily gained followers. The week he posted the original video, he peaked for weekly increase in subscribers (*Figure 1*).

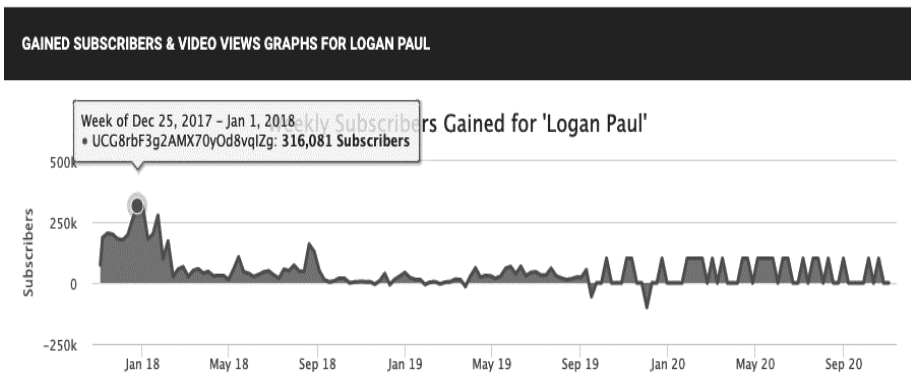


Figure 1. Logan Paul weekly subscribers gained for the week of December 25, 2017 - January 1, 2018 according to socialblade.com (*Logan Paul YouTube Stats, 2020*).

There was a dip in weekly subscribers after posting the apology. Paul's daily subscribers continued to go down and stayed down until September of 2018 (*Figure 2*).

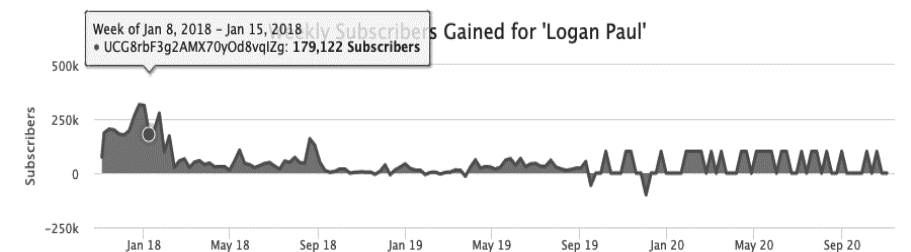


Figure 2. Logan Paul weekly subscribers gained for the week of January 8, 2018 - January 15, 2018 according to socialblade.com (*Logan Paul YouTube Stats, 2020*).

In December 2017, Paul had 14,067,925 subscribers. In January, after posting his apology, he had 15,276,058 subscribers. After the posting of the apology, he increased the amount of subscribers to his account. The data for weekly total subscribers did not go all the way back to January of 2018, but the monthly data shows that he is increasing overall.

This video has 58,675,189 views. It has 1.7 million likes and 2.4 million dislikes. This was his first and only apology video.

Tana Mongeau

“A Long Overdue Apology” by Tana Mongeau was 14 minutes and 46 seconds long. This video is in response to past racist behavior and inauthentic apologies in the past for her repeated behavior. This past behavior included using racial microaggressions toward former friends, using racial slurs on Twitter and other social media platforms, and lack of responsibility during the COVID-19 pandemic after being seen attending large house parties with other influencers (Dodgson, 2020). She was also called out for performative activism on Twitter and Instagram for not addressing the rumors about her use of racial slurs while openly stating she supported the Black Lives Matter movement (Dodgson, 2020). She was also criticized for how long it took her to respond to these allegations and create an apology video.

In this video she used mortification, evasion of responsibility, reducing offensiveness of event, and corrective action. Mortification is the most commonly used in this video. She stated, “First and foremost, I want to apologize for how long this video has taken. There is no excuse, reason or thing to say to make that okay, and I want to take full accountability for that” (Mongeau, 2020). She also stated that she did not deserve a platform because of her actions continuing her use of mortification throughout the video. Evasion of responsibility was used in the form of defeasibility. Using defeasibility, she emphasized she now knows what she was doing was wrong, but at the time she did not know. This is done when discussing her performative activism. She explained that she had good intentions. She thought, “I was doing my justice by posting about Black Lives Matter and Breonna Taylor...” (Mongeau, 2020). She makes sure to state that she understands by not addressing her past, she was being performative with these posts, even if she did not know it at the time.

To reduce offensiveness, she used compensation to convince her followers that she wanted to make a difference. She chose to donate to the NAACP and Feeding America. Corrective action is frequent throughout this video as well. She stated that she now knows the offensiveness of her actions and is working towards being a better person and ally to people of color. She explains she is using the mistakes in her past as a way to work toward understanding her white privilege. Mongeau also uses corrective action when discussing her platform and her content. She wants to create content that is not harmful to society and use it as a form of change: “I don’t want to come back to this platform until I am someone who can shape the youth in far better ways than the things I watched growing up shaped me. I don’t want to be the reason a

young girl grows up the way I did” (Mongeau, 2020). She lists that her video was demonetized and provides petitions she signed to support people during the pandemic and the Black Lives Matter movement.

Tana Mongeau was “canceled” in June 2020 after old friends created videos “exposing” her racist behavior. After this, many Twitter users found videos and tweets of her using the racial slurs. She did not address this formally until September 4th, 2020. In June and into July her weekly subscriber gains chart showed no increase in subscribers but no negative results (Figure 3).

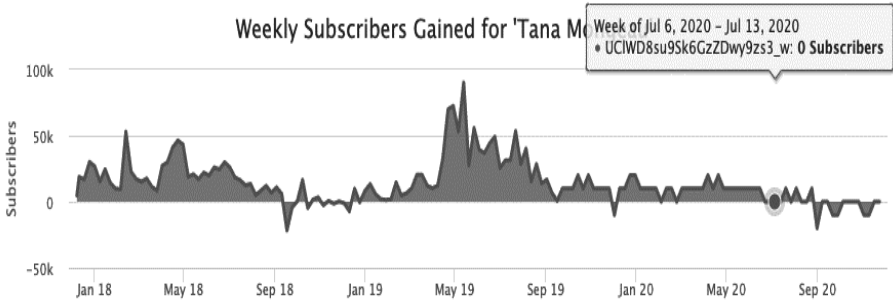


Figure 3. Tana Mongeau’s weekly subscribers gained for the week of July 6, 2020- July 13, 2020 according to socialblade.com (Tana Mongeau’s YouTube Stats, 2020).

After addressing the scandal in September she was in the negative for five straight weeks. The most she lost in one week topped out at -20, 000 subscribers. Overall after publishing this video she lost 60 subscribers.

In this chart (Figure 4), it shows that from July through November, there was no overwhelming growth in her followers, there was also no overwhelming loss in followers. Her followers have plateaued.

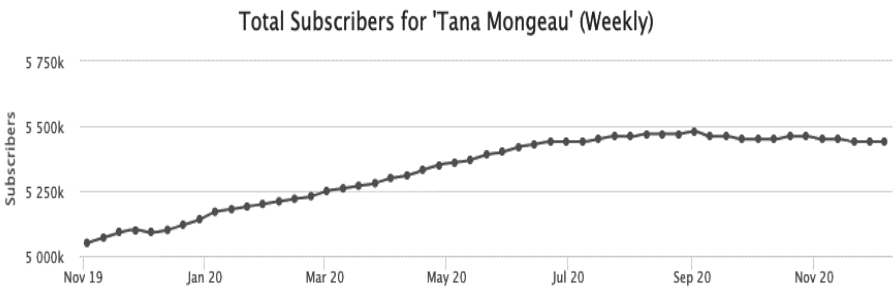


Figure 4. Tana Mongeau’s weekly total subscribers according to socialblade.com (Tana Mongeau’s YouTube Stats, 2020).

This video has 1,894,669 views. There are 40k likes and 110k dislikes. She has five different apologies on her channel and this is the most recent one.

Jeffree Star

“Doing What's Right” by Jeffree Star was 10 minutes and 36 seconds. This video was about allegations put on Star by other YouTubers and past racist comments. These allegations originated from past “drama” among other beauty YouTubers. Star had made allegations toward James Charles. These allegations were brought back up in a video posted by another beauty YouTuber Tati Westbrook. She claimed Jeffree Star and another YouTuber Shane Dawson manipulated her into trying to ruin James Charles’s career. She said they were manipulating her to release a video that would destroy his career (Tenbarga, 2020). They also spread sexual harassment allegations about him. She also stated they had wanted James Charles “out of the way” (Tenbarga, 2020). Jeffree Star also has a history of racist tweets and demonstrated use of slurs.

This was the only video that did not use mortification as the main focus of the apology. He simply just apologized to James Charles but does not apologize for the racist behavior. There was no formal apology. His “apology” used denial, reducing offensiveness, and corrective action. He used simple denial stating, “I didn’t try to take anyone down. I am not a villain in a movie. This isn’t a Netflix series with a crazy storyline.” He went on to say “... a lot of things that are happening and being said are false” (Star, 2020).

His use of reducing offensiveness includes using transcendence. He used transcendence by claiming there are bigger problems that Americans should be focusing on. After discussing his wrongdoings, he said, “Now Breonna Taylor still has no justice. Black trans women are being murdered every day and the news is silent.” and “...it’s really time to reflect on the big picture” (Star, 2020). He also used the technique attack the accuser against Tati Westbrook for accusing him of trying to destroy someone's career. Bolstering is used in response to the accused racism. He says his company has been ahead of other cosmetic companies in being inclusive of all people. He explains, “I will always use my platform and voice for good. I remember when brands were making 10 concealers and 15 foundation shades and they thought that was correct. I remember speaking up very loudly to my peers and other people in this industry saying that it was wrong...I stick up for what is right and I always will” (Star, 2020). His use of corrective action was him explaining he is reflecting on his

actions and how he wants to start a new chapter in his life. This video was posted on July 18, 2020. Starting in June his total subscribers started to drop; during this time he was at a max loss of -200,000 per week. Since June his subscribers have been trending downwards and he has not had a gain in daily followers since June (Figure 5).

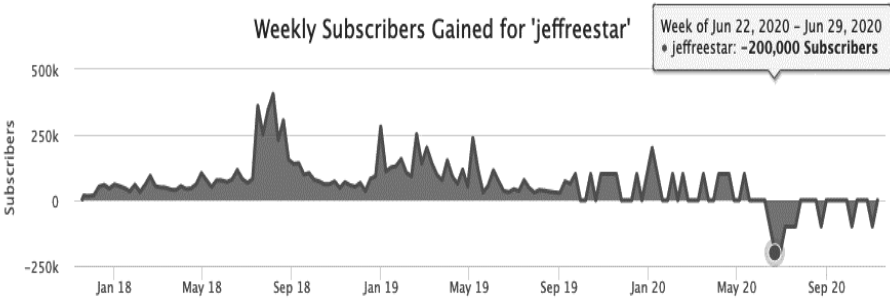


Figure 5. Jeffree Star’s weekly subscribers gained for the week of June 22, 2020- June 29, 2020 according to socialblade.com (Jeffree Star YouTube Stats, 2020).

After his apology in June his total subscribers have been going down. In September the numbers plateaued then continued to go down starting in November (Figure 6).

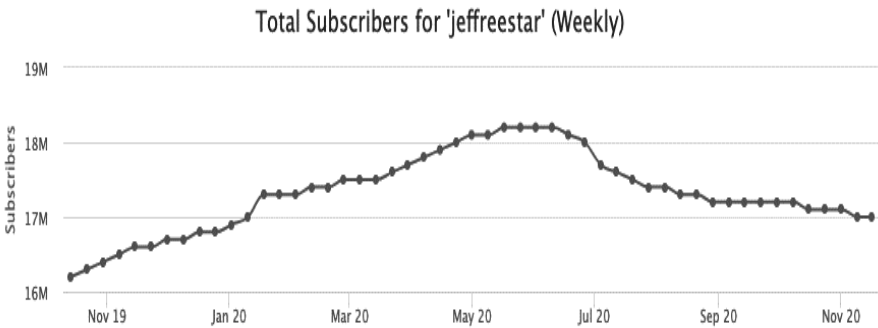


Figure 6. Jeffree Star’s weekly total subscribers according to socialblade.com (Jeffree Star YouTube Stats, 2020).

This apology has 13,103,780 views. After posting this apology he has overall lost 1.1 million subscribers. This video has comments and the dislike feature turned off. On his channel, Jeffree Star has three apology videos. This is the most recent.

Shane Dawson

“Taking Accountability” by Shane Dawson is 20 minutes and 28 seconds long. This apology video is about the same drama Jeffree Star addressed in his video and past inappropriate behavior including racist jokes, blackface, and telling jokes that sexualize children. This video focused on mortification but also included evasion of responsibility, reducing offensiveness, denial, and corrective action. He focused on apologizing for his past, saying he doesn’t deserve a platform. He stated, in reference to using blackface and portraying stereotypes, “I’m sorry, I don’t even know how to fully apologize because it seems like something that is irredeemable... I should lose everything” (Dawson, 2020). Next he used evasion of responsibility in the form of defeasibility. He claimed he was uneducated on how blackface was wrong but now understands what he did was wrong. To reduce offensiveness, he used bolstering discussing the bad things that have happened in his life that led him to believe these things were funny. He said, “My childhood, my past, I’ve had a lot of pain. I’ve had a lot of bad things happen to me... I took that pain and made them into jokes” (Dawson, 2020).

He used denial by saying, “I don’t have hate for any race. I don’t have hate in my heart for anyone” (Dawson, 2020). Another use of denial is when discussing his pedophilia accusations. He claimed that the video people were sharing as proof of him sexualizing children was edited to cut out the parts where he said, “Pedophilia is disgusting.” He claimed they were jokes and said, “I swear on my life, I am not somebody who would ever talk about a child, like in seriousness, I would never talk about a child in any way that was inappropriate. That is disgusting. That is gross. That is not something I would ever do” (Dawson, 2020). Last is corrective action, which is used repeatedly throughout this apology. In response to his use of blackface he said, “I’ve watched so many videos on the history of blackface and how it was created to make fun of black people.” He continued, “Since I’ve apologized for those things in the past, I have made a lot of changes in my life, changes in every facet of me” (Dawson, 2020). He also explained that he does not use racial slurs ever anymore and never should have, even for comedy purposes (Dawson, 2020).

This video was posted on June 26, 2020. Before the controversy he had 23,300,000 subscribers, and from there his subscribers dropped rapidly. The most subscribers lost per day were 500,000 (Figure 7).

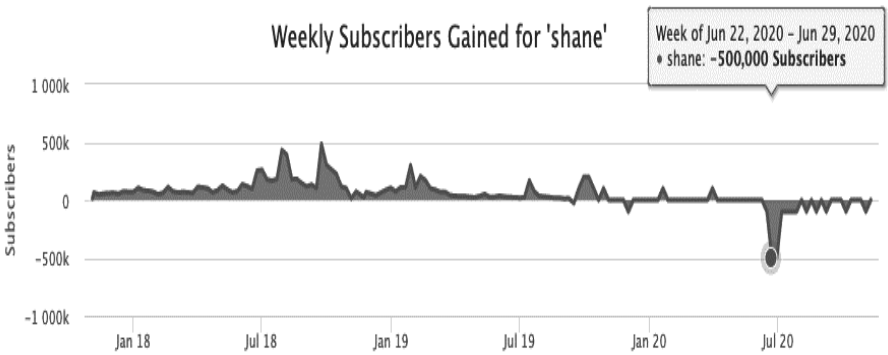
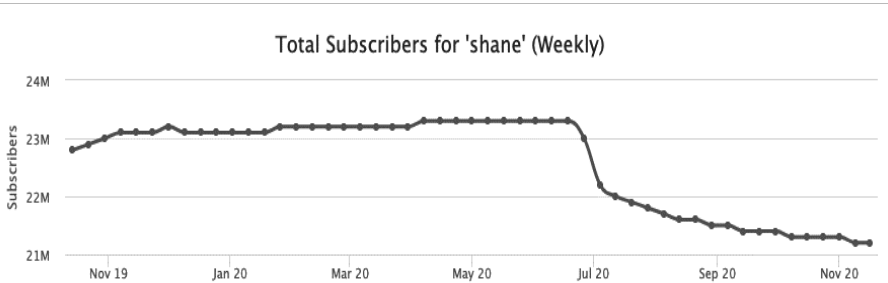


Figure 7. Shane Dawson’s weekly subscribers gained for the week of June 22, 2020- June 29, 2020 according to socialblade.com (Shane’s YouTube Stats, 2020).

His total subscribers have been trending down since the posting of this apology. He is now at 21,200,000 subscribers, losing 2,100,000 subscribers. This video



has comments and dislikes disabled. There are three apology videos on his channel and this is the most recent (Figure 8).

Figure 8. Shane Dawson’s total subscribers weekly according to socialblade.com (Shane’s YouTube Stats, 2020).

Jenna Marbles

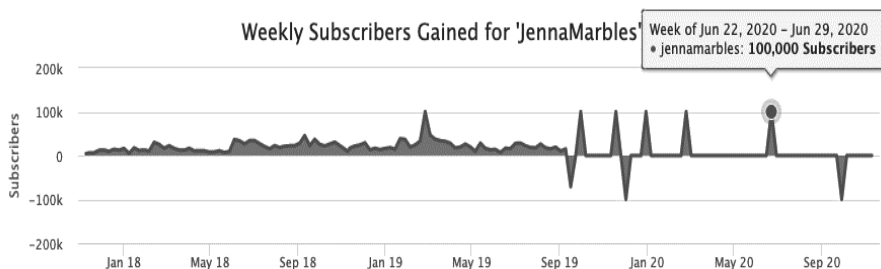
“A Message” was originally posted on Jenna Marbles’s YouTube channel on June 25, 2020. She quickly removed it, but it was reposted by another channel called ThisVideosBack. The apology was 11 minutes and 10 seconds. This video is regarding old content from when she first started YouTube. These videos include racially charged

jokes, blackface, and gender stereotypes. She focused on mortification, but they also use evasion of responsibility, reducing offensiveness, and corrective action.

Mortification in this video is simple. She acknowledged that her past content was offensive and she was not proud of it. Her evasion of responsibility refers to her use of blackface. She used the evasion of responsibility technique of accident. In a video of her impersonating Nicki Minaj viewers claimed she was doing blackface. She apologized for doing this, and then explained, “I do just want to tell you that it was not my intention to do blackface” (Marbles, 2020).

Her use of reducing offensiveness involves bolstering of her character and the growth she has made as a person. She explained why she had not taken these videos down sooner, “I think there was a time when having all of my old content exist on the internet showed how much I have grown up as a person which I’m very proud of...” (Marbles, 2020). The last technique used was corrective action. The way Jenna Marbles used this was by using a YouTube feature where creators can make their videos private so they are not viewable to the public. She stated, “...I have spent a lot of the last few days privatizing almost all of my old content... I’m literally not trying to put out negative things into the world” (Marbles, 2020).

Since this video is a repost of the original video by another creator the likes and dislikes for this video are not accurate and will not be included. After the original



videos posting she gained followers (Figure 9).

Figure 9. Jenna Marbles’ weekly subscribers gained for the week of June 22, 2020- June 29, 2020 according to socialblade.com (Jenna Marbles YouTube Stats, 2020).

Overall she did not lose followers. After the video was posted she gained followers and plateaued until November (*Figure 10*).

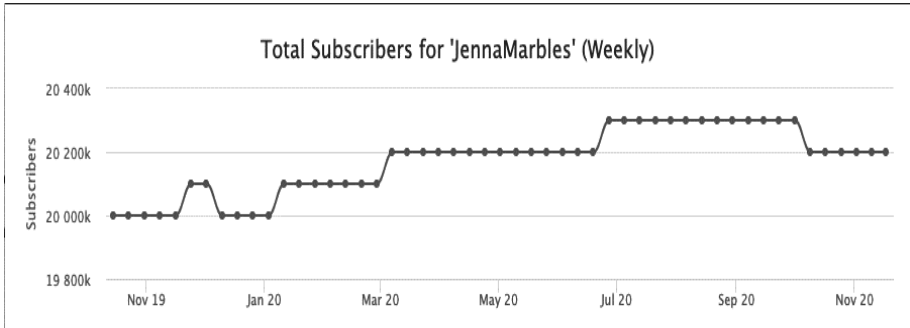


Figure 10. Jenna Marbles total subscribers weekly according to socialblade.com (*Jenna Marbles YouTube Stats, 2020*).

Before the video was posted she had 20,200,000 subscribers. After the video was posted she had 20,300,000. She is now back to the amount of followers she had after the video was posted. She has two apology videos on her channel and this is the most recent.

James Charles

“No More Lies” by James Charles is 40 minutes and 34 seconds long. This video is in response to accusations by Jeffree Star, Tati Westbrook, and other people on Twitter. They accused him of using his celebrity status to sexually harass straight men and “convert them” (Tenbarge, 2020). Westbrook was also upset with him for advertising a brand of beauty supplements that were not hers. This video discusses the vitamins but focuses on the sexual harassment allegations. This was part of the drama that caused the apology from Jeffree Star. This video focused on denial, but it also uses reducing offensiveness, corrective action, and mortification.

Denial is used throughout the video, attempting to prove he did not do the things of which he was accused. Simple denial is used by showing what he calls “receipts.” These receipts are mostly pictures of messages between those involved. He states, “It is very important to me that this video has all the information and all the facts...” (Charles, 2019). He used facts and screenshots of conversations to prove that the accusations against him were not true. He also used clips from other videos for this purpose as well. He explained, “...I have never and will never use my fame, money, or power to manipulate or get any sexual actions from a guy. That is disgusting. It is not me” (Charles, 2019). He explained he is disgusted by the fake and destructive claims being spread about him.

He used multiple techniques of reducing offensiveness. He used minimization and attacks the accuser. Minimization was used to explain the accusation that he used his celebrity status to seduce straight men. Westbrook claimed that he said that he could do whatever he wanted because “I’m a celebrity. In response to this he

said, "... The 'I'm a celebrity' thing, is really incredibly frustrating to me because this is an inside joke between my friends and I that Tati has also participated in..." (Charles, 2019). He explains that "'famous' is synonymous with anything good so... if our boneless buffalo wings at Chili's are extra delicious one day... 'oh my god these wings are so so famous'" (Charles, 2019). He also used screenshots of these conversations to help explain the joke.

The next use of reducing offensiveness was attacking the accuser. This is frequently used throughout this video toward Tati Westbrook and Jeffree Star. He said Westbrook shared his story "...with no details, no facts, and no proof and twisted around and now serious allegations have surfaced that could permanently damage my career..." (Charles, 2019). He also responded to people on Twitter who have made allegations against him which he believes are not true. In response to this he says, "People are treating a #jamescharlesisoverparty as an open invitation to add to the narrative with lies which is not only harmful to me but it's also creating very very dangerous stereotypes around the LGBTQ+ community" (Charles, 2019). He also responded to Jeffree Star's comments by saying, "Jeffree's messaging about me both in private and in public was hurtful, defamatory, and extremely excessive but most importantly literally all based on lies" (Charles, 2019).

Corrective action and mortification go together in this video. Through his corrective action, he also apologized for his actions and anyone he hurt during this process. He apologized to his fans for disappointing them and explained that he has a lot to learn about relationships and his sexuality. He explained that growing up he did not learn much about flirting and he may come on too strong sometimes, but it's because he never had the chance to learn. He then said, "I can confidently say that with each experience I'm learning more and more and I've been able to better myself" (Charles, 2019).

This video was posted on May 18, 2019. This video had 53,615,210 views. Before this apology video was posted he lost 2,591,263 (Figure 11).

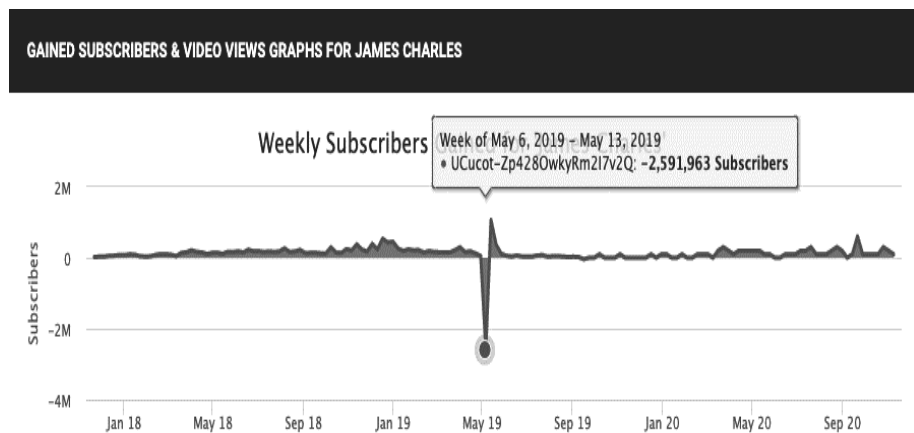


Figure 11. James Charles's weekly subscribers gained for the week of May 6, 2019 - May 13, 2019 according to socialblade.com (*James Charles YouTube Stats*, 2020).

After posting the video he gained 1,063,011 subscribers. His weekly subscribers gained has not gone negative since this scandal in May of 2019 (Figure 12).

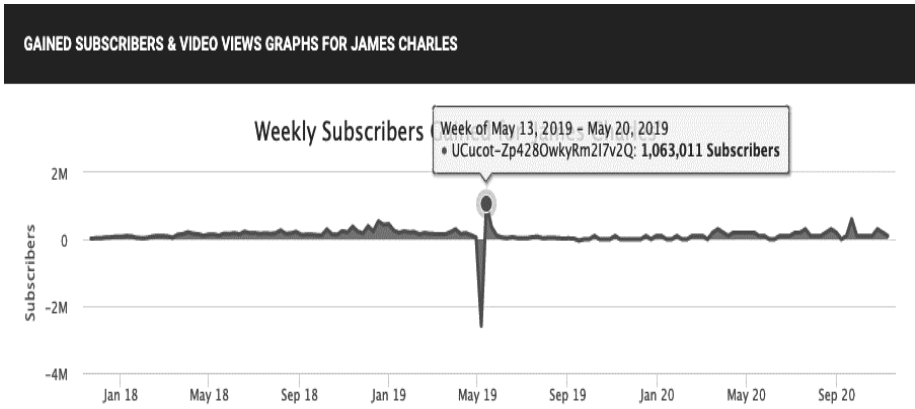


Figure 12. James Charles's weekly subscribers gained for the week of May 13, 2019 - May 20, 2019 according to socialblade.com (James Charles YouTube Stats, 2020).

His total subscriber count dipped in June but he has now made up all of these subscribers and more. Before this scandal he had 16,534,122 subscribers he is currently at 23,900,000 subscribers (Figure 13).

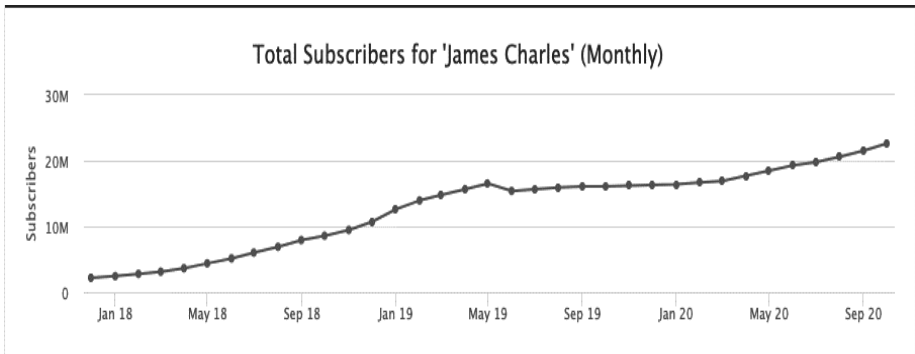


Figure 13. James Charles total monthly subscribers according to socialblade.com (James Charles YouTube Stats, 2020).

This video had 2.6 million likes and 612k dislikes. He has two apology videos on his channel both about this situation. This was the second one.

Discussion

Social media influencers have risen in popularity with the increasing usage of YouTube, and they have changed the way celebrities interact with their fans in a major way. This includes when they make mistakes. These videos are personal to their followers because there is a more personal connection to influencers due to how they communicate. They impact the way people communicate, influence advertising, and affect what is expected of celebrities. Through this research it allows a more in-depth look at how internet “scandals” and how and if cancel culture works.

Research Question 1: What image repair techniques are most popularly used by influencers when having to apologize to their viewers?

In the videos researched, all five categories were used throughout the six videos. The most popularly used image repair technique was corrective action. Each video had some form of corrective action. The next most used were mortification, reducing offensiveness, and evasion of responsibility. These were included in five out of the six videos. The least used was denial which was only used in two out of six.

Research Question 2: Do these techniques result in a positive or negative reaction to the apology from their audience?

This question was more complicated than originally expected. The influencer with the worst results from their apology was Jeffree Star. During his scandal, he lost 1.1 million subscribers and is still trending downwards. The only technique he did not use was mortification. He apologized but not for his actions or for hurting anyone, and he did not take responsibility for what happened. Compared to other influencers who used mortification at the center of their apology, he had a more negative reaction from his response. Without mortification, a video will not elicit a positive response but mortification alone does not elicit a positive response. He also used reducing offensiveness in the form of transcendence which was not present in another video. This could explain the strong negative response to his video compared to others who used reducing offensiveness.

James Charles had the most positive response to his video compared to others. His like-to-dislike ratio showed there was a positive reaction and his subscriber count went back up by over 1 million after posting his video. This video has one difference in techniques compared to all the others. While he and Jeffree Star both used simple denial, James’s use of this was different and is what made his apology video more believable. Use of evidence or “receipts” was not used in any other video but was used as the basis for his video. This could be the reason why his video had a more positive response.

Evasion of responsibility in the form of defeasibility also seemed to have a negative response. In both Tana Mongeau’s video and Shane Dawson’s video they used defeasibility to explain away their actions. Both included that they did not know enough about blackface/microaggressions to know what they were doing was wrong.

They both also lost subscribers due to their scandals and videos. Shane Dawson is still losing followers.

Research Question 3: Does the amount of apologies on their channel have an effect on the reaction to the apology?

There seems to be a correlation between videos that were viewed negatively and the amount of apologies published on their channel. For five of six influencers studied, this was not their first apology video. Three out of the five had a negative reaction to their video. Jeffree Star, Shane Dawson, and Tana Mongaeu all had previous videos apologizing for racial insensitivity and other inappropriate conduct. All three of these had a negative response compared to Jenna Marbles and James Charles who continued to gain subscribers after their apology.

There could also be a correlation between negative viewer response, apology video frequency, and subject matter. Jeffree Star, Shane Dawson, and Tana Mongaeu all had a negative reaction and were apologizing for racial insensitivity, not for the first time. This is not fully supported because Jenna Marbles also apologized for racial insensitivity but had a positive response.

The viewers' response to the apology video hinged on their own belief that it was a genuine apology from someone who has changed. This means physical evidence is going to convince them more than false promises through using corrective action or mortification. Simple denial in the form of evidence or "receipts" was the most effective in allowing influencers to retain their followers. James Charles provided concrete evidence through text messages to show that he did not do the things he was accused of. Jenna Marbles showed her evidence through corrective action that showed change in her content and personality. These both resulted in positive responses from their audience and in James Charles's case, gained all his followers back.

The viewers' response to the apology video hinged on their own belief that it was a genuine apology from someone who has changed. This means physical evidence is going to convince them more than false promises through using corrective action or mortification.

Limitations

The limitations of this study include the small quantity of videos analyzed. It also analyzed apologies from different types of influencers with different reasons for apologizing. A way to improve on this study might be to focus on one category of influencer or a specific reason for apologizing. Racial insensitivity was a popular reason for apologizing, so comparing apologies for the same reason might allow a better look into why these apologies work or do not work. Image repair theory also limited the study. Using a broader lens to study these videos would allow for a better understanding of how they persuade their viewers.

Conclusion

As social media grows it becomes more important for research to be conducted to understand the impact it has on our society. As it has grown, cancel culture has become more prevalent for those in the public eye. Apology videos come with this as well. Apology videos are different from the traditional apology because the creator has full control over the message they want to portray which makes image repair more common.

Each video used corrective action. Mortification, reducing offensiveness, and evasion of responsibility were included in five out of the six videos. Denial was only used in two out of six. The amount of apologies on their channel had a negative effect on their follower count if the video was about the same topic. Overall, the choice in image repair strategies did have an effect on the positive or negative reaction of the viewers. The most popularly used strategy was corrective action but this did not have a significant impact on whether or not viewers reacted positively. The use of mortification, evasion of responsibility, and reducing effectiveness had the largest impact on how the video was received.

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Women, Politics, and the Media

Baily Robinson

Author Note

In this paper, the term “gender” refers to one’s identity as a male, female, or nonbinary. The purpose of this paper is to expose gender bias in the media as it pertains to women in politics.

Abstract

Many Americans consume their information on politics and political candidates from the news and media outlets they watch. These media outlets help shape our beliefs and opinions as we process the information we are presented with. As a result, the way women are portrayed and spoken about in the news and other media have shaped the way we think about women that are in the public eye, particularly those that hold a public office or position of power. The research question is how news reporters talk about female candidates and how that affects the public’s opinion of them. Stereotypes and general assumptions about women based solely on their gender are a foundation for this gendered reporting. The purpose of this paper is to explain the way women are talked about in the news and its effects on their perceived competency and fitness for office.

Women, Politics, and the Media

For years, women in politics have fought against prejudiced and sexist commentary in the media. The coverage they receive is often based on their looks, their marital status, and their personal life instead of their ideas and policies. They often get portrayed as angry, unhinged, and emotional if they break from the nurturing and agreeable gender stereotype. The news that is consumed by the public every day shapes their opinion and the way they vote. Given the fact that most people form their opinions of government officials and political candidates based on what the media tells them, the way the media talks about women in politics is important. Every morning and every night, millions of Americans tune into stations like MSNBC, Fox News, and CNN, while millions of others read articles published by organizations like the New York Times and the Washington Post, as they gather information and form their opinions. The way organizations like those named above talk about women, as well as how much coverage they give them, plays a key role in attempting to overcome gender stereotypes and opening up doors for more women in politics. The question is, what have women had to face when it comes to news coverage of their careers, and have we seen a shift in focus?

Review of Literature

There are many peer-reviewed journals that provide insight into how women in politics are talked about in the news. When it comes to politics, women have to

carefully balance their masculinity and femininity to be respected and taken seriously. These articles are a representation of the evolution of women in politics and the coverage they receive from mainstream media. Analysis of stereotypes, election coverage, sexual assault in politics coverage, and news coverage of female government officials reveal the differences in the way the media covers male and female politicians.

Gender Stereotypes

The basis for the apparent gender bias in the media stems from gender stereotypes. There are stereotypical male and female traits. Toughness, decisiveness, and strength are all male traits, which also happen to be traits people want in a leader (Banwart, 2010). Stereotypical feminine traits are nurturing, warmth, and sensitivity (Banwart, 2010). Women also fight the stereotype of being too hormonal or emotionally unstable. This puts women at a disadvantage in the political field, as they must prove that they possess the perfect balance of the stereotypical masculine and feminine traits that it takes to be a good leader.

Hillary Clinton is aware of this stereotype and the obstacle it presents, which is clear in her debate performance against Donald Trump in 2016. Nonverbal communication, such as smiling, posture, gestures, raising eyebrows, eye contact, and spatial distance, by both candidates were observed and analyzed. The findings of this study were that Clinton smiled more, made more eye contact, and had more expansive postures than Trump (Wasike, 2019). These are all typical for women, especially women that are in the public eye and are vulnerable to criticism. In this debate, Trump used a lot of personal attacks and interrupted Clinton several times, yet she still remained calm, collected, and happy. Women feel the need to smile and be calm, even in a situation as nerve-wracking and overwhelming as a nationally-broadcasted presidential debate. They feel pressure to appear relaxed because they don't want to be called emotional or unstable, as women often are called in the media.

News Coverage of Female Candidates and Government Officials

In general, women receive less news coverage on issues and policies and more news coverage on appearance, family life, and their personality than men (Carlin & Winfrey, 2009). Additionally, news stories about female candidates often mention children and marital status and use those to define them, rather than their candidacy (Carlin & Winfrey, 2009). Clinton and Sarah Palin are prime examples of this gendered coverage. Palin's coverage was more about her "sexiness," and Clinton's coverage was more about her not being feminine enough (Carlin & Winfrey, 2009). Whether women are seen as attractive and appealing, or unattractive and boring, the media focuses on their looks. Reporters used Palin's attractiveness against her, saying she couldn't be taken seriously because she was pretty, while they used Clinton's anti-femininity and outfit choice of pantsuits instead of skirts as justification for her husband having an affair (Carlin & Winfrey, 2009).

The media also mentioned their children in a majority of their coverage. Palin's role as a mother was used against her in a way that questioned whether she could do her job if she were elected (Carlin & Winfrey, 2009). Clinton did not have

young children at the time of the election like Palin did, but she received criticism as well. She was framed as the nagging mother and was accused of bringing her child on the campaign trail as a tool to make her look more nurturing and caring (Carlin & Winfrey, 2009). This reveals a clear gender bias in news coverage of female politicians, as a male candidate is not usually asked about his family life or questioned on his parenting.

In 2007, Nancy Pelosi was appointed Speaker of the House. The news coverage that led up to her appointment and thereafter was highly gendered. Her role as a mother was used in stories about her, as it was with Palin and Clinton. The Washington Post wrote a story that explained that despite working and being politically active, she never abandoned her family (Dabbous & Ladley, 2010). She was also accused of being a wife, mother, and grandmother in her day-to-day life, and in her spare time she was Speaker of the House (Dabbous & Ladley, 2010). This further suggests that women are to be wives and mothers first, and they take their jobs less seriously when they have a family. Pelosi's children and grandchildren were also mentioned frequently in many articles, some of which seemed to suggest that Pelosi picked up her leadership skills not from political experience or knowledge, but from being a mother (Dabbous & Ladley, 2010). This takes away from her credibility and downplays the experience she has in her professional life in politics.

In addition to Palin, Clinton, and Pelosi, Elizabeth Dole and Claire McCaskill are also living proof of media gender bias. In a study about Clinton, Palin, Dole, and McCaskill's news coverage on the campaign trail, it was found that women received more gendered news coverage than their male opponents (Meeks, 2012). They were often described with gender or uniqueness labels, meaning that they were referred to as the "first female" or "female candidate", while men didn't have any gender labels attached to their names (Meeks, 2012). This is unsurprising, as being a male in politics is the norm, so it doesn't seem necessary to call them by their gender. This furthers the notion that women in politics is something out of the ordinary, since news reports feel the need to point out the fact that they are women. This study also revealed that as women climbed the ladder and ran for executive offices, their gendered news coverage increased (Meeks, 2012). Palin, Clinton, and Dole all experienced jumps in gendered news coverage when they ran for president, as opposed to other offices (Meeks, 2012). They were often referred to as a wife or mother. Notably, Palin received nearly 40% more gendered coverage than the male candidates, presumably because she was often described as attractive and her looks were often talked about (Meeks, 2012).

In order to be taken seriously and be seen as fit for office, a female candidate needs more coverage on her policies and less coverage on her appearance and personality.

In the Funk and Coker (2016) experiment, individuals were shown a fake Facebook ad of a candidate, Kirsten Gillibrand, but she was given a different name and all mention of a political party was taken out (Funk & Coker, 2016). Some participants were exposed to coverage that contained gender stereotypes and objectifying language, while others saw coverage that only discussed her policies and ideas, and they were to

rate the candidates on a few different traits, such as competency and seriousness (Funk & Coker, 2016). Those that were exposed to objectifying commentary were more likely to rate the candidate as less competent and less serious than those exposed to commentary on policies (Funk & Coker, 2016). In order to be taken seriously and be seen as fit for office, a female candidate needs more coverage on her policies and less coverage on her appearance and personality. The media contributes to and is largely responsible for putting women at a disadvantage simply because of her appearance and/or position as a mother or wife.

Sexual Assault Coverage

Recently in politics, sexual assault has been a topic of discussion as the Me Too movement becomes more prominent. However, the coverage of such events seems to protect the male that is accused, and the stories are only reported if they seem relevant. In 2016, four women came forward with sexual assault allegations against Trump, but it was hardly even mentioned in the media. Only 17 stories were written about the accusations, and news coverage was scarce (Blumell & Huemmer, 2017). When the Access Hollywood tape was leaked, in which Trump used vulgar language to describe how he hits on women, the media covered it extensively. There were 17,260 articles written about it, and more women came forward with allegations of sexual violence against Trump (Blumell & Huemmer, 2017). This led to more coverage of the allegations, as the topic had taken over headlines for days.

The above statistic proves that the women alone were not enough to get national or international attention. The Access Hollywood tape story made their allegations more relevant to the media. In fact, a lot of the news stories about Trump's alleged sexual violence did not focus on the women that came forward. Instead, they made Trump the focal point. Only 13% of headlines were from the woman's perspective, while 41% of headlines were about Trump and/or his family's reaction (Blumell & Huemmer, 2017). The remaining 46% mentioned Bill Clinton or the fate of Billy Bush's career (Blumell & Huemmer, 2017). The media focused more on the men in these stories, one of which was not even involved in the incident, than the women that came forward.

Spiral of Silence Theory and Dr. Christine Blasey Ford

The Spiral of Silence Theory suggests that public opinion sways one's decision to speak up on a certain issue or topic (Codington-Lacerte, 2020). If their opinion is in the majority, they are more likely to speak up. Mainstream media picked up the Access Hollywood tape story and made it big news, which led to more coverage of the women that came forward with sexual assault allegations. However, since most stories were not actually about the women but rather Trump and how it would affect him, that may have stopped women from coming forward. When Supreme Court Justice Brett Kavanaugh was nominated for the Supreme Court, Dr. Christine Blasey Ford came forward and said that Kavanaugh had sexually assaulted her years before. Dr. Ford was met with a lot of scrutiny. She was not treated well by the Republican senators that

questioned her, and she received a lot of backlash for not being able to recite every detail of her sexual assault.

MSNBC and Fox News, both very prominent news stations at both ends of the political spectrum, said Kavanaugh's name twice the number of times they said Ford's in their coverage of the hearing and the events leading up to it (Greenwald, 2019). It is important to note that this is in part due to the fact that she was not identified early on, so she was referred to as "the woman" or "the accuser." However, even after she was named, she was often referred to as "the accuser," especially on Fox News (Greenwald, 2019). Not saying her name makes it less personal. It dehumanizes her. The story quickly became one of polarizing politics. It was framed as a trap set by the democrats, instead of a woman coming forward about an assault. According to the Spiral of Silence Theory, other women would take note of Dr. Ford's unfair representation and treatment online and in the media, and they would be wary of coming forward and identifying their aggressor, especially if he is a man in politics.

With the Spiral of Silence Theory, the opinion of the target doesn't matter, as the effect is essentially the same (Matthes et. al., 2018). This means that it doesn't matter who the person is going to tell, whether it's a conservative, liberal, or independent organization, it is still difficult to come forward and speak on a topic that the majority does not seem to agree with you on. In the case of Dr. Ford, even left-leaning MSNBC gave Kavanaugh's perspective more air time (Greenwald, 2019). Because it is hard to predict how that person or group of people will react, silence is seen as the best option (Matthes et. al, 2018). When survivors and accusers don't receive fair treatment, they find it easier to not speak up. That is why the way the media handles sexual assault and other sensitive topics is so important, especially in cases involving a government elected or appointed official.

Where We Go from Here: A Step in the Right Direction

One recently elected official that receives a lot of negative gendered news coverage is Congresswoman Alexandria Ocasio-Cortez. This year, she was criticized for wearing an expensive outfit at a House hearing. She responded to the article on Twitter, stating that she thrifts her clothes (Ocasio-Cortez, 2020). The fact that her outfit was even being discussed proves that gendered news reporting still happens today. However, coverage of Ocasio-Cortez in the New York Times proves that there appears to be a shift in the way we talk about women (Beaupre, 2019). After she was elected, the focus shifted from her gender and appearance to her politics (Beaupre, 2019).

The same can be said for Hillary Clinton. Despite receiving highly gendered news coverage for the past several decades, the sexism and gender bias in the news stories decreased over time (Zulli, 2019). References to her husband have steadily decreased since she announced her candidacy for executive office (Zulli, 2019). This leaves more time to focus on her policies and issues, which are very important to cover for any candidate running for office. Uniqueness labels like "pioneer," "first woman," and "trailblazer" significantly decreased in her time going through different offices (Zulli, 2019). This could be due to the fact that as time went on, more women joined the political field. Regardless, the decrease in uniqueness labels suggests that there is a change in the way women are spoken about in politics.

Conclusion

While we still have a long way to go, we are seeing a shift in the way female candidates and officials are talked about in the media. In the mainstream media, there is not as much talk about the stereotypical feminine characteristics of female candidates, or talks of their lipstick color and clothing. But this does still happen. There is a long history of gender bias and gender stereotyping in mass media, especially in the field of politics, and that will take years to overcome, but the cases mentioned above prove that steps are being taken in the right direction.

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How Does LGBTQ+ Culture Affect Body Image?

Bryce Reeves

Abstract

This paper discusses the significant factors that impact the LGBTQ+ culture and their effect on body image. Six separate studies are evaluated to indicate which underlying factors such as the drive for muscularity, the impacts of media, and how each leads to creating unhealthy eating and dietary habits have the largest impact on mental health. The studies referenced all discuss experiences with sexual minority individuals. The references will indicate the effects of heterosexism on members of the LGBTQ+ community.

Keywords: culture, body image, heterosexism

How does LGBTQ+ culture affect body image?

In the era of social media, the ability to compare oneself to others has increased, but what are the psychological effects of this in already marginalized groups? Several studies have been conducted on heterosexual males and the need to appear masculine, but new research is taking place on the effects of the need to be masculine in sexual minority groups. Heterosexism is defined by Merriam-Webster (2020) as “discrimination or prejudice against non-heterosexual people based on the belief that heterosexuality is the only normal and natural expression of sexuality.” Heterosexism and minority stress can amplify pre-existing body image issues that members of the LGBTQ+ community possess. If it is understood who is the most at-risk for body image issues, it is important to find solutions to better educate and prevent further psychological trauma.

Heterosexism and minority stress can amplify pre-existing body image issues that members of the LGBTQ+ community possess.

Drive for Muscularity

Cirleen DeBlaere and Melanie Brewster (2017) conducted a study where they used the Drive for Muscularity Scale (DMS) to uncover if sexual minority men were more or less likely to have body image issues because of societal pressures. Based on prior research conducted on heterosexual counterparts the authors hypothesized that the sexual minority men would be more inclined for the need to have a mesomorphic body, lean and highly muscular, based on their societal pressures and cultural stigmas. This research is important to understanding the culture within the LGBTQ+ community and changing that mindset through education and awareness. This research could also give individuals a front-end approach to preventing depression or suicide.

The researchers surveyed 202 predominately white men with the age parameters set between 18-62 years old. The overall goal was to uncover if the sexual

minority men were more inclined to obtain a gender-typical physique to conform and go against the heterosexism and stereotypes of gay men (DeBlaere and Brewster, 2017). The participants were directed to an online survey from the target marketing ads done by the researchers. When taking the survey, the participants were being measured on a scale from one to six, and they would put the number that correlated with their response. The two measurements were the drive for muscularity and psychological distress. The higher the number assigned by the participant, the more of a drive for masculinity, and likewise, the higher the number assigned, the higher the level of psychological distress. It is important to note that the researchers also took into consideration the participant's socioeconomic status and level of education on top of gender, sexual orientation, and age.

To conclude the results, the researchers compared their responses to the responses done in a separate study where sexual orientation wasn't a factor. The results show from the two-factor correlation that participants with higher levels of psychological distress were more inclined to have a drive for muscularity. When compared to their heterosexual counterparts, sexual minority men are more likely to have body image issues and are willing to go to unhealthy lengths to lose weight. This study is not conclusive of all races and the effects that culture has on societal norms and expectations (DeBlaere and Brewster, 2017). The researchers ask that future research be done to be more inclusive.

Reflective Embodiment

While the prior research cast a larger net to get quantitative data, Duane Duncan (2007) conducted his research to get qualitative responses from a much smaller pool of individuals. Duncan believes that many studies fail to take into consideration what he refers to as "gay identity" (Duncan, 2007). Duncan hypothesized that when given the opportunity, the participants would conceptualize the idealistic man from the contexts of a reflective embodiment.

The researcher interviewed four participants ranging in age from 22 to mid-'50s. The researcher was able to find the participants locally in Australia through pre-existing relationships and word-of-mouth. Each of the participants come from a different socioeconomic background to provide more robust research results. The interviews with the participants lasted between ninety minutes and two hours, but the questions asked of each individual were the same. The interviewees were asked to conceptualize the ideal male body and to discuss why they thought that body would be the best to understand the cultural framework behind their ideal body. With such a small group it could be understood that it is again, not a large enough pool to gain proper insight. The selection process also could limit the responses based on individuals all living in the same city and visiting the same establishments.

The research concluded that the individuals all came to the same concept of the ideal man and body. Each participant clarified their reasoning why an athletic, muscular body would allow them the most opportunity within the gay community in Australia. Duncan (2007) says that the comparisons to the heterosexual masculine counterparts and the history of homosexuality are the reasons for which gay men specifically view their bodies as needing to be perfect. The results fall directly in line

with the hypothesis in that each participant crafted a response that fell into the same category of ideals.

Unhealthy Habits

In the last two studies, the focus was understanding if the LGBTQ+ community was in-fact at a higher risk for body image issues and obsessive behaviors. In a research study conducted by Brewster, Sandil, Deblaere, Breslow, & Eklund (2017), the focus was to understand the behaviors of how far their participants would be willing to go to achieve their ideal bodies, even if it meant harming them in the process. Acting upon unhealthy thoughts proves that this is an important pandemic within the LGBTQ+ community that needs to be proactively addressed. The researchers hypothesized if participants had strong enough body dissatisfaction, the need for muscularity, and internalized heterosexism, then they would be at higher risk to use anabolic-androgenic steroids (AAS) and have obsessive workout habits (Brewster et al., 2017).

Brewster et al. (2017) gathered 326 sexual minority men, predominantly white and within the same realm of socioeconomic status and education levels. In this study, the researchers measured the internalization of sociocultural standards of attractiveness, internalized heterosexism, body surveillance, body dissatisfaction, drive for muscularity, openness to using steroids, and compulsive workout behaviors. The participants were asked scaled questions in which they would assign a number as their answer. To ensure their findings were correct they compared them to prior studies done by researchers on heterosexual men (Brewster et al., 2017).

From analyzing the data, Brewster et al. (2017) found that “internalized standards of attractiveness was directly and uniquely related to higher body surveillance, body dissatisfaction, and drive for muscularity. Additionally, internalized standards of attractiveness were indirectly and positively related to intention to use AAS through drive for muscularity.” It is important to note that one’s “role” within the relationship should gay men utilize heterosexual gender roles in relationships, could dictate the type of physical appearance a participant might want to have, the drive to be thin versus the drive for muscularity. Brewster et al. (2017) found that it could be helpful to therapists supporting sexual minority men to understand how their patients understand and internalize sociocultural standards of attractiveness.

Effects of Pornography

Many studies have understood the relation between heterosexism, the need for a mesomorphic body, and how it leads to appearance-related issues in sexual minority men. Tracy Tylka (2015) takes a unique approach to the effects pornography has on sexual minority men, with the notion that there is a correlation between body image issues and pornography. This is an easily disregarded area of focus; however, this is still a medium in which sexual minority men take in comparisons of one another. It is important to note that one could find it difficult to fully understand the ramifications as each individual could have specific sexual preferences.

The study was broken into three different models with three individual hypotheses. The “Tripartite Influence Model” gave an understanding of the influence media has on societal ideals (Tylka, 2015). This model is important to understand how pornography may influence societal norms on sexual minority men. Tylka (2015) hypothesized that this model would show that with increased exposure to media that reinforces mesomorphic body image, it would increase the pressure that sexual minority men feel. The “Model of Appreciation” was the second model that measures one’s appreciation and ability to hold positive opinions of one’s own body (Tylka, 2015). This measure serves as important to measure the conceptualization one experiences when watching pornography, specifically the differences between one’s own body and those of the models. The differences in the body can translate to one’s understanding that their body isn’t seen as a societal norm, leading to further body dysmorphia. The “Model of Relational and Emotional Well-being” measures the intimacy patterns of those who watch pornography and Tylka (2015) hypothesized that there would be a correlation between individuals watching pornography and intimacy and attachment issues.

This study surveyed 359 undergraduate students of different ethnicities, sexual orientations, and ages that were enrolled at a university. The findings for the first model, while on a smaller scale of increase than the others, showed enough data to correlate the link that men compare themselves to the individuals in the pornography and internalize the conceptualization of a mesomorphic body. The second model revealed that men who watch pornography are more focused on how their body looks than its physical use and led them to consider unhealthy ways to lose weight and increase their internalized perception of a mesomorphic body. The third study showed a relation between men who watched pornography and an increased likelihood of “romantic avoidance and anxiety” (Tylka, 2015). The findings of this study directly relate to the implication that pornography can negatively affect sexual minority men in relation to their body image. This study primarily focused on heterosexual men, so further research should be conducted on a majority of sexual minority men to enhance the qualitative data.

Depression and Eating Disorders

The study of men's health has led researchers Mike Parent and Tyler Bradstreet (2017) to want a deeper explanation of the relationship between the need for muscularity and its effects on self-concept and depression. This study is important as it aims to place a direct correlation on the attitudes and need for a hetero-normative muscular body and how that desire can translate into eating disorders and depression in sexual minority men. Before the study, the researchers made an important note that homosexual and bisexual men were hypothesized to be at higher risk of unhealthy behaviors.

To get a comprehensive understanding the researchers collected a sample of 207 heterosexual men and 197 men that identify as homosexual or bisexual. These individuals were random sampling and surveyed through an online questionnaire. The researchers had six different individual hypotheses that summarize the correlation between the need for muscularity leading to body dissatisfaction, which leads to

unhealthy habits such as eating disorders and depression (Parent and Bradstreet, 2017). The two sampling groups were asked questions in regards to their workout routine, their need for muscle, body image, self-esteem, symptoms of depressions, eating disorder identifiers, and scaled questions (one to six) to verify the severity of their answers.

The research results indicated that “the relationships between drive for muscularity attitudes and behaviors, and depression and eating disorder symptoms, were mediated by physical self-concept, global physical self-concept, and self-esteem” (Parent and Bradstreet, 2017). Thus, there is sufficient data to show an indirect relationship between the need for muscularity and self-concept, eating disorders, and depression. Although there are mental and physical benefits to physical exercise, in the LGBTQ+ community there is a relationship between physical exercise and muscularity-related behavior and attitudes (Parent and Bradstreet, 2017). An added area of research could surround the need for comparison between sexual minority men and the need for a lean body versus a lean muscular body and its relation to gender roles in a relationship.

Gender Stereotypes

The need for masculinity has been established between heterosexual and sexual minority men, and in the research compiled by Francisco J. Sánchez, F. Javier Blas-Lopez, María José Martínez-Patiño, and Eric Vilain (2016) compare the need for masculinity within the LGBTQ+ community between cultural divides. The research question they were aiming to answer is whether Latin American sexual minority men were more likely to be more aware of their masculinity, be more likely to hide their femininity, have higher importance of masculinity, and the likelihood of disapproving of effeminate sexual minority men, as compared to their white counterparts. This research is important to draw the comparison between two groups within the LGBTQ+ community and how their drive for masculinity affects their body image and self-concept.

The researchers used an online survey of 108 individuals and equally divided the results between those identified as Latin American and white. The online survey utilized questions modeled to understand four key areas: the importance of masculinity, masculine consciousness, anti-effeminacy, and negative gay identity. When asked about the importance of masculinity in oneself or their partner, Latin American men found it to be more important than their white counterparts. Latin men also were more conscious of how effeminate they were perceived to be when compared to their white counterparts; however, both groups had similar low judgment when it came to other effeminate gay men. This shows that both groups of sexual minority men view masculinity in oneself as important, Latin men at a higher rate which could be attributed to cultural differences and acceptance, but neither group sees femininity in other men to be an issue. In the final area of focus, the researchers found that “Latino gay men expressed a greater need for privacy and greater need for acceptance compared with the White gay men. On the other hand, the White gay men expressed having a more difficult coming-out process compared to the Latino gay men” (Sánchez et al., 2016).

Summary

In a world where everyone is raised in heteronormative environments, this creates the drive for sexual minority men to fit in with societal norms and the drive for masculinity and a mesomorphic body. The research conducted in this paper shows the drive for masculinity across cultures, age, and status of sexual minority men. The conceptualization of the mesomorphic body and negative self-concept is reinforced through pornography. This self-concept can be directly and indirectly related to anxiety, depression, eating disorders, and unhealthy workout habits. Sexual minority men need to understand the effects of comparison to their heterosexual counterparts, the effects of the drive for masculinity and muscularity, and the effects that pornography has on the conceptualization of creating a self-concept and self-identity. On a societal scale, the summation of these attitudes and behaviors create the culture within the LGBTQ+ culture and raise the expectations others experience. The culture within the LGBTQ+ community puts great pressure on an already marginalized group suffering from trauma. Individuals suffering from these should consider seeing a therapist to properly understand how to deal with the internalized feelings of heterosexism and societal influences on body image. By effectively educating individuals before establishing these habits, it could greatly change their outcome for the better. From each of these six research findings one would concur that the LGBTQ+ community is at higher risk for body image issues, self-confidence issues, body dissatisfaction, eating disorders, unhealthy workout habits, drug abuse, and internalization of heterosexism.

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Starbucks and the Siren Call

Roschel Schmigotzki

Website & Social Media Analysis

In today's society, there is a need for marketers to appeal to their customers in ways that other companies have not yet strategized. While this is not always the smartest or the most readily available route to take for a company, there are still elements that separate a successful company from other businesses of like services. This is especially true in terms of a business's website and the digital services that are offered. As stated by Zahay and Roberts (2018), "Digital transformation must focus on providing excellent customer experience as well as on streamlining operations and reducing costs. Marketers must take the lead in creating satisfying customer experience and be an active participant in identifying needed changes in business models" (p. 28-29).

This is a vital role that the marketer needs to accomplish if a company is to stand out to the target market. Individuals are bombarded with many advertisements of companies that are very similar in nature. How does a company get noticed in the plethora of advertisements that manifest daily? A unique and efficient webpage that offers rewards and a closeness with the company is one way to attract attention. While most companies have a website, it does not automatically gain a lot of customers. To a certain degree, social media is what entices individuals the best in today's society. However, there are some companies which provide enough value on their website to keep their customers satisfied.

Describing the Selected Website and Social Media

To first understand the social media site, there is a benefit in understanding the main webpage. A company's website might impact the traffic on the company's social platform itself. The website that I chose for this analysis is the Starbucks website. This website is one that shows how much Starbucks appreciates their customers. This is seen in the many different options available to individuals on the landing page. Examples of this include the option to order beverages and food online so that the products are waiting for the individual upon arrival to the shop of their choosing. This feature is arguably the biggest usage for the website. The app that is based off the website is also centered around the idea of ordering before arriving. This communicates to the individual that they are taken care of and that the products are reserved for them, like a seat in a movie theater or a ticket in first-class on a plane. It illustrates luxury even if it is just a simple task like ordering ahead of time. No matter how small the gesture is, the customer feels appreciated. Starbucks has gone through the process of creating a system specifically with the hopes of showing the customer how special they are to the company. This method of ordering also communicates an innovative, quick way of receiving a product. If an individual was running late for a meeting, this ordering method would cut down on time significantly. In this example, online preordering also prevents a customer from not committing to a purchase.

On the other hand, the social media site for Starbucks that I chose was their Instagram platform. The site itself displays the typical colors of Starbucks in nearly every post (ex. Green, recyclable cups, and holiday colors). There are also posts that talk about ways to use the different flavorings in the cups and different ways to order that are not readily displayed on the menus. This gives the followers on Instagram a sense of exclusivity. The simple idea of Starbucks giving their customers a list of syrups they can order into their coffee is enough to make the customers convinced that Starbucks is giving them an insider's "secret." This is one of their biggest profit strategies. Starbucks employs simple "recipes" that can attract the attention and curiosity of most individuals. Additionally, in their Instagram biography, Starbucks also includes a link to their website for a Pistachio Latte. This is one of their new beverages and is something that is gaining popularity. According to Camila Barbeito (2021), "All in all, the Pistachio Latte is a fun flavor alternative I'll definitely be ordering again." This also shows that Starbucks can introduce "strange" flavors and still have enough of a following for the product to be successful. This profits the company immensely and contributes to their success as a company.

Target Market and Provided Value

The largest portion of Starbucks's target market are individuals who enjoy coffee. Based on the National Coffee Association, 64% of individuals in the United States drink coffee (Deneen, 2019). Since this is the majority of the population, Starbucks has high chances of gaining a large following. On their Instagram page, Starbucks has 18.1 million followers. Despite the large following, there are some customers who still prefer the main website over the app and the social media site. Luckily, Starbucks caters to this and can gain the attention of most individuals by appealing to their preferred method of customer/business interaction.

As stated previously, one example of the provided value that Starbucks's Instagram account offers to its users is the "secret" recipes that would have otherwise not been public. Another example of the value in the site is that most posts are about self-care.

This can be seen in Starbucks's profile biography, saying, "To inspire and nurture the human spirit—one person, one cup, one neighborhood at a time" (Starbucks, 2021). Additionally, there are posts that focus on inspiration for having a good day and taking care of oneself. Individuals who follow the site find value in the idea that the coffee company cares about them personally. This will then translate into how a customer views the brewing process of their order and will also see that as an act of care on Starbucks's part.

Starbucks, undoubtedly, has created value in the form of a nurturing caretaker and is the true resemblance of their logo—a siren. Starbucks conveys to their customers that they are enchanting and America's number one coffee shop. The "siren call" is their posts luring its followers in with the idea that each individual is cared for and appreciated on a personal level with the company. Those who know Starbucks can identify the coffeehouse with just the symbol alone. This is how deeply Starbucks has ingrained themselves in their ever-growing empire of loyal individuals.

Value Provided to Firms

The value that SSM provides for firms is that of communication with individuals who may or may not be part of the target market, to advertise and to learn more about their target market and how to tailor content accordingly. This aids in the marketing strategy and gives the firm who uses social media a more personal reputation among individuals.

As with the Starbucks's Instagram account, the value that it creates for the individuals who follow the account is then translated into value for the firm in return. For example, if a customer leaves positive feedback on one of the Instagram posts, this may then translate into more service from others who follow the positive feedback, increasing sales. This type of word of mouth (WOM) could then lead to the building of an "army of advocates." This is described by Barker (2017), saying:

Advocacy goes beyond focusing social media efforts around brands themselves and simply publishing content about the brand...While social media can be a platform for businesses to share their content, it can become even more valuable by building the number of people who are passionate about a business...These brand advocates will talk to their friends—not because of a contest or prize—but because they are truly passionate about a business and want to tell the world. (p.37)

When this occurs, there is a burst of attention that the company receives from those who were reached through the positive WOM of the "army." On the other hand, the negative WOM can also create positive results in the end, because the negativity will invoke some curiosity to some individuals and could potentially increase sales. Additionally, some of the individuals who spread the negative WOM, if handled properly by the firm, could even convert the individuals into part of the "army." As stated by Barker (2017), "Some very passionate brand advocates can start off as disgruntled customers or skeptical purchasers" (p. 38). In every journey of a firm, there will be negativity that follows. How a company takes care of this situation is what can make or break business. For Starbucks, this has been shown in some of their campaigns that have both succeeded and failed. While the success of the company continues, it is obvious that the way Starbucks has handled opposition has kept them a fan favorite, with little scarring from their struggles as a business.

Value Provided Due to Campaigns

One of the campaigns that brought value to Starbucks was their post dedicated to #BlackHistoryMonth. The campaign was centered around the idea of bringing back peace and to love one another to make a difference. Inspired by the racial events in 2020, Starbucks launched a campaign that welcomed any and all customers who walk through their doors. The post even included a quote from one of their managers who made a comment about bringing peace and fighting for justice. At the end of the post, Starbucks referred to their employees as "associates" to show their commitment and high level of regard that Starbucks has for their employees.

This brought value to Starbucks because it shows that Starbucks is accepting of all beliefs and people. This paints Starbucks as a judgment-free space and the

company could start to see support from the Black community as a result. Because all employees are “associates,” the respect from the employees towards the business increases since most companies do not refer to their employees in this manner. Since Starbucks’s values are centered around the concept of acceptance and respect, the posts on their social media reflect this and serves as a constant reminder that Starbucks supports all communities.

Another example of a successful campaign was that of the #whatsyourname campaign that was held in honor of the LGBTQ community in 2020. This campaign started with the idea to invite those who identified with the community of LGBTQ individuals to have the names that they wanted to be identified by written on their cups and their new names would be announced when their order was ready. During this campaign, the symbol that Starbucks used was that of the mermaid. In support of the community and the tough times that occur during some individuals’ transitions, every special edition mermaid cookie sale would add to the fund for the Mermaid charity.

This brought value to Starbucks because of the respect and appreciation of those who go through the long, tough journey of transitioning, and this campaign saw an increase in sales and money being donated to the charity. Much like the #BlackHistoryMonth campaign, the #whatsyourname campaign created a safe space for acceptance and a judgment-free zone in which anyone could find approval. Starbucks has undoubtedly created value in this concept and many individuals have supported this throughout the years.

Risks and Disadvantages

There is always a risk when it comes to releasing a post on social media. Not everyone is going to accept what the company is saying, and there can be some backlash that comes out of it as a result. An example of an “epic fail” is the “Race Together” campaign. This campaign was specifically tailored to the idea that all races should be respected. To “prove” this, the campaign urged the employees to write “Race Together” on each customer’s cup to start a conversation about racial issues. The employees did not have training on how to approach this heavy topic, and some customers found this offensive. In some cases, there were comments from customers saying that they didn’t have time to stand around and talk about race and how history has affected the current state of the world. It would make them late to their meetings. This could also become inconvenient if the conversation became heated and would cause the line to be backed up, inadvertently causing other individuals to be late for their meetings as well (Duryee, 2015). When the backlash came, some managers from varying Starbucks locations decided to block comments on their social media since they claimed they were feeling verbally attacked by customers. Another aspect of this campaign that angered some individuals was that the post that mentioned “Race Together” was a picture of white employees handing out drinks and discussing racial issues. The Black community did not take well to this and was another factor that contributed to the failed campaign.

Another example of a risk is when Starbucks posts campaigns such as the “Race Together” and #whatsyourname, there may be some backlash as to why specific

individuals need to be targeted for a campaign. This may come across as the company favoring certain individuals over others. While this factor is hardly one to make a negative dent in the company, it is still a factor that could create some negative backlash for the company. For example, older generations may feel alienated by some of the campaigns. While the target market is not mainly comprised of older generations such as the Baby Boomers, there is still a large enough population from this generation to be affected by the campaigns that Starbucks releases on their social media. Since Starbucks is known for its value in accepting all individuals, there should be more attention given to some of the older generations who comprise a portion of Starbucks's customer base. For now, however, there is still a gap in Starbucks's campaigns in that not every generation is considered on their social media.

Starbucks's social media is there to encourage individuals to become a part of the "family" and to enjoy what Starbucks has to offer: community, acceptance, and warm memories in a cup.

Conclusion of Overall Value

Overall, the value that Starbucks's Instagram account offers is more positive than the potential risks that it could cause. Because of this, Starbucks may have yet an increase in their following in future years. From "secret" recipes to inspirational posts, Starbucks's social media is there to encourage individuals to become a part of the "family" and to enjoy what Starbucks has to offer: community, acceptance, and warm memories in a cup.

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Writing Notes Is Not Enough

Evan Chambers

Common sense seems to dictate that the invention of writing has benefited humanity. However, a deeper consideration, as well as a great deal of research, suggests that this issue has multiple layers and is not the ultimate answer to memory, but rather when something is written down it must then be studied to be memorized. Socrates believed reading lessons without instruction would shorten the memory leading to ignorance and resulting in people who "...are for the most part ignorant and hard to get along with..." (Norman). More recently, a study done by psychologist Zeigarnik proved that once something is written down, test participants were twice as likely to forget the information (Konnikova). While there is compelling evidence to show that committing a lesson to memory is better than taking notes, the evidence instead shows that once a lesson is written it must be studied to truly be remembered.

To question the efficacy of the written word seems like heresy. To clarify, committing something to paper and not then to memory is what Socrates is really denigrating. For now, there is more extensive modern research on memory, taking notes on paper and a computer, and why it is necessary to study notes once they have been recorded. Students should understand that written notes are necessary. But studies show that, more important than writing notes, is paying primary attention to the information presented.

Betsy Sparrow, a researcher with the Columbia University Psychology Department, tested a statement made by Stephen Kosslyn of Harvard University who stated that "The Internet is a kind of collective memory" (qtd. in Jarrett, "Has the Internet become"). Sparrow's research showed that study participants were able to remember where information could be found but not the information itself (Jarrett, "Has the Internet become"). Participants were asked to write notes about trivia questions and then save those notes to a computer. Participants could recall where the notes were saved but could not specifically recall the information. The study's finding was that when information is expected to remain continuously available, study participants

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were less able to recall that information. There were similar results from other studies when notes had been written on note paper, whereas this study specifically covered typing notes into a computer (Jarrett, "Has the Internet become"). This type of study shows that aides to memory are a crutch and can alter how people think and remember details. The study also shows the importance of referring back to notes rather than only recording them, as any student can attest to.

In addition to remembering learned details, those lessons should also be internalized and understood. Baroness Professor Susan Greenfield writes, "Imagine that in the future people become so used to external access for any form of reference that they have not internalized any facts at all" (qtd. in Jarrett, "The 'Paper Effect'").

Greenfield is a woman with so many scholarly accolades they should be written down, except then they'd all be forgotten. She warned about this effect in her book, *Mind Change*. She warns that the internet is becoming an external memory bank for humanity and people are less able to recall information without assistance (Jarrett, "The 'Paper Effect'").

Further proof that taking notes without later studying them is detrimental to study habits was provided by Professor Michelle Eskrit and Sierra Ma from Mount St. Vincent University in Canada (Jarrett, "The 'Paper Effect'"). They had students play a game of Pairs, a card-based memory game, where half the students were allowed to take notes on the cards' positions. Those notes were then taken away. The students who did not take notes performed much better at the game than those who did but could no longer access the notes (Jarrett, "The 'Paper Effect'"). The researchers speculated that it seemed like the act of taking notes should have been a form of studying and resulted in those participants outperforming the other group. Instead, their research showed that those students who did not engage their mind in the act of memorizing showed less ability to recall specifics (Jarrett, "The 'Paper Effect'"). Further proving that taking notes alone does not help a student with their memory.

To return to Ziegarnik, she speculated that her research showed that the brain sought finality (Konnikova). When a task is started and then written down the brain believes that task has been finalized, whether that information needs to be referenced later or not. Rather than the brain dumping information, when information is written down the brain finalizes that information (Konnikova). Ziegarnik compares the effect to tension in the brain similar to a cliffhanger ending. When details to a task are written down, the brain perceives an ending to that cliffhanger and the story is finalized (Konnikova).

Ziegarnik eloquently tested an observation that is rather old. Ernest Hemingway observed that taking notes about a creative first draft will excise inspiration from the mind when he said, "Because I had worked on newspapers since I was very young, I could never remember anything once I had written it down; as each day you wiped your memory clear with writing as you might wipe a blackboard clear with a sponge or a wet rag" (qtd. in Konnikova). Socrates is starting to look prescient rather than stodgy and old fashioned. Did Socrates have the right idea? Is all human innovation somewhat questionable because of writing which is a faulty innovation that robs people of their memory? Consider the words of Nicholas Carr: "My mind would get caught up in the narrative or the turns of the argument, and I'd spend hours strolling through long stretches of prose. That is rarely the case anymore. Now my concentration often starts to drift after two or three pages. I get fidgety, lose the thread, begin looking for something else to do."

The subject of whether or not to write something down and the effect that has on memory seems relevant to students today. That is a conversation that has been going on since ancient Greece and has continued to today. Personal habit is an aspect that seems to bear more consideration. Carr used to spend long stretches reading but does not anymore. Why is that no longer his habit? To use a meta reference, all this proof that writing should be used cautiously was provided by researchers who undoubtedly write extensively, and many are, in fact, authors. To make a comparison, when the calculating computer or slide rule were invented, mathematics and physics

were not impacted in a negative way. Katherine Johnson put humanity on the moon with her mind alone, despite the invention of the slide rule and the computer (Stauss). I would attribute that to the personal discipline she displayed that took an African American woman all the way to one of the most prestigious government positions of the time, despite the ongoing civil rights movement. Personal habits and discipline are the true culprits that lead to the mind and memory atrophy, rather than any kind of external assistance from paper, the internet, or calculators.

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Author Biographies

Evan Chambers is pursuing a bachelor's degree in criminal justice while working full time in the Air Force. After graduating, he hopes to use his degree to continue his career of public service by becoming a police officer after retiring from the military. Evan wrote his essay, "Writing Notes Is Not Enough," for Professor Brie Jontry's first-year writing class. He enjoyed the process of researching this subject with an open mind and discovering more about the way people learn. He would like to thank Professor. Jontry for helping him edit this essay and for her kind encouragement.

Grant Hunsaker graduated with a bachelor's degree in English with a minor in History in May 2021, and was the recipient of the 2021 Mary Barlow Writing Award for Outstanding Student Writing. He plans on pursuing an M.F.A. in creative writing. Grant's paper was written over the course of the fall 2020 semester for his senior Capstone project with Dr. Mecklenburg-Faenger.

Jerry Keeney is pursuing a bachelor's degree with in Mathematics and Geography. In his own time, he's concurrently working towards a degree in Broadcast Meteorology through Mississippi State via distance learning. His ultimate career goal is one in broadcast meteorology. He wrote his research paper for the History of Math course taught by Dr. Charlie Smith, with the hope of covering a topic he thought would be unique for the course while still helping him learn more about a field that interests him. He would like to thank his family and friends for supporting him every day, as well as his teachers from elementary, middle school, high school, and college for providing him with the skills and knowledge that he's acquired in order to succeed in the real world.

Andrea Lucas is currently pursuing her second bachelor's degree studying Political Science with a minor in Global Studies after earning her first Bachelor of Arts degree in Dance Pedagogy from Butler University in 2009. After graduating from Park University, she plans to earn a master's degree in Political Science. Andrea would like to pursue a career as a political consultant, analyst, or within the international diplomatic arena. Andrea wrote her essay for Dr. MacLennan's course in Comparative Political Systems. After traveling the world as a professional ballet dancer, Andrea has further broadened her global perspective while studying Political Science. She hopes to demonstrate to others that learning about different cultures, differing political processes, and disparate views can ultimately help us to better understand ourselves while also acquiring more compassion for others.

Bryce Reeves is a returning college student pursuing an Organizational Communications degree and a minor in Social Psychology. He embarked on his career working in corporate America and then moved to make an impact on small businesses in Kansas City. Bryce is a decorated philanthropist serving on the Board of Directors for the Mid-America LGBT Chamber of Commerce and Fountain City Performing Arts providing at-risk LGBT youth a place to express themselves through the arts. He was challenged to write his research paper by Dr. Natasha Houston who helped push him

to dig deeper into his research to make an even larger impact on the audience. Reeves has witnessed the effects that LGBTQ+ culture can have on individuals and hopes this brings awareness to look out for one another.

Baily Robinson is a Senior at Park earning a Bachelor of Arts in Organizational Communication and a minor in Political Science. After graduating in December 2021, she plans to work in the non-profit field and pursue a career in community outreach or politics. While the initial purpose for pursuing an Organizational Communication degree was to prepare for and learn about a job in human resources, the coursework for the degree and her minor opened the door to new opportunities and emboldened her to foster her passion for and interest in learning about politics, history, and contemporary issues. The purpose of her paper is to expose the apparent stereotypes and bias against women in politics in the media. She wrote her paper for Theories of Communication taught by Professor Allison Beltramini. Baily would like to thank Professor Beltramini for offering her support and encouragement throughout the writing process for this paper.

Camelin Cochran Sampson graduated with a B.A. in Organizational Communication with minors in leadership and sociology in May 2021. She will hopefully be pursuing her master's degree in communication to continue her research and pursue a career in higher education. She wrote "Public Apologies in the Age of Internet Influencers" to fulfil the Senior Research Project requirement. This paper was advised by Professor Carolyn Ullrich. This paper also received the Lambda Pi Eta award at the Central States Communication Association Undergraduate conference. Camelin presented at this conference as a part of the Top 5 Papers Panel. She would like to thank Dr. Lora Cohn for always encouraging her and pushing her to be her best. Dr. Cohn was always willing to be a sounding board for new ideas and helped her develop her research topic.

Roschel Schmigotzki is a junior in college, pursuing a Bachelor of Science in Marketing with a minor in Graphic Design. Planning to graduate next year, Roschel is working on additional extracurricular activities that will enhance the remainder of the college experience. This includes work in the National Society of Leadership and Success to receive advanced and executive certifications in leadership training. She is also actively striving to pursue her goals to become an independent author. As of now, Roschel is writing a book that is set to be completed next year. Roschel would like to thank Professor Shawna Green for encouraging and igniting her passion for writing. She would also like to thank Professor Nitin Pathak for giving excellent feedback that helped shape an overall better understanding of marketing.

Molly Soltis graduated with a B.S. in mathematics and a minor in social psychology in May 2021. She has received a government position offer from her dream job and will start her career in Washington D.C. She wrote her paper for her History of Mathematics course in 2020, taught by Dr. Charlie Smith. She would like to thank Dr. Charlie Smith for his mentorship and support while she was his work study student throughout her two years at Park.

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