

Attack of the Fake Geek Girls  
Challenging Gendered Harassment and Marginalization in Online Spaces

by  
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A Dissertation Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

Approved April 2015 by the  
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ARIZONA STATE UNIVERSITY

MAY 2015



## ABSTRACT

*Attack of the Fake Geek Girls: Challenging Gendered Harassment and Marginalization in Online Spaces* applies feminist, gender, and rhetorical theories and methods, along with critical discourse analysis, to case studies of the popular online social media platforms of Jezebel, Pinterest, and Facebook. This project makes visible the structural inequities that underpin the design and development of internet technologies, as well as commonplace assumptions about who is an online user, who is an active maker of internet technologies, and who is a passive consumer of internet technologies. Applying these critical lenses to these inequities and assumptions enables a re-seeing of commonplace understandings of the relationship between gender performativity and digital cultures and practices. Together, these lenses provide a useful set of tools for methodically resisting the mystique of technologies that are, simultaneously, represented as so highly technical as to be opaque to scrutiny, and as ubiquitous to everyday life as to be beneath critical examination.

Through a close reading of the discourses surrounding these popular social media platforms and a rhetorical analysis of their technological affordances, I documented the transference of gender-biased assumptions about women's roles, interests, and competencies, which have historically been found in face-to-face contexts, to these digital spaces. For example, cultural assumptions about the frivolity of women's interests, endeavors, issues, and labors make their way into digital discourse that situates the online practices of women as those of passive consumers who use the internet only to shop and socialize, rather than to go about the serious, masculine business of making original digital content.

This project expands on existing digital identity and performativity research, while applying a sorely needed feminist critique to online discourses and discursive

practices that assume maleness and masculinity as the default positionality. These methods are one approach to addressing the pressing problems of online harassment, the gender gap in the technology sector, and the gender gap in digital literacies that have pedagogical, political, and structural implications for the classroom, workplace, economic markets, and civic sphere.

## DEDICATION

This work is dedicated to my confidant, Michelle Roberts; my sister and shenanigans partner, Cathy Eley; and my mother, Helen, who taught me to be resilient, to seek justice, and to never stop learning.

## ACKNOWLEDGEMENTS

This dissertation, and the scholarly work and development it represents, would not have been possible without the guidance, support, and investment of my committee members and faculty; the encouragement and inspiration of my friends; the pride of my family; and the strength and empathy of my partner.

I would like to extend my sincerest gratitude to my advisor, Dr. Keith D. Miller, who has cultivated my identity as a scholar and writer, generously contributing his leadership and vision to all of my endeavors. I am deeply grateful to Dr. Shirley K Rose who lent her remarkable clarity and insight to a number of issues I encountered while a doctoral student, an instructor in the program under her direction, and in the process of researching and writing this project. Dr. Patricia Boyd has been my mentor since directing my master's thesis in 2008. Dr. Boyd's unflinching faith in my scholarship and contribution underpins all of my scholarly work, and for her, I am ever thankful.

I sincerely appreciate the support and mentoring of Dr. Alice Daer, Dr. Maureen Goggin, Dr. Peter Goggin, Dr. Kathleen Lamp, Dr. Doris Warriner, Dr. Daniel Gilfillan, Dr. Joe Lockard, Dr. Elisabeth Hayes, Dr. James Paul Gee, and Dr. Kate Frost, all of whom have generously guided me and advocated on my behalf.

I have benefitted immensely from working with and alongside my vibrant and talented cohort, including Dawn Opel, Paulette Stevenson, Monica Boyd, Dr. Amber Nicole Graham Pfannenstiel, Dr. Ryan Skinnell, Dr. Nicole Khoury, Dr. Ryan Shepherd, Dr. Emily Cooney, Brent Chappelow, Emily Hooper-Lewis, Rebecca Robinson, Michael Thomét, and Alison Sutherland.

I offer my love and thanks to my friends, Dr. John Carter McKnight, Dr. Katrin Tiidenberg, and Michael Burnam-Fink, collectively known as the CDPN.

Finally, I thank my partner, Chris, for all of the excellent sandwiches.

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## Chapter One: Contextualizing and Analyzing the Impact of Gender Performativity and Policing Online

In this dissertation project, I begin by introducing the problem of misogyny in digital spaces, and I situate my project within a larger context of power, privilege, harassment, and marginalization online that asymmetrically impacts women. In this introduction, chapter one, I describe the case of internet trolls who organized to harass and threaten the editors and users of the feminist media website, Jezebel.com through several months in 2014, and I leverage this case to develop a dimensional description of the commonplace hegemonic process employed to deliberately and systematically silence women in digital spaces. In chapter two, I introduce and describe the methods and theories I employ to analyze the cases in this project. In chapter three, I explore the online social networking platform Pinterest and the marginalization of its female user community by the predominately male technological press corps. In chapter four, I discuss the Fake Geek Girl meme that rose to online prominence in 2013, and I complicate this meme with a close reading of several examples of online posts written by popular male internet figures about the ostensible problem of Fake Geek Girls within the greater geek community. I argue that these prominent male geek rants reinscribe the commonly held geek cultural belief that “fake geek girls” prey upon unsuspecting male geeks, and that this discourse is used to keep the gates of geek culture and block female geeks from full community participation and membership. In chapter five, I discuss my findings; situate these findings within the disciplines of digital rhetorics, feminist rhetorics and digital literacies; describe the significance of these findings and how this work adds to the body of scholarly writing within these disciplines; and finally, I briefly discuss the future trajectory of this research.

Conventions: words, phrases, names, and syntax selection

Internet technologies are persistently in development which causes the social networks, websites, and mobile applications that are dependent on these technologies to also exist within a persistent state of change. Additionally, the user practices and discourses afforded by these technologies are also persistently changing and growing as new technologies and communication modes are adopted while others fall out of favor or are made obsolete. The language to describe and delineate digital technologies and supported media is fluid, reflecting both the persistent material changes of the technologies and the shifting attitudes toward and cultural re/positioning of the technologies. In the process of researching and writing this project I have, for the sake of consistency and readability, made a number of discrete language and syntactical choices in cases where language and syntax are not “settled.” It is not my intent to produce a definitive decision on the “correct” language or syntactical usage – I do not aim to stabilize or fix these areas of fluidity. Rather, I seek only to produce an accessible and cogent document: here, I limit the scope of my choices to this project.

Internet or internet?

The *Modern Language Association Style Guide* and the *Chicago Manual of Style* both capitalize the word Internet as a proper noun, however journalism style guides and most technology industry sources do not capitalize internet unless it is employed to modify a noun, as in the Internet Engineering Task Force (IETF) that develops and disseminates internet standardization protocols. While historically, internet was capitalized, industry experts, some journalists, and some scholars began moving away from the notion of the internet as a proper noun in the 1990s. It

is commonly held that John Schwartz's 2002 *New York Times* piece, "Who Owns the Internet? You and i Do (sic)" is the first widely disseminated discussion of the move away from capitalization. In his article, Schwartz discusses several scholars and industry voices who are engaged in a movement to conceptualize the internet as a necessary part of everyday life, like "air and water," which are generic not proper nouns. This movement to re-conceptualize the internet as a necessity has similar aims to political movements, like "Net Neutrality," that have attempted to redefine the internet as a utility, and thus subject it to the types of federal regulation that purportedly protect citizen access. Finally, the internet has undergone dramatic architectural changes over the last five decades, and when at one time "the Internet" may have referred to a singular, specific computer network, today 'the internet' is a symbolic term that binds together cable and satellite service providers, academic and government institutions, private enterprises, and mobile platforms in a broad concept of digital connectivity. In this document, I decline to capitalize internet, unless it is employed to modify a noun, for all of these reasons.

#### Affordances or technological affordances

Scholarship frequently describes the features and attributes of technologies that can be leveraged in scholarly activities as "technological affordances" (Boyle and Cook, 2004; Suthers, 2006; Want, et al., 2012). Yet, in this project, where the case studies are all culled from digital technologies and technological platforms, the phrase "technological affordances" becomes repetitive and redundant. Where adjectival references generally add specificity to text, in the case of this document the redundancy of "technological" adds only extra words, so I have omitted it for the sake of clarity, unless the phrase occurs within a quotation.

#### On-line, online, e-mail, or email: hyphenations

Reflecting the evolution of digital technologies, the names and terminologies of these technologies have also changed and evolved over time. Much of this change has been a kind of simplification, reflecting the need to be relevant and accessible to an ever-increasing and diverse user base. Following the practice of simplifying terminology for the sake of accessibility, in this document I have chosen to also use simplified terms where available, like email rather than e-mail, and online, rather than on-line. Where I cite the writing and scholarship of others, I have faithfully replicated the author's terminology from the original text.

#### Real space, digital space, face-to-face space: describing life online

Navigating the distinctions between online practices and personas and in-person, face-to-face personas is complex because digital rhetoric, literacy, and identity scholars increasingly agree that there is little difference between the identities we assume in face-to-face communications and those we present online (Baym, 2010; Daniels, 2009; Tiidenberg, 2013). While we may play roles or perform fantasy for a digital audience, these performances are not unique to online spaces, rather the multiplicity of the self is a persistent notion in postmodernity. While early cyberspace scholars may have theorized an online utopia distinctly different from in-person context, by 1996, Nicholas Negroponte was arguing that online contexts would become a kind of "place without space," and that "the post-information age" would be entirely unmoored from geography: "[d]igital living will include less and less dependence upon being in a specific place at a specific time, and the transmission of place itself will start to become possible" (165). In short, the fluidity and multiplicity of postmodern identity is enacted in post-information age notions of

the fluidity of place online. Issues of the permeability and fluidity of digital place and space are beyond the scope of this project, but references to online place(s) are necessary because the cases studied here are situated within online spaces. Here, I define these online spaces as websites or social media platforms. These spaces and places, and the identities and literacies performed within their constraints, are all conceptual products of computer code. Textual references to these websites and networks that are described in the language and syntax of physical space are offered only to facilitate the analysis of the practices and discourse within those contexts (see also: Manovich, 2001; van Dijck, 2013; Waggoner, 2009).

#### Discourse and discourse: the scholarship of James Paul Gee

Chapter four of this dissertation applies James Paul Gee's social linguistics scholarship and methods of discourse analysis to the Fake Geek Girl internet meme. Gee argues that "[a] Discourse with a capital 'D' is composed of distinctive ways of speaking/listening and often, too, writing/reading *coupled* with distinctive ways of acting, interacting, valuing, feeling, dressing, thinking, believing, with other people and with various objects, tools, and technologies, so as to enact specific socially recognizable identities engaged in specific socially recognizable activities" [emphasis in the original] (*Social Linguistics and Literacies* 155). For Gee, the crucial distinction between discourses and Discourses is the being-doing of identity work that extends beyond, but is intimately bound up with, spoken and written language. In this dissertation, where I employ Gee's scholarship and theories of Discourse, I conform to his capitalization schema.

## Trolls and trolling

“Don’t feed the trolls” is an internet maxim that elides the commonly held belief that there are people on the internet who make a game out of inciting emotional responses from others online. It also elides the commonly held belief that these people are unavoidable, and everyone online must both expect them and learn to ignore them. Trolls and trolling are catchall terms that are employed to describe a wide range of harassing, abusive, inciting, and anti-community behaviors online. However, trolls, as a term, sounds rather cutesy, as if these are the fairy tale bugaboos who live under the bridge, so use caution while crossing. Calling them trolls and their behavior trolling serves to obscure the very real fear from death and rape threats caused by these trolls. I would prefer another term, one that is less cute and more on point about the virtual violence perpetuated. That term at this time does not exist, so I continue to use trolls and trolling in this document to conform to the conventional understanding and vernacular of this phenomenon.

'playing hack-a-mole with a sociopathic Hydra': gendered digital violence on Jezebel.com'

On August 11, 2014, the editors of the feminist-oriented news and culture site, Jezebel.com, Jessica Coen, Dodai Stewart, Erin Gloria Ryan, Tracie Eagan Morrissey and Kate Dries, became a national news story themselves when they posted an open letter as the top article on the Jezebel site titled, "We Have a Rape Gif Problem and Gawker Media Won't Do Anything About It." Jezebel.com is owned by parent company, Gawker Media, LLC, which is a network of popular digital media sites, including Deadspin.com, Gawker.com, Techmodo.com, Kotaku.com, io9.com, and Jezebel.com that cover breaking news, entertainment gossip, technology, and video games (Bercovici). Day-to-day operations of the Gawker Media sites are the responsibility of Joel Johnson, the editorial director for the Gawker Media network. In their letter, signed simply "Jezebel Staff," the Jezebel editors reported that the comments and discussion forum of their website had been under attack by internet trolls for several months. These trolls, of which the editors reportedly had traced back to 4Chan, a discussion board website that is known for its coordinated attacks against other websites and other people online who have drawn 4Chan's ire, had been using "burner" accounts to post violent, pornographic animated images (GIFs) of rape on the Jezebel discussion forums. "Burner" accounts are website user accounts that are difficult, if not impossible, to trace to a real life person. Because of the affordances of the Gawker network websites, Jezebel's writers (as well as all of Gawker's writers) moderate the comment and discussion threads on their own articles. This authorial moderation of the comments and discussions posted in response to one's own articles allows for direct interaction between Jezebel's writers and their audience. By using burner accounts to post comments to the Jezebel articles, 4Chan's coordinated campaign of harassment forced the almost entirely



female Jezebel staff, to monitor, view and delete these animated images of rape or leave the images for the website's audience to encounter.

This trolling strategy, to post images of rape and violence against women, to a website run primarily by women for a primarily female audience, is a specifically gendered strategy designed to humiliate and intimidate the staff and audience. And the harassment took its toll on the editorial staff who wrote:

[t]his practice is profoundly upsetting to our commenters who have the misfortune of starting their day with some excessively violent images, to casual readers who drop by to skim Jezebel with their morning coffee only to see hard core pornography at the bottom of a post about Michelle Obama, and especially to the staff, who are the only ones capable of removing the comments and are thus, by default, now required to view and interact with violent pornography and gore as part of our jobs (Jezebel Staff).

Conventional online wisdom argues that in online contexts when we are the targets of harassment from other users that we "should not feed the trolls." In other words, if someone is harassing you online, you should ignore them because giving them attention only encourages them. This common knowledge, 'ignore it and it will go away,' approach does not take into account the gendered nature of online harassment, which is overwhelmingly directed at women online, or the gendered context in which women's lives are disproportionately shaped and controlled by the real life, commonplace threat of rape (Hess). While the trolling of women online is almost always gendered, there is at least an entire study in the specific analysis of rape threats and rape pornography leveraged against women and whether or not it can be viewed as an online extension of the real life manifestations of sexual violence framed as male power and supremacy that is described by feminist and gender theorists (Brownmiller, 1975; Buchwald, Fletcher, and Roth, 1993; Butler, 1990; Kimmel, 2005). Specifically, in the case of the 4Chan troll(s) who attacked Jezebel's writers and readers, given the online space's publicly stated mission to write and report on political and cultural issues of interest to women, it seems

apparent the gendered sexual violence of the images posted to Jezebel were specifically chosen as an attempt to punish the website's largely female community who are transgressing traditional gendered norms by being vocal about women's issues in a public forum, as well as to reassert masculine power in a digital domain that had been purposed for generally feminine interests.

In their open letter, the Jezebel editors indicated that they had reported their concerns to Johnson and the higher management at Gawker Media and Kinja, but had received little support because the management prioritized preserving comment anonymity for potential tipsters over the well-being of Jezebel's writers:

In refusing to address the problem, Gawker's leadership is prioritizing theoretical anonymous tipsters over a very real and immediate threat to the mental health of Jezebel's staff and readers. If this were happening at another website, if another workplace was essentially requiring its female employees to manage a malevolent human pornbot, we'd report the hell out of it here and cite it as another example of employers failing to take the safety of its female employees seriously. But it's happening to us. It's been happening to us for months. And it feels hypocritical to continue to remain silent about it (Jezebel Staff).

The editors closed their letter by arguing that their management had been in the past supportive of the website's writers and cared deeply about freedom of speech and discourse, but that these values had not been applied to the current Jezebel trolling situation, this coordinated 4Chan attack of porn and rape GIFs, faced by Jezebel's staff, necessitating the public airing of their concerns. In short, the trolls were empowered to post violent pornography to the Jezebel website in the interests of free speech, while the freedom to network and discuss issues of feminist interests were threatened by the trolls, a threat to freedom that was not acknowledged, or ever understood, by the greater Gawker and Kinja management structures.

## Digital literacy leveraged as discursive power

While the Gawker Media websites have been online since the 2000s, in 2012, all of the websites were converted to the Kinja publishing platform. Gawker Media's content lifeblood is originated largely by tipster-contributors, who provide editors and writers with breaking stories. Kinja was developed as a complementary technology for the Gawker network of websites, as Gawker Media executives and writers wanted to build a more reader and tipster-driven online community. The affordances of the Kinja platform were designed to support this goal, and by accounts, the Kinja strategy is a successful one. One of the unique features of the Gawker network of websites that run on the Kinja platform is that the staff writers and editors who produce the website content also mediate the comments and discussion threads for their own articles, engaging in direct conversation with the audience/commenters. Under the Kinja model, commenters provide information that potentially updates and extends the article, or they engage in discussion of the article within the broader context of the website content. Gawker Media staffers respond to these posts, updating the articles with the commenter-submitted information and engaging the commenters about the mission and vision of the website and its content. Gawker Media's model of audience-writer interaction supported by the Kinja platform has contributed to the development of a highly engaged community surrounding the Gawker Media's sites.

Gawker Media website commenters not only directly communicate with the website writers through tipster submissions and comments, but the reader-commenters also engage one another in both serious and humorous modes, debating the merits of the points in the story or sharing a joke, much like members of an face-to-face community. Different from



Fig. 1. Tina Fey, in the character of Liz Lemon, offering herself a high five. This is a common animated GIF on Jezebel.

face-to-face communities, Gawker Media website commenters also post animated response GIFs. An animated GIF is a digital file type that is a short animated sequence lasting only a few seconds. (One popular animated GIF that is often posted to Gawker articles is Tina Fey, in the character of Liz Lemon, giving herself a high five.) While animated GIFs are commonplace on the internet, they have a kind of cultural cachet on the Gawker network of websites with commenters applauding each other for especially relevant or creative GIFs. Spontaneous "GIF parties" spring up in the comment threads, with commenters replying to each other's GIFs with GIFs of their own. Response animated GIFs are an important community discursive feature of the Gawker Media websites' user communities.

While the commenters are required to create a Kinja account to post comments and join discussions on the Gawker Media websites, the Kinja user accounts are validated as "legitimate" accounts, and not spammers or trolls, because

in the process of setting up your account, you must link to either your Google, Facebook or Twitter accounts. Ostensibly, if a person has one a Google, Facebook, or Twitter account, they are not a potential troll or spammer attempting to obscure their real life identity, and the posts to the Gawker Media websites can be traced back to a legitimate user on one of these prominent social media platforms. However, as part of the Kinja design, it is also possible to establish your user account as a “burner” account, an account where no personal information about the user is recorded, including no Internet Protocol address (IP address), which is a common data element for a website service provider to capture and store in their databases when someone posts to a website, and one that generally reveals the poster’s geographic, real life point of origin. An IP address is essentially the street address equivalent for the internet, and every node on the internet – every computer, every modem, every router, and every website - has an IP address. Gawker Media, LLC management feels user anonymity is important in order to allow for tipsters to report breaking items of interest to Gawker Media’s writers without risking revealing their own identities, so Gawker Media has enabled and supported the creation of these untraceable burner accounts (Coen). While the open letter from the Jezebel editors argues that it is these anonymous burner accounts that are responsible for the bulk of their harassment, Johnson suggests that at least some of the offending posters had accounts that were validated through burner accounts in Twitter (ibid.) In other words, users set up “sock puppets,” or fake Twitter accounts for the sole purpose of using those accounts to validate their Kinja accounts.

Creating a Twitter account is a relatively straight forward matter: a new Twitter user simply submits their preferred screen name, an email address, and a password to the Twitter application, and the user account is generated.



Fig. 2. Tweet posted by Twitter user account @WorstMuse satirizing a writer’s tendency to miss editorial deadlines.

The underlying and originating concept of the microblogging platform Twitter is that a human will create an account and will post as him or herself. Twitter’s Terms of Service includes a statement that users must be authorized to tweet as the person or company they represent themselves to be. However, very soon after Twitter went live to its user base, Twitter parody accounts, commentary accounts, and fan accounts emerged. These accounts are also technically “sock puppets,” in that they enable a person to perform on

Twitter in the persona of someone else. For example, one popular Twitter commentary account is @WorstMuse account that has more

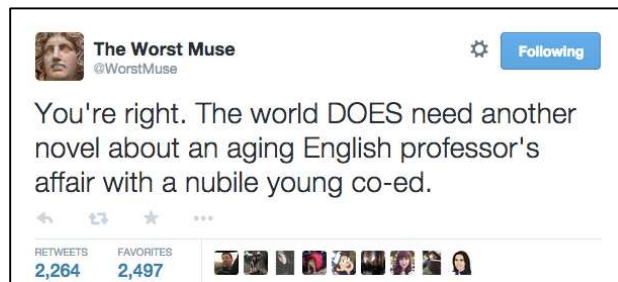


Fig. 3. Tweet posted by Twitter user account @WorstMuse mocking the clichéd fiction trope of an affair between an older mentor and a naïve young woman.

than 80,000 followers on Twitter. A few popular tweets posted by @WorstMuse are, “You’re right. The world DOES need another novel about an aging English professor’s affair with a nubile young co-ed” and “Deadlines are for hacks. YOU’RE an artist!” In other words, someone acting in the persona of a writer’s ‘worst muse’ is posting advice as if the worst muse were a real world person providing poor inspiration for writers. The comments are both funny and serve as commentary on the internal life of a writer who misses deadlines and doubts the value of her work. The parody account @FakeAPStylebook, that has over 200,000 Twitter followers, and while it has

been offering snarky style advice for journalists since 2009, it gained international attention during the 2014 Winter Olympics for its sarcastic commentary on Russian



Fig. 4. Tweet posted by Twitter user account @FakeAPStylebook satirizing a comment Sarah Palin made about her foreign policy experience during the 2012 U.S. Presidential campaign.

preparation and infrastructure: "You are here to cover the Sochi Olympics in Russia. Quit looking over at Sarah Palin's house. #Sochi2014" and "Terrorist bombs are denoted 'BOOM!' Collapsing infrastructure is denoted 'FWOOM!' #Sochi2014". Twitter officers and representatives have given a number of talks and presentations over the years where they assert that Twitter's value is in its ability to allow its users to connect with the topics and demographic groups of their own interest (Ingram). In short, if the Twitter account attracts an audience that values it, then it is serving the goals of the Twitter platform, whether or not the account represents a real person. The account can be a sock puppet if it is popular with other Twitter users.

In the case of fan accounts or parody accounts, the sock puppets are used for humor or in homage. They attract followers who find the accounts



Fig. 5. Tweet posted by Twitter user account @FakeAPStylebook that makes an ironic distinction between terrorist attacks and poorly constructed infrastructure at the Sochi Olympic games.

funny, entertaining, informative, or clever. Even the sock puppet names can be designed to be humorous or clever, such as @WorstMuse that is a kind of nod at the self destructive practices of some creative people. But in the case of Jezebel trolls,

sock puppets are not used for humor or entertainment, but rather to obscure the identity of the person committing trolling, stalking, and doxxing of real world people and their identities. Despite the underlying concept of a real person posting real tweets on Twitter, the site has few limitations on sock puppets and trolling. In fact, Twitter's only additional limitations, other than that the person using the account should be authorized by the person or business the account claims to represent, on these accounts are that they not infringe upon trademarks (Twitter). Twitter also takes a notoriously hands off approach to all tweet posters, writing that "[w]e respect the ownership of the content that users share and each user is responsible for the content he or she provides. Because of these principles, we do not actively monitor and will not censor user content, except in limited circumstances described below" (Twitter "The Twitter Rules"). The "Twitter Rules" then bullet content boundaries that prohibit trademark and copyright violations, the online dissemination of confidential personal information of others (known as doxxing among hackers), and violence and threats.

The specific "Twitter Rules" statement about violence and threats is controversial though, given that it reads, "You may not publish or post direct, specific threats of violence against others." In other words, rape threats are just fine on Twitter so long as the post does not provide a specific place and time where the rape will be perpetrated. Although a longer discussion of Twitter's culture and history, particularly related to harassment, could be included, it is important to note here that using a Twitter account as a means of 'validating' that a real person is joining the Kinja platform in order to legitimately engage the community is a tenuous assumption given the deliberately porous "rules" of Twitter and the ease in which a burner Twitter account can be created. This porosity is widely known throughout tech and social media discourse. And in the case of Jezebel's rape GIF problem, when the



editorial director of Gawker Media gestures toward Twitter, what social media experts hear is, “it’s not my fault or the fault of our Kinja platform and technology. It’s anarchy over at Twitter.”

And it is indeed virtually lawless on the Twitter social network. A simple internet search for Twitter harassment will return countless stories of women reporting rape and death threats, sexual harassment, and violent imagery to Twitter, and Twitter responding that these threats are not a violation of the Twitter Terms of Use because they do not contain specific details (Jones; Weitenberg). In her efforts to process her overwhelming grief at the suicide of her father Robin Williams, Zelda Williams, named by her father in honor of Nintendo’s video game character, Princess Zelda, took to Twitter to share her grief with a larger community. While she received a public outpouring of support and shared memories, Zelda Williams was also a target of trolls who sent her graphic, decapitation photos digitally altered to resemble her late father. In response, Zelda Williams deleted her accounts and fled social media altogether, stating that she might never return (Dewey). The story of the abuse directed at Zelda Williams was reported across media outlets internationally (Oliver). In response, executives at Twitter released a statement that they have been reviewing their policies for some time and will release revised policies and enhanced reporting tools (Dewey). Similarly, the open letter from Jezebel’s staff received widespread media coverage and was reposted to digital media sites across the internet. In response, Gawker Media announced that they were suspending the ability to post all GIFs to the comment threads of their sites until the Kinja platform could develop and implement more refined monitoring tools (Coen). Of course none of these technological solutions address the deeper cultural issues of power and gender that underpin the trolling of female internet users. In fact, it seems apparent that the social media technologies are leveraged in these

cases to enact real world power dynamics against women in public spaces, and perhaps do so more effectively because they are anonymized by the sock puppet affordances of the social web, a claim I will take up in my concluding chapter.

To keep on keeping on: trolling, harassment, and the stories we tell ourselves

To this point, I have described what I feel is a terrible situation at Jezebel in which female editors and community members have been subjected to images of



violent pornography ostensibly because 4Channers hate feminism (Davies). I have described some of the technological features and limitations of the Jezebel website, its Kinja blogging platform, and the digital literacies of its community members. The story reads

Fig. 6. Screen capture of the image of a kitten held in female-presenting hands that was posted with the Jezebel open letter regarding rape GIFs. Cats and kittens are a common internet trope, some say cats are the 'official' mascot of the internet, and this image represents a complex rhetorical move, one that constructs females as internet makers and producers of content in resistance to the 4Chan efforts to drive the predominantly female Jezebel community off of the internet.

fundamentally as a straightforward war between the relatively competent and tech-savvy Jezebel community and the hyper-competent hacker community of 4Chan. With their GIF parties and their multiple social media platform accounts on Kinja, Twitter, and the like, it would be difficult to suggest that Jezebel.com users are anything but well-versed with the technologies and discursive practices of the social

web. By contrast, 4Chan users are also competent with the social media platforms of the social web, as they are able to create sock puppet accounts on these social media platforms to obscure their identities, but the 4Chan community is generally *more* adept than the Jezebel community because the 4Chan community mounted an organized attack (one type of literacy in that they used their 4Chan community forums to organize) that identified (another kind of literacy in that it requires a good understanding of systems logic in order to identify and *exploit* a platform weakness) a weakness in the system, and the community will to sustain the attack over a period of months. This last point, the community will and its collective identity that drives it to coordinate attacks across the internet is beyond the scope of this project. It is rather the first two points that I want to focus on – the multiliteracies (Selber) of one community were less adept and flexible than another, making the Jezebel.com community, a women’s community, vulnerable to the will of the apparently more technologically literate 4Chan community. Or, the boys beat the girls because the boys were better at it.

The girls then called publicly for the help of a different group of boys who swooped in and saved the day. This reductive tale of the “incompetent” girls who needed rescuing has become the popular narrative because it is a familiar story, one that fulfills all our commonplace beliefs and women, men, and technology. At this writing, the Jezebel.com story has faded from recent memory, the space it once occupied has been allocated to newer stories of online harassment and trolling, like #GamerGate and “the Fappening,” the theft and online dissemination of thousands of hacked nude photos of female celebrities by 4Chan community members in that familiar pattern. I would suggest here that the pattern of under-competent women threatened by bad men and rescued by good men is so familiar and so commonly intertwined with our gendered assumptions around technologies (women are poor

drivers, women cannot program the VCR, women cannot use the tools and follow the instructions to assemble the Ikea bookcases) that it slips beyond our notice. It goes unchallenged. My next logical step in this introduction chapter would be to elaborate on this project, its relationship to other projects within the digital rhetorics, feminist rhetorics and digital literacies disciplines, and finally to describe its significance and how I think it adds to scholarly work in these disciplines, yet I want to pause here just for a moment and confront the violence that is hidden by this unchallenged and familiar narrative of good men rescuing women from bad.

An aside: counting the cost

Because it is their jobs, because they pride themselves in the Jezebel community they have built, and because they care about their readers and commenters, the female staff at Jezebel.com have spent hours a day, every day for months on end, subjecting themselves to images of rape and violence done to the bodies of women because someone had to delete those images. Someone had to look at the images, make a decision about whether or not they were offensive, select them for deletion, and then execute the on-screen delete function. They had to complete these steps for every image posted to their site. Such is the task of internet moderating: to review and assess individual contributions and then determine to retain or delete those contributions, one at a time. Whether we call this trolling, harassment, or virtual rape – the point is that it *already* happened, and nothing that we do now, nothing the Kinja programmers do, nothing the Gawker Media executives do, nothing the Jezebel.com community does, and nothing about this research project can change what has already happened – what we already dismissed in service of the next cycle of online abuse. The talented and award winning actor, Jennifer Lawrence, cannot take back the nude pictures of herself that

were stolen from her boyfriend and splashed all over the internet. And Anita Sarkeesian, the feminist cultural critic and voice behind *Feminist Frequency* who was one of the early targets of #GamerGate, cannot reclaim her anonymity or sense of physical safety now that she must take precautions for every death threat she receives (Schreier).

Sarkeesian has been forced to flee her home as a result of very specific rape and death threats that identified her personal details and the details of her family members (McDonald). So has vlogger, Laci Green who posts feminist-themed videos to her sex-positive YouTube channel that push back against patriarchal cultural norms that minimize feminine desire and female sexual satisfaction. As has journalist Amanda Hess who in January 2014 wrote a devastating expose of gendered online harassment for *The Pacific Standard*. In her article, "Why Women Aren't Welcome on the Internet," Hess details the harassers who fixated on her and sent her horrific threats, and also her interactions with law enforcement authorities who seem largely puzzled that she continues to put herself in harm's way by being a woman in public. Police officers have literally suggested she stop posting online. Hess writes that of course this is not possible. It is not possible for women to restrict their activities enough, to stop lending their voices to public discussion, to stop walking on the street, to stop being in the workplace alongside men. She argues that this harassment we so easily dismiss as par for the course for being female in public has consequences that extend deeply into women's choices and women's psyches. In a section that is worth citing in its entirety, Hess catalogues a small selection of examples conveyed to her by other female journalists:

To [Alyssa Royse](#), a sex and relationships blogger, for saying that she hated *The Dark Knight*: "you are clearly retarded, i hope someone shoots then rapes you." To Kathy Sierra, a technology writer, for blogging about software, coding, and design: "i hope someone slits your throat and cums down your gob (sic)." To Lindy West, a writer at the women's website Jezebel, for [critiquing a comedian's rape joke](#): "I

just want to rape her with a traffic cone.” To Rebecca Watson, an atheist commentator, for blogging about sexism in the skeptic community: “If I lived in Boston I’d put a bullet in your brain.” To Catherine Mayer, a journalist at *Time* magazine, for [no particular reason](#): “A BOMB HAS BEEN PLACED OUTSIDE YOUR HOME. IT WILL GO OFF AT EXACTLY 10:47 PM ON A TIMER AND TRIGGER DESTROYING EVERYTHING” [emphasis original] (Hess).

“Harassment” and “trolling,” the words we have for abuse leveled against women online, lack the scope necessary to contain the hatred and violence of these threats. Threats that have already been made against women who have already had to read them, and in response, review and assess their own safety, and then they had to try to purge that same hatred and violence from their experience. Because it already happened, and because the damage has already been done. For the targets of this harassment and these threats, no one is called to account for their behavior, no one faces consequences, and no stipulations are put in place to prevent future threats. There is nothing like closure, only dusting yourself off and deciding if you are going to get back to work. Authorities, both local and federal, have investigated these cases of online harassment and terroristic threats, but to date, no charges have been filed in the United States, although there have been a few successful prosecutions against the perpetrators of online terroristic threats in Great Britain.

My dissertation project primarily deals with misogyny and the replication of gendered inequities from real life contexts into digital ones – the kind of boorish, everyday misogyny that marginalizes and diminishes women’s skills, accomplishments, interests, and contributions. Yet my objects of study share a position on the same spectrum of misogyny as the harassment against the women of Jezebel.com, the female celebrities whose photographs were stolen, and the female digital journalists described by Amanda Hess. I offer the case of Jezebel.com as exigency for this dissertation. The internet and all the aspects of modern life it supports, including commerce, socialization, romantic relationships, democratic

processes, and public education, is largely an unsafe space to be female. While the Jezebel.com case is sensational, it illustrates the ability of anonymous persons to elevate the emotional costs of being female online to a point where women choose to cede the public digital space rather than continue to pay that price. This silencing effect is chilling as across the fall and winter of 2014, for example, female video games developers and journalists left the field rather than continue to be the focal points of organized harassment campaigns (Cox). Nancy Baym writes in *Personal Connections in the Digital Age* that “[t]he digital age is distinguished by rapid transformations in the kinds of technological mediation through which we encounter one another” (1). And indeed, in this digital age, the speed at which our personal encounters are relocated to digital space permits precious little time for reflection and contemplation of what cultural artifacts are also being relocated to digital space, and how those artifacts are enacted in that digital space. This project is one effort to study closely some aspects of that transference because, as I describe in this introduction, because the transference moves so quickly and is ubiquitous, the consequences are easily overlooked or re-contextualized as without harm.

## Chapter Two: Theoretical Intersections

I describe this dissertation project as the application of theories of gendered rhetoric and performances, discourse analysis, and an array of digital research methods to case studies of online discourse in order to expose the hegemonic masculinity power structures that underpin the design and development of internet technologies, as well as commonplace assumptions about who is an online user, who is an active maker of internet technologies, and who is a passive consumer of internet technologies. In this project, I contend that gender performativity, dynamics of gendered power and gendered disempowerment, and heteronormative tropes and expectations have far-reaching implications for public, private, professional, religious, and educational online spaces and communities. I argue here that this gender performativity is inextricably bound up with wide-ranging notions of digital literacy practices and competencies, digital and online consumption, online community membership and engagement, digital pedagogies, the representation of entertainment media audiences, employment as it is construed as a digital search process, and even how social relationships are re/mediated in social media spaces. Within this project, I challenge the commonplace assumption that trolling, online harassment, and online marginalization happens in generally symmetrical ways to everyone online – that being harassed is just a natural consequence of online life, rather than a specifically gendered condition. I challenge here the commonplace assumption that women’s digital literacy skills and practices are generally deficient, and that these deficiencies are clearly evidenced in the types of online interactions and transactions women complete in contrast to those of more technologically savvy male users. Instead, I contend here that women’s digital practices are gendered first before they are assessed for their merits, and that in the heteronormative, gender-



binary matrix, women always face the threat of gender nullification if they perform technological competence.

These are big claims, and in this dissertation, using case studies of Pinterest, Facebook, and popular blogs, I argue that the critical application of these theories of gender, discourse, literacy and new media, reveal female users' sophisticated online identity practices, digital competencies, and online performances. I argue that in addition to its institutional applications within an academe that is widely adopting digital platforms and approaches in its efforts to adapt to the needs of 21<sup>st</sup> century students, that my research is significant and relevant because disrupting the gender performativity of digital space is one potential approach to addressing the pressing problems of online harassment, the gender gap in the technology sector, and the gender gap in digital literacies that have implications for the classroom, workplace and public-civic sphere. All of that requires unpacking.

Rhetoricians and compositionists have been studying the intersections of computing technologies and writing since the 1980s, and in fact, those early theorists contributed important foundational work that informs computer-mediated pedagogies and literacy studies, and has effectively problematized the transformation of the academy as a largely computer-automated and computer-supported context given the various social, cultural and economic gaps students encounter in acquiring computational literacies (Brandt; Hocks; Selfe). That rhetorical theories, methods and practices can be applied to computers and their artifacts is not a new idea. What is new is the global adoption of social media as a primary mode of communication and socialization; the ubiquity of handheld, network-enabled computing devices, such as the iPhone; and the surrounding cultures and identities produced in the emerging digital realm. Notions of digital

culture and identity are the site of a growing body of research across a number of scholarly disciplines, including the social sciences, the digital humanities, and rhetoric and composition. Digital rhetoricians have employed, and continue to employ, a range of theories and methods in their scholarly work, theories and methods I describe and discuss in this chapter. But there is also a growing sense in the field of rhetoric that these theories and methods have limitations, there are areas of under-theorization, and there are gaps in our understanding of the implications of our existing research. Theorists such as Liza Potts, Jeff Rice, Mia Consalvo, Dave Jones, and others are working to develop situated methods and theories to address the shift toward life online. In this chapter, I discuss the methods I used as well as several gaps these situated methods and theories could potentially address.

In the 1990s, scholars wrote about the democratic, and even utopian, possibilities for “cyberspace,” as a digital construct removed from the constraining politics of physical bodies and real world identities (Plant). There were prognostications around the grassroots potential of bloggers as feminist activists, and the emergence of cyberfemisms and cyborgian feminisms that suggested women could transcend the problematic female body entirely (Haraway, 1991; Plant, 1997). These new digital spaces were promised to be categorically different and separate from physical spaces, and that within this digital duality, new and wholly separate from real life (IRL – in real life) identity practices could emerge. Contrary to the transhumanists who sought these disembodied digital-upload-identity experiences (Moravec), the advent of the digitally networked world has not freed us from the politics of gendered bodies. Rather, the digitally networked world has been subsumed into real life body politics as the internet, its sites and affordances, have become a masculine sphere dominated by masculine hegemonies, interests, values and views. Within this digitally networked world, supported by the affordances of

digital technologies to reply, respond, flag, disseminate, and dox (a shortened version of 'documents,' which means to publicly expose a person's private information, for example, their real name, address, phone number, and sometimes social security number and banking information) from the relatively safe distance of the keyboard, policing and shaming systems are enacted against those who transgress these masculine norms.

Cyberfeminist manifestos describing a newly networked world as a potential site of transcendence from the material, social, political and economic constraints of the gendered body were not hopelessly misguided or deluded. As Plant convincingly argued, the potential for a 'genderquake' was there – online no one can see your gendered body and, in theory, you have the agency to claim whatever identity, material or otherwise, you want for yourself. So what went wrong? For my purposes, that question is almost unanswerable, or rather, the question "what didn't go wrong?" is a more appropriate question for the failure of the cyberfeminist revolution. For my project, I cannot possibly explore the entirety of what did not go wrong and how we arrived at a point where women are marginalized in online (and technological) contexts simply because they are women. Instead, I seek to expose some of the issues of power, discourse, literacy, and agency that have helped construct this current state of affairs as I assemble a toolkit of theories and methodologies to employ in service of these goals. To accomplish this, in this chapter,

I will use Butler's theories of gender to explore how the gender binaries and the heteronormative matrix of real life was reinscribed across digital bodies, confronting how digital bodies became gendered when cyberfeminists hoped to build a digital culture free of real life bodies.

I will explore technological theories of networks and notions of hegemonic masculinity to discuss the limitations of my existing research, some gaps I see in current digital rhetorical methods, and an opportunity to expand on the under-theorized notions of gender performativity in digital spaces.

I will describe theories of experience architecture (XA) and interaction design and explain how these seemingly value-free technology development practices became gendered, and describe how rhetorics of XA can be used to make visible the values and ideals encoded in the design and affordances of online spaces.

I will discuss neoliberal feminisms and postfeminisms as power narratives that work rhetorically to shape our impressions of women's values and ideals. I will describe how these value systems limit women's opportunities and identities rather than liberate them.

Moving from theory to methodology, I will discuss and describe some feminist rhetorics and research methods that can be adapted for online research.

And finally, I will discuss and describe James Paul Gee's method for discourse analysis and how I applied it to online discourses and contexts.

### Butler and Gendering Bodies in the Heteronormative (Digital) Matrix

This dissertation project explores several cases where women's digital practices or women's networked community practices are policed, critiqued, undermined or rejected by males who are either actively engaged in the same communities side-by-side with female community members, or by males who are outside observers with no community investment or membership except a passing claim to genuinely "care" about the quality of digital community and literacy practices. In the case of Jezebel.com that I discussed in my introduction chapter, the male commenters who spammed the Jezebel.com website with rape pornography were not members of the Jezebel.com online community – they reportedly were members of the 4Chan online community who resented the idea that there are *any* feminist spaces at all online, and the 4Channers leveraged their superior technological skills to exploit a weakness in the Kinja blogging and commenting platform in a publicly-expressed effort to drive Jezebel's writers and commenters off the internet. In my third chapter, I describe the disparaging discourse from the largely male online press corps of the technological industry and their aggressive animosity toward the largely female Pinterest user community. In many cases, these

male technojournalists openly acknowledge that they are not the primary audience for Pinterest, nor do they share the interests of the Pinterest community, yet they assume the right to criticize the community and disparage its concomitant digital literacy practices from their outsider position. In my fourth chapter, I discuss the Fake Geek Girl meme where male members of the geek community police and ultimately reject from their community women who express common geek interests. The male rejection of female geeks is aggressive enough that they created the Fake Geek Girl meme in order to shame and ultimately eject women from their community. And finally, in my conclusion, I briefly discuss #GamerGate as an organized, insider effort to drive feminists out of the video gaming community through threats and technological exploits.

The common thread through my case studies is the assumed male right to subjugate females that makes up the heteronormative matrix, and its internal scheme of patriarchy, that asserts a gendered binary where males are privileged and females are objectified as passive receptors of masculine supremacy (Butler 1990). This matrix and its patriarchal schema is readily observable in real life across a wide range of discourses from the debate over rape culture on college campuses, to the societal expectations that female politicians had to be attractive and male politicians had to be aggressive in the 2012 Democratic presidential race (Carlin and Winfrey). Butler argues that these binary structures and organizing schemas, because they are mapped atop biological difference, are discursively constructed as "natural." If the bodies are different, then it "naturally" follows that there exists also social differences, intellectual differences, emotional differences, sexual differences, and ultimately these differences, subsumed into the patriarchal schema of male supremacy, become value-laden differences. This notion of what is more valuable and less valuable references both material and moral conditions. The products of

masculine labor are naturalized as being more valuable than the products of feminine labor, and the contributions of male intellect are considered more valuable than female intellectual contributions. These differences are observable in the real world, for example, in the wage gap and the glass ceiling, and yet even as they are observable, they are difficult to subvert given, as Butler describes, their embeddedness within the social and cultural machines that produce discrete gender differences, and sort those differences into cultural hierarchies as “natural” products of biological difference.

While the 1990s cyberfeminists and cyborgian feminists hoped that women could transcend the problematic female body entirely, and the resulting binary disruption would facilitate Sadie Plant’s liberating “genderquake,” resulting in new possibilities for a creative range of gender identity, these aspirations and predictions have failed to materialize in digital space. The new digital spaces that were promised to be categorically different and separate from physical spaces instead resulted in digital spaces that, in most cases, replicated the heteronormative matrix and naturalized biological binary schema of physical space. I argue here that the reason cyberfeminism failed to produce digital liberation from the material constraints of the female body is that these naturalized binary systems of social and cultural order are still the mechanism through which meaning is made in community spaces and discursive systems, whether or not those systems are digital or physical.

Cyberfeminism as a theoretical system of knowledge production did not produce a new digital cultural matrix through which meaning could be made (Nelson). We may be online, but we are left with the same old systems of power that produce meaning in real life. When male and female bodies create online profiles and enter digital spaces, they carry with them the meaning-making structures of physical space. Without an alternative digital matrix of meaning-making, they fall back on the

heteronormative matrix and patriarchal scheme of male supremacy rooted in naturalized biological differences. As such, in the digital absences of bodies, gendered bodies are re-constituted and reapplied over digital identities resulting in online embodied experiences that replicate those of the physical world (Daniels).

I return now to my case studies of Jezebel.com, the Fake Geek Girl Meme, Pinterest.com, and #GamerGate, where women's digital practices or women's networked community practices are policed, critiqued, undermined or rejected by males who are either actively engaged in the same communities side-by-side with female community members, or by males who are outside observers with no community investment or membership except a passing claim to genuinely "care" about the quality of digital community and literacy practices. Applying Butler's lens to my cases, we can view the 4Chan community attack on Jezebel.com as a moment where women are transgressing a perceived binary of public/private and are building a very public, feminist political platform in the form of Jezebel.com. Jezebel's community identity is openly transgressive of gender norms, from their adoption of the "jezebel" archetype to their female-centric content that discusses everything from female-audience-driven made-for-TV-movies to the Republican war on women. 4Chan's leveraging of a technological exploit, a computer logic or procedural flaw, in the Kinja blogging platform as violent rape imagery in the comments thread can be viewed (and in fact was viewed by the Jezebel editorial community as they described in their open letter to the public) as metaphorical "corrective rape" for their transgression of gendered norms. Rape used as a tool in the physical world to police and punish transgressive women was transferred into a digital context and redeployed as a violation of the female embodied experience in the Jezebel.com digital community.

In the greater geek community, the social media rants to which I apply discourse analysis to expose the underlying gendered policing can also be paralleled to the kinds of gendered policing that occur in physical spaces. Rape culture can be viewed as a patriarchal shaming system to regulate the sexual threat that women represent to male supremacy. Within chapter four, I describe the obsession with sexual threat and the problematic myth of the Fake Geek Girl as a female transgressing male supremacy by preying upon male geeks marginalized by the system of hegemonic masculinity (Kendall). In that example, the creation of the FAKE GEEK GIRL as an internet meme literally creates a digital product, the females shamed in the meme images, as digital bodies to stand in for the physical ones of females within the geek community. In the case of Pinterest, male technojournalists make no distinction between digital and physical bodies and digital and physical discourse. As I argue in that chapter, those male journalists never once question their male supremacy that gives them the right to authenticate women's work even as they are not directly engaged with the generative Pinterest community. In that case, those journalists seamlessly transferred their male supremacy to digital space without a second thought. As Butler demonstrates, gender as a construct is performative. If something is performative, it produces. It produces and reproduces effects. Gender as performativity must be performed and re-performed, and it must be persistently affirmed and re-affirmed by its systems of power to produce its hegemonic and hierarchal effects. The digitally networked internet as a conveyance system has, by and large, been subsumed into the gendered binary system and as such it produces the social and cultural effects of male supremacy and female subjugation.

The heterosexual matrix and patriarchal system of male supremacy through naturalized gendered binaries is one, but not the only theoretical frame acting on my



case studies. The theory of hegemonic masculinity is adjacent to but not housed within Butler's framework. While Butler's hegemonic matrix defines masculine norms as heterosexual and cis-gendered, she also argues that these norms are a kind of gendered violence on bodies and identities, and that understanding these systems and how they function opens opportunities for gender and heterosexual disruption. Hegemonic masculinity theory describes the framework of how masculinity is socially constructed and socially functions to constrain and police the performance of masculinity.

Privilege pants and victim hoodies: Hegemonic masculinity in the network

The first time I approached my case study of the Fake Geek Girl meme, my research of which is collected in chapter four of this dissertation, I briefly glossed Connor's hegemonic masculinity theory as a framework within which to examine a collection of internet rants using James Paul Gee's methods of discourse analysis. In other words, I argued that the performativity of hegemonic masculinity *produced* the rants, and Gee's methodology could be used to *analyze* the rants in service of making visible *how* those rants, and the language and speech acts within those rants, produce and replicate hegemonic masculinity. Within his DA toolkit, Gee describes identity building through discourse as a mode of conveying and performing identity, as well as sharing 'commonsense' and common knowledge, which people who share the same lifeworld and its corresponding discourse pass among themselves. Connell defines hegemonic masculinity as "the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women." I argued then that hegemonic masculinity is the hierarchal system in which men vet and affirm their masculinity,

and that the discourse of the predominantly male geek community was used to convey and perform masculinity within the greater system of male hierarchy. Even as geeky males self-identify as marginalized within the system of hegemonic masculinity, in their subordinated position in relation to males who are higher in the masculine hierarchy, geeky males assume an important role in the performance (by underperforming) and conveyance (by conveying social awkwardness and 'failure' as males) of masculinity in the hegemonic masculinity system. In other words, there cannot be males higher in the hierarchy without also having males lower in the hierarchy. There cannot be men succeeding at masculinity if there are not also men failing at masculinity by which to compare the successful cases. Or more simply, without stratification, there can be no hierarchy.

When I initially constructed this model of theory and analysis within which to analyze my case studies of internet rants against the Fake Geek Girl, the model seemed to hold together. And, indeed, when I completed the analysis, my findings aligned with my hypotheses, and the model held together well. It seemed particularly productive when applied to Tony Harris' rant because it effectively exposed Harris' commonsense assumptions that appear to underpin nearly *all* of the examples of internet rants I present in that chapter: that women are subordinated objects, and their intrinsic value is solely located in their sexuality and sexual availability. While in chapter four, I largely leave my academic conference work on the Fake Girl Geek intact, and I do not significantly alter the analytical model I constructed in that original work, here I would like to break that model apart in order to explore what I feel is a gap in digital rhetoric methodologies and a point of under-theorization in how gender performativity is examined in digital contexts (Yee). While I designed and employed this model of study pairing the theory of hegemonic masculinity and James Gee's methods for discourse analysis, in hindsight, I realize

that I made an enormous if unstated assumption. James Gee's methods for discourse analysis, and in fact methods for Critical Discourse Analysis (CDA) in general, are widely applied to spoken texts, transcripts of spoken texts, and written texts with the variation in method of conveyance (spoken, written and/or transcribed) discussed generally within the DA and CDA frameworks.

For example, it is a principle of DA and CDA that communication happens through a collection of discrete choices by the speaker (communicator), and the method of conveyance (spoken, written, etc) is one of those choices (Machin and Mayr). My model conforms to this principle, and I made the assumption that posting online is yet another form of communication conveyance, similar enough to written and spoken texts, that it could be discussed and described during my analytical processes as a mere choice of conveyance of meaning. In hindsight, after completing and repeating this model several times, assuming that posting a rant on a social media platform is a method of conveyance similar enough to other modes of text reproduction as to not require additional explication fails to consider several unique features of social media as both a conveyance platform and means of production. In short, conceptualizing social media posts as similar enough to other modes of text production that the existing methods for analyzing real world communication can be neatly transferred without modification or enhancement is flawed. And I think it is flawed because it constructs the method of conveyance as static. The pages of a book may be constructed as generally static, and the material recording – the actual tape or disc – of a speech may be generally static, but there is an entire academic discipline that theorizes and describes the fluidity and systems of power within digital networks. Social media platforms are, in their post functions, somewhat static modes of conveyance in that I type in the status box of Facebook and click the “post” button on the screen, and Facebook's platform software accepts my text and transfers it to

my Facebook wall (generally) in the same format that I typed it. In this way, the method of conveyance of my post is generally static, yet the digital network upon which the social media platform is deployed is not static.

Many theoretical books have been written on this subject, such as Manuel Castells' 2009 text *The Rise of the Networked Society: The Information Age: Economy, Society and Culture, vol 1*; and Alexander Galloway and Eugene Thacker's 2007 text *The Exploit: a Theory of Networks*. And I cannot cover the range and scope of theories of networks within the limitations of this project. Digital platforms, computing devices, computing hardware, software, communication protocols, and service providers are entangled within our over-arching concept of the internet – the global digital network that links together people and systems in economies, cultures, systems of power, and systems of communication. Instead, I will briefly discuss the logics of social media as described by Jose van Dijck and Thomas Powell and describe how I think these logics *should* influence the interpretation of digitally networked texts. I will close this section then by briefly describing how this constitutes a gap that my original Fake Geek Girls research misses and an opportunity to theorize the under-theorized approach to gender performativity in the network. I will take this up in more detail in my concluding chapter when I discuss the potential for future research.

In their article "Understanding Social Media Logic" published in volume 1, issue 1 in the journal *Media and Communication*, van Dijck and Poell argue that social media as a knowledge domain is built upon a logic constructed of four grounding principals – programmability, popularity, connectivity and datafication. Their argument then is that by understanding these grounding principals, we are more able to make visible the "intricate dynamic between social media platforms, mass media, users, and social institutions" (2). Here we see an attempt to merge the

material structures of social media – the software and hardware - with the social structures, the people, cultures, and digital practices that drive social media content. Programmability is “ the ability of a social media platform to trigger and steer users’ creative or communicative contributions, while users through their interaction with these coded environments, may in turn influence the flow of communication and information” within the platform (6). So here, programmability is a product of the social practices of the users and the algorithmic affordances of the platform. Popularity, like programmability, is influenced both by user practices and algorithms, but it is also in some ways a contest of wills. The users, by sharing statuses, “upvoting” posts, or “liking” posts arrive at popularity through some semblance of democratic engagement (Shirky). However, the social media platforms, because of how they monetize – or financially profit from – the use of the platform, have a vested interest in the popularity of some posts more than others. Thus popularity describes both the choices of users who favor some content over others, and the choices of platform developers who actively promote more lucrative content over others.

Connectivity as a notion “emphasize[s] the mutual shaping of users, platforms, advertisers, and more generally, online performative environments. [...] Connectivity introduces a bipolar element into the logic of social media: a strategic tactic that effectively enables human connectedness while pushing automated connectivity”(8). In other words, when users choose to connect to a specific video on YouTube, for example, the YouTube video is spread to that person. Seeing that user’s choice can influence the spread of the video to another social media contact (friend, subscriber, follower, etc), thus the connectivity between people on the network can spread media object across the network. This connectivity between people is then not just social but also a platform logic – an algorithmic function that

can facilitate the formation of strategic networks or communities of users. We can see this in the “other people also bought” posts on Amazon.com, for example, in which a complex interplay between users and algorithms is reflected in both social and material connectivity.

“Big data” is an emerging field of study in rhetoric. Big Data, as an industry term, refers to sets of data that are so large as to present technical complications in their storage, manipulation and retrieval. “Big data,” is something of a misnomer, and “gigantic data” might be more accurate. Big data sets typically are collected by governments, as in health and demographic data collected from citizens, or very popular social media platforms, such as Facebook with its trillions of status updates from its billions of users. While each navigational click of the mouse may feel ephemeral, those clicks each create a digital transaction record in an online database. As van Dijck and Poell write, “[w]hen it comes to computer-mediated communication, each type of content – be it music, books, or videos – is treated as data; more specifically with regards to social networking platforms, even relationships (friends, likes, trends) are datafied via Facebook or Twitter (9)”. It seems simplistic to suggest, but it is also an accurate assessment, that everything we submit in an online context, whether it be online book purchases from Amazon.com, or search requests made to Google, becomes data that is used to make assessments about everything from consumer trends to the political climate of a particular neighborhood. For example, in March 2013, Casey Chan, writing for the technology and culture blog, Gizmodo.com, posted an article and data visualization charts mapping “The Most Searched Terms in Porn By County and State,” in which we learn that the most popular search term in porn for the state of Texas is “teen” (Chan). Social media platforms collect this data and use it for a number of purposes, including customizing the content, as in when Amazon.com changes the suggestions

on its search screen through the datafication of a user's shopping history, to site monetization, like Facebook's customizing its advertising based on a user's past likes and shares.

I treated the rants in my original Fake Geek Girl research as static texts influenced by hegemonic masculinity within the predominately male geek culture. Yet, given what we know of network theory, and reflecting upon van Dijck and Poell's description of the grounding principals upon which social media as a knowledge domain holds together, we know that the objects of study, the texts themselves, have a kind of fluidity because they are contextualized within a system created by the plasticity of programmability of the platform and the user's choices. Some of this plasticity and choice can be described as: the forces of popularity – in terms of what is trending, what is viral, and what is down-voted – shift the reception of the texts; issues of connectivity – who is connected to the platform to view the text and when, and how those windows of time intersect with the rapidly flowing information streams of social media feeds; and datafication – the system of knowledge architecture and how it influences what texts are available to the user, how and when, and what is collected from the users as data by the social media platform for other purposes.

Experience architecture and the (gendered) rhetorics of design

Chapter three of this dissertation project, "A Site for Fresh Eyes: Pinterest's challenge to 'traditional' digital literacies began as a conference presentation at IR13: the thirteenth international conference of the Association of Internet

Researchers (AoIR) at MediaCityUK at the University of Salford, Manchester, United Kingdom in October, 2012. I originally

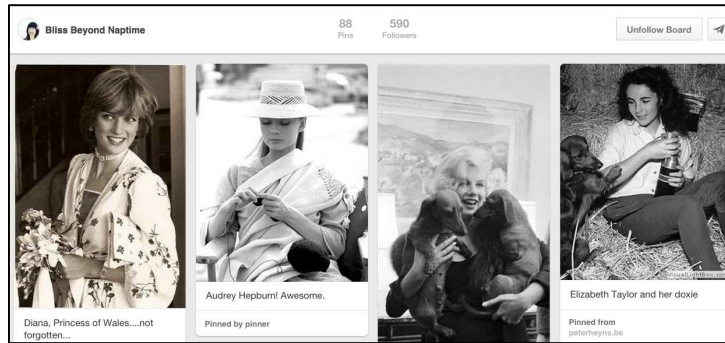


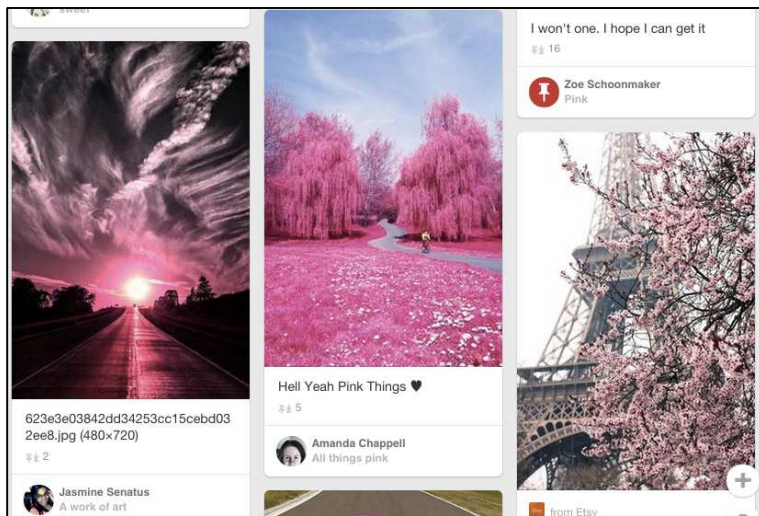
Fig. 7. Screen capture taken from Pinterest featuring black and white photos of famous women, including Diana, Princess of Wales, and Marilyn Monroe.

proposed a multimodal presentation entitled "Pinterest and the rise of the aesthetic data schema" in which I promised to describe and discuss the new (at the time) social networking platform, Pinterest; how I had observed its user community creating montages and pastiches through images that seemed related by content or color; and how this represented an innovation in data architecture compared to the time-tested methodologies of the software engineering discipline. I wrote the talk and built the digital presentation of lush imagery interposed with slides representing key concepts in data architecture and data modeling, and I delivered the talk to the thirty attentive and receptive fellow scholars in the audience, the largest academic audience I had encountered to that point in my doctoral studies. Predictably, my talk and I left the good-humored audience both intrigued and confused.

The AoIR conferences privilege interactive experiences, with conference speakers and presenters talking through their arguments rather than reading papers; sharing visual or tactile presentations; leaving large blocks of time at the end of panels and between conferences tracks for conversations between attendees; a lively Twitter backchannel where audiences and speakers engage directly (I once posted a humorous tweet about a luminary in the field internet studies, and he paused his talk to teasingly promise me that he would serve as an external reviewer



when I went up for tenure one day); and an active social calendar of shared meals and local activities, such as visits to galleries or organized shopping ventures. A



number of attendees at IR13 used these social opportunities to introduce themselves and discuss my work. I learned that the audience was largely intrigued because I was discussing the

Fig. 8. Screen capture from Pinterest of pink-tinted images

relationship between the affordances of the Pinterest platform and the emerging community practices that governed how the user community leveraged those affordances to produce digital texts. I was told that members of the AoIR community, unlike myself, were not experienced data architects, so this notion of looking at the relationships between the software features, the community literacy practices, and the end results was novel to the researchers present. I learned that they were confused because my disciplinary discourse, that of a software developer and data architect, did not easily translate to the discourses of the social scientists, rhetoricians, and video game scholars in my audience.

I received an email from Lee Humphreys of the Communication Department at Cornell University who was guest-editing a special collection of papers selected from the IR13 abstracts. She wrote that my proposal was intriguing, and asked if I might submit a manuscript for consideration in the special collection. I did, and I received feedback from two reviewers that the work was promising but again the discourse was unfamiliar and therefore my approach was difficult to follow. They felt

the argument was significant enough to include, but it would need a lot of revision to bring it in line with the rest of the collection in terms of discourse and audience awareness. Humphreys contacted me again and offered to work through the revisions with me. I began reading in earnest technical communication articles on design, as well as those from the fledgling branch of digital rhetoric, experience architecture (XA). While the third chapter from this dissertation remains largely as it was originally published, in the two years since I first drafted it, I have further refined my ability to investigate and write about the relationships between people, literacy practices, and technologies. However, the Pinterest chapter remains a reasonably accessible work for the broader social science audience of *Information, Communication and Society* by using neither the disciplinary specific terms of software development nor experience architecture to analyze my case and describe my findings.

Michigan State University digital rhetoric scholar, Liza Potts, describes experience architecture as:

...an emerging area of study focused on the research and practice of creating technologies, products, policies, and services that serve the needs of various participants. Situated in the Humanities and Social Sciences, XA focuses on issues addressing usability, interaction design, service design, user experience, information architecture and content management for websites, mobile apps, software applications, and technology services (Potts).

I argue that we can think of XA as cohesive framework for understanding the interplay between users, technology-based texts, and the technologies used to compose and disseminate them. And we can think of usability, interaction design, service design, user experience, information architecture and content management as lenses within that framework. *Usability* refers to how the technology is used, how useable it is, the assumptions encoded in the design that suggests who uses it and why. *Interaction design* is what software developers used to refer to as “user

interface.” Janet Murray argues that conceptualizing users as “interactors” is a more accurate description of the transactions that take place between the person employing the technology and the controls of the technology. “User” suggests that the technology is fixed and there is one specific and knowable workflow the user follows to engage the technology. Interaction suggests the user has agency and motives for how and why she employs the software. Interactor and interaction design suggest interplay between technology and the person employing it rather than a one-way transaction. *User experience* focuses on whether or not the user accomplishes her goals, how effectively she was able to accomplish those goals given the constraints of the tools, and how the tools shaped her identity and response. *Information architecture* refers to how the data is arranged, the rhetorical meaning encoded in the data, the choices the designer made when arranging the relationships between the data, and those relationships in turn shaping what is possible within the technology – in short that datafication is a rhetorical act. *Content management* refers to software applications that allow for the writing and posting of content on websites.

If I were to complete my Pinterest analysis again, I would situate it within the emerging field of XA, and I would employ the emerging discourse of XA as I have briefly described here. I do not think the Pinterest analysis suffers from being underpinned by technical communication notions of design, but there is potential here for developing fuller, richer theories for digital rhetorical analysis within the framework of experience architecture. As I have discussed throughout this chapter on theories and methods, digital rhetorics to date as a subfield of rhetoric has been something of a hodgepodge of theories and methods lifted from real life contexts and applied to digital context, or what Annette Markham sometimes refers to as “remix theory” to suggest that studying digital texts requires a multiplicity of approaches. I

think the weakness here, as I have described, is that these practices have assumed that real life methods, strategies, frameworks and practices can be transferred wholesale into digital contexts without adaptation for what is unique about these digital contexts. I think my discussion of theories of networks and social media logics demonstrates some of the unique features of social media that complicate the transfer of real life methods into digital contexts. I think the further development of experience architecture as a framework for doing digital rhetoric is a promising approach to addressing the uniqueness of digital texts and contexts.

Postfeminist negotiation and accommodation: the digital courtesans

The technoutopian promise of an egalitarian digital sphere was, and perhaps remains, hard to shake, and its success stories are pop cultural and industry icons whose success narratives shape business, commerce, education and American dream ideologies. There are film biopics of digital technology innovators, like Steve Jobs of Apple and Mark Zuckerberg of Facebook. There are bestselling books and business models from internet-software-developer-turned-venture-capitalist, Paul Graham of the Silicon Valley startup incubator, Y-Combinator, and Sheryl Sandberg, Chief Operations Officer of the social media giant, Facebook, who encourages women to just “lean in” to their careers as a method for overcoming gender inequity. Today, the internet is the framework upon which global communities and global economies are built, students are educated, and digital media are disseminated near-instantaneously across global networks. It is a framework of unprecedented growth, and near-unfettered capitalism, and its success stories are the legends and myths of this digital age. But those communities, economies, education scaffolding, and stories remain largely masculine stories, with the digital spaces replicating and even further entrenching the systems of power and control scholars have long

documented in public and private spheres. Challenging the applicability of these masculine stories, their supposed universal appeal, and the universal opportunities they purportedly represent for everyone is difficult because in these stories, men are generally the protagonists, but these are not tales of great physical strength or martial successes. Rather these are tales of intellectual conquest, where men, armed only with keyboards and computing technology, have conquered marketplaces, captured human imagination, and transformed social and entertainment experiences with keystrokes and lines of code. These are not stories of the successes and excesses of male bodies; they are triumphs of the mind. And, as the logic goes, there is no physical or material boundary for the mind – women could just as easily have played the protagonists. And some did.

Sandberg is a visible example of a woman who found success in the digital marketplace, first at search engine giant, Google, and then at social media giant, Facebook. In addition to her impressive professional resume and best-selling book, in 2014 Sandberg launched the “Ban Bossy” campaign attracting such luminous partners as former Secretary of State Condoleezza Rice, Supreme Court Justice Sonia Sotomayor, Chair of the Federal Reserve Janet Yellen, Beyoncé, and Secretary of State Susan Rice (“Ban Bossy”). The idea behind “ban bossy” is to transform the language popularly used to describe women and girls who assume leadership roles. Sandberg and her allies argue that labeling little girls as “bossy” carries a high social cost, discursively constructing girls as passive and reticent, which carries penalties later in life when those same girls become women and enter the public and professional spheres (Alter). While Sandberg, on the surface, may seem like a feminist pioneer in a masculine field, her position as a feminist role model is not without its problems. As bell hooks, writing for *the feminist wire* points out, Sandberg’s tone in public interviews and in her book, is disarming, even cutesy, as in

when she describes leaving all the family's financial management to her husband because she would rather plan little girl parties for her daughter than think about money matters. She conveys this and other anecdotes in a conspiratorial tone, as if she were sharing feminine foibles over a glass of wine with a girlfriend. hooks reminds us that when Sandberg makes public appearances, it is in closely tailored clothes with provocative necklines and hemlines and stiletto heels, casting "the aura of vulnerable femininity" as her shadow upon the public stage (hooks). Sandberg's neoliberal feminism never interrogates white male supremacy, never confronts the heteronormativity of her performed sensuality, and never challenges the economic and cultural supremacy of her upper middle class upbringing and Ivy League education. Even as it must have been incredibly challenging to make a space for herself as a captain of industry in the new digital economy, Sandberg's notion of leaning in never discusses how she accommodates heteronormative expectations or how she negotiates the stereotypical "bitch" label for female leaders. Even her "ban bossy" initiative soft-pedals those gendered negotiations. We see a similar pattern of contradiction and compliance in another visible woman in technology, Marissa Mayer.

Mayer is the current president and CEO of search engine giant, Yahoo! Like Sandberg, Mayer also got her start at Google, but while Sandberg's undergraduate degree is in economics and her master's degree is in business administration, Mayer stands out for having completed her bachelor's degree in symbolic systems and her master's degree in computer science. Where Sandberg is a pure business administrator in the technological industry, Mayer is a computer engineer specializing in artificial intelligence, a member of the small sorority of female computer engineers in the male dominated industry. Because of her novelty as a female computer engineer at the high profile Google, Mayer is no stranger to the public imagination.

She was often written about in glowing terms in media profiles as Google's golden



geek girl. After Mayer assumed the top position at Yahoo, the "Silicon Valley superstar" graced the covers of *Vogue* and *Vanity Fair*, and was featured in business and industry journals alike. *Vanity Fair* called her

Fig. 9. Glamorous photograph of Marissa Mayer that accompanied an in-depth profile of her career in *Vogue*, dated 16 August 2013.

"Yahoo's Geek Goddess" and *Vogue* ran a spread of Mayer dressed in high fashion dresses and stiletto heels while striking glamorous poses. Even as they were calling her a goddess, *Vanity Fair's* writer, Bethany McLean, documents stories of Mayer's "imperious style," her "narcissism," and her "coldness." Mayer, it would seem, is another beautiful "bitch" who manipulated and clawed her way through the masculine strata at Google (McLean). Who is Mayer? Is she a brilliant, golden geek girl who glows and charms her way through the masculine power structures of Silicone Valley? Is she a scheming manipulator primed with feminine wiles and an excellent wardrobe? One straight forward feminist research methodology is to critically view one's choices or available pathways and ask oneself what options are absent and which pathways are closed. Here, I ask are there no other options for Mayer than cheerleader or dominatrix? This is a critical question for me because once upon a time, when I was the female software executive, and I was being audited by investors, I was described in the final audit report as "the perfect balance between cheerleader and dominatrix." I asked then, and I ask again now, are there no other choices for profession women in technology?

In Margaret Rosenthal's *The Honest Courtesan: Veronica Franco, Citizen and Writer in Sixteenth Century Venice*, Rosenthal describes the conventional perspective on the unique social position of the Venetian courtesan as a woman outside of the patriarchal constraints of the day, a woman who moved freely as the intellectual equal of aristocratic men of Venetian society - women whose sexual and economic liberation ostensibly defied the gendered expectation of aristocratic women. Courtesans were learned, traveled, cultured, successful pioneers who captured popular imagination. Rosenthal then employs cultural criticism, feminist theory, and literary theory to dismantle this conventional wisdom on Venetian courtesans. She argues convincingly that these women negotiated their social positions by relying on the patronage of powerful men and the class flexibility of the rising merchant marketplace that was Venice (2). Ann Rosalind Jones in *The Currency of Eros: Women's Love Lyric in Europe, 1540-1620* suggests that courtesans occupied a "negotiated" position that adopts the dominant social norms, but then reframes and redeploys those norms in the service of their own marginalized positions. In other words, courtesans could be described as configured by their own contradictions, balancing conformity and innovation as they negotiated their way through the dominant discourse.

My shift to a professional sex worker here is at first blush a non sequitur, but my intention is to be provocative and to invoke the discourses of postfeminism - that neoliberal "sensitivity" that configures women's identity production as a capitalist/marketplace product of professional and domestic labor, physical beauty, and sexual availability (Gill 148). I want to be provocative because the success narratives of Sandberg and Mayer are tidy - they were born into educated, middle-class families; they worked hard and excelled in school; they attended exceptional (and exclusive) universities, both as undergraduates and then as graduate students;



they married men who are their social and intellectual peers – men who have shared the domestic work and reportedly have not been ‘threatened’ by a successful woman; they launched lucrative careers in the technology and financial industries; they worked hard again; and at the end of the day, they have been presented to American women as role models for what women can aspire to. Sandberg and Mayer ‘have it all,’ and if you model their hard work, grit, and resilience to ‘lean in’ to the workplace, you too can have it all. If you are white. If you are college-educated. If you are cis-gendered and heterosexual. If you marry and produce children. If you are beautiful. If you can navigate the male dominated workforce, while juggling neoliberal contradictions about women’s identity production. And if you can navigate those contradictions without transgressing any of the valued cultural gender norms. Within this sensibility of women’s identity as marketplace product, women must construct their identities from an assemblage of contradictions: attractive but intelligent; sexy but pure; ambitious but nonthreatening; career focused but committed to traditional, heterosexual marriage and family; glamorous and well-maintained but ‘effortless’ in their beauty, and so on. As Linda Guerrero argues in “(M)Other-in-Chief: Michelle Obama and the Ideal of Republican Womanhood,” Americans are not receptive to a woman like Hillary Clinton who insists on (accurately) representing herself as the intellectual and functional equal of her husband, or even as having parity with another man. Rather Obama has, in some ways, strategically endeared herself to the American public by downplaying her legal career that reportedly was more successful than her husband’s, and instead by presenting a public image of a woman devoted to the domestic spheres of child-rearing and household management (Guerrero). Women who do not in some ways rely on the patronage of a man for their successes, either domestic or professional, are a threat to the social and cultural order.

While women like Sandberg and Mayer are held up as examples of the egalitarian potential of the digital culture, the fact that these women are professionally successful in the technology industry is not evidence of meaningful change for women. It is not evidence that men and women are equal within the technological master narrative. And is not evidence that these successes and this supposed parity is possible for all women. It is possible for a few women enacting a neoliberal narrative of postfeminism. It re-inscribes and redeploys the power structures of patriarchy within the neoliberal marketplace for the sake of one woman at a time. The rising tide does not float all boats, rather it elevates only those few who are capable of embodying the contradictions and minding the boundaries of postmodern femininity. Postfeminism is an important cultural sensibility that is present in both of my studies, but particularly in my Pinterest research. I do not address postfeminism directly in these studies, but its specter is particularly felt in the misogynistic discourse around Pinterest that constructs women as passive consumers; obsessive consumers; purveyors of fantasy and not reality; and of over-primpers who are at all other times expected to be attractive and sexually available to a heteronormative masculine culture, just so long as those same male users do not have to encounter any of the female grooming products or practices that produce this sexual attractiveness in their online spaces. This is another lens I will take up in my concluding chapter as having potential for future avenues of research.

#### Doing discourse analysis online with Gee's DA Toolkit

In November 2012, the specter of the Fake Geek Girl was reverberating throughout the dark corners of the internet, in places like 4Chan and Reddit, where some of the more malignant geeks gather. Ostensibly this "fake geek girl," is a female pretending to be a geek by feigning an interest in video games, comics, or

science fiction/fantasy in order to exploit the vulnerable, heterosexual, male geeks who are, also ostensibly, otherwise unsuccessful with women. A rant is a time-honored online rhetorical genre, akin to standing on a digital soapbox and delivering a passionate, obsessively narrow monologue to an imagined audience of the like-minded. Rants against the Fake Geek Girl were already circulating within the online spaces like 4Chan and Reddit, but in November 2012, comic book artist Tony Harris took his ranting about the Fake Geek Girl to the more mainstream social media platform, Facebook, where it gained national media attention. Gee's describes big-d Discourse as an "identity kit," a sort of out-of-the-box costume and cultural software employed to participate in a particular discourse community. Gee elaborates that discourse as a kind of cultural shorthand, significant for what the speaker omits (or leaves unsaid) assuming that his or her audience shares this common knowledge and/or can glean it from the context (*How to do Discourse Analysis*, 2-8). This insider/outside approach was a comfortable alignment with the social project of the Fake Geek Girl Meme to warn unsuspecting male geeks of female outsiders who were posing as geeks in order to infiltrate and exploit the greater (obviously masculine) geek community.

Deploying Gee's toolkit, I approached the rants looking specifically for the assumptions the ranter made about what the audience could glean from context, as well as looking for deictic-like properties of 'regular' words that may be acting as specialized discourse native to the community (*How to do Discourse Analysis*, 10). I also examined what was said and what was not overtly stated but assumed in context (12). Because internet posts are not spoken, these posts lack oral intonation to convey meaning. We typically describe on-screen text as flat, lacking in grammatical emphasis like intonation, body language, and hesitations or speed variations. Online posters often adopt various text-based strategies to stand in for

intonation and body language, like emoticons or deliberate misspellings to convey emotion. For example, an online poster might employ the greater than sign, the colon, and the left parenthesis to convey anger >:( . Or an online poster might add extra consonants to the end of a word for emphasis. For example, if my Facebook friend, Jamie, posts an image of a pair of boots she is considering buying, I might respond with "wantttt" to suggest that I do not just want those boots, I *really* want them. In this study, I looked specifically at how Tony Harris used onscreen strategies of capitalizations, misspellings and repeated punctuation to add emphasis and encode meaning in his rant (22-28).

In my analysis, I paid particular attention to what Gee describes as "Why This Way and Not That Way?" As Gee explains speakers employ choices when they decide to describe a situation, context, or events in a particular way. One strategy in Gee's discourse analysis toolkit is to ask why the speaker made these particular choices and not some other choices (*How to do Discourse Analysis*, 54-65). I think this strategy was particularly useful in looking at Scalzi's rant in which he framed himself as an ally for women, while he simultaneously challenged Peacock to a figurative contest to determine which male was the more prominent in the geek community. I like John Scalzi's fiction, and I find Scalzi's voice to be an important force behind the efforts to create a more gender-inclusive science fiction and fantasy writer's community. Yet, it was telling when I asked myself why Scalzi approached the problem of Peacock's rant from a context of which male more has the right to speak for the geek community. When I considered other ways Scalzi might have refuted Peacock's rant, the same hierarchal expectations and tropes of hegemonic masculinity that I found in Harris' and Peacock's work also emerged in Scalzi's work. Scalzi made his claims in this way and not that way because hegemonic masculinity

is the dominant power structure in the geek community, it is the organizing system through which meaning is made.

### Feminist Research Methods

This dissertation is a feminist endeavor in that I am looking at cases of online marginalization, harassment, and gendering, and I am confronting the hegemonic narratives written around and about these cases. I ask here what information is being provided, who are the actors, how are they described, and what are the contextual details given. Then I am destabilizing these narratives by asking what and who is missing from them. I interrogate the narrator, the motives of narration, and the positionality of the narrator. I ask how the narrator serves his or her positionality and why (Royster and Kirsch). I am “tacking in” from what can be known by the narratives as they are written, to fill in the privileged positions of the speakers. I am drawing in details of purpose, locality, spatiality, motivation, and individuality to make visible the systems of power that are defining and regulating what is known in these narratives. For example, when I interrogate the technology media stories around the female-dominated social media site Pinterest, I expose the rhetorical moves of power and privilege encoded in the male dominance of digital technologies. In the process, I am making visible other possible definitions and means of regulation, those I hope are closer to the needs of the voices who are being obscured by dominant technological narratives.

I am challenging assumptions about who are “legitimate” subjects and objects, for example, when I break apart the Fake Geek Girl meme and interrogate the objectification of women as a necessary rhetorical move in the legitimization of male geek identity work. I am foregrounding lived experience as I describe how the female editors of Jezebel.com encounter their moderating work and the ways the

female users of Pinterest build their community networks with the tools provided. In this project, I endeavor to consider the representation and agency of my case studies, to convey their experiences and narratives rather than write narratives atop their experiences from an 'expert' position (Kirsch 1999).

### Chapter Three: A Site For Fresh Eyes: Pinterest's challenge to 'traditional' digital literacies

Pinterest is an online social networking platform for saving and sharing URLs. It is unique in several ways: it is the fastest growing online social platform, outstripping even Facebook in its growth; its interactive design is image-driven; its membership is overwhelmingly female; and member relationships are created around shared interests and images rather than personal connection (Constine). URL bookmarking platforms, such as Delicious and Google Chrome Bookmarks, typically use the computer storage file tree to organize and represent relationships between links. Pinterest does not rely on this convention, rather, community members have agency to arrange their image-link relationships by visual theme that need only have meaning for the individual member. These arrangements, if they were represented in diagram, would more closely resemble spokes and wheels than file trees. Pinterest then might be described as a URL-saving and management system that arranges internet addresses into a rhizomatic, digital-physical topography, one that is co-curated and navigated by its community members.

Much of the technology industry and financial media attention paid to Pinterest has focused on its consumer possibilities – as the reasoning goes, women generally make 85% of household purchases and women use Pinterest to track things they like; thus, marketers can use the pins of Pinterest's users to chart trends and shape product lines (Tomassoni). Technology sector journalists and pundits argue that Pinterest is popular with women because it allows for a social shopping experience, and support this claim with content and traffic metrics that seem to suggest that Pinterest drives more traffic to some internet retail sites than Facebook and Twitter combined (Fox; D'Onfro; Lynley).

Pinterest is also unique in the backlash its community has attracted from more than a few voices in the technology sector. These voices uncritically position themselves as arbitrators of the value of Pinterest as a social networking site, and the worthiness of the site content as saved and shared by the Pinterest community – these privileged voices assess Pinterest as a community of women who indulge in silly feminine daydreams rather than engage in the serious work of valuable content creation. Reggie Ugwu, tech blogger at the industry-watch site *complextech.com*, describes Pinterest as the ‘worst site’ on the internet that should ‘die a fiery death ... for the sake of all humankind’. While this is almost certainly hyperbole, his next comment is telling in its reinforcement of the hegemonic technology narrative that women only consume technology, while men make technology, arguing that Pinterest is ‘what happens when you empower people not to create, but to share’. Fiona Menzies of *Forbes* also takes up this theme, writing that ‘... social media mirrors real life. Women (generally) prefer [the internet] for social experiences, while men are more likely to utilize it as a means to an end’. Adrian Chen of *Gawker* calls Pinterest ‘the Mormon housewife’s image bookmarking service of choice’, conjuring images of cloistered women whose lives and identities revolve around being wives and mothers. And Paul Sawers, writing for *Social Media Week*, explains that women’s online practices are different than men’s based on ‘intrinsic’ gender differences, while women collectively ‘participate’ in the feminine activity of ‘conversation’, men engage in the ‘competitive’ sport of ‘communication’. No attempt is made to define the distinction between these activities; we are to assume they are different given that the participants are of different genders.

Scott Kiekbush, user experience designer, speaker on internet technologies, and tech blogger writes:

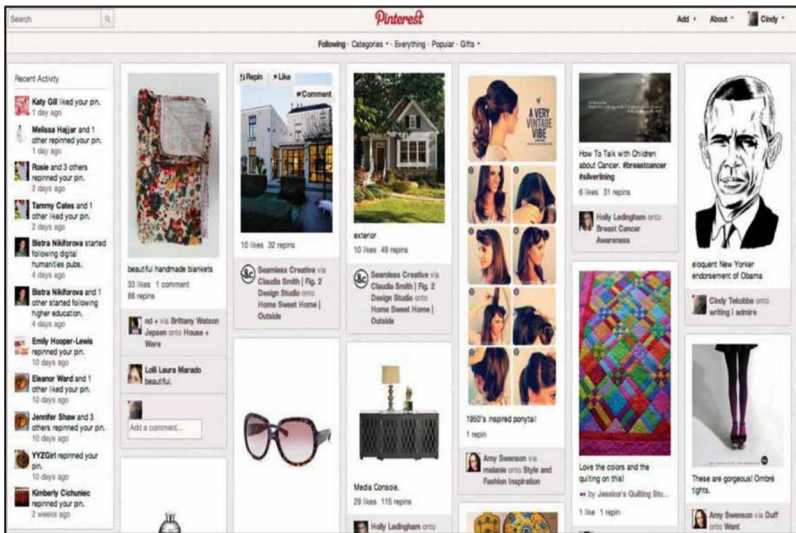
I get it. I’m not really the target demographic for Pinterest. I don’t have a vagina. But that’s not the main reason that Pinterest gets



under my skin. I created an account a while ago to give it a try. I thought that maybe it could be a replacement for the lackluster Delicious as a bookmarking site. Notsomuch ... [The] pictures of high heeled boots, impeccably decorated spacious lofts, and blueberry scones start showing up all over the place. Many [Pinterest members] seem to be using it to plan their dream weddings (both real and imaginary).

In other words, even though Kiekbush places women as Pinterest’s target audience, insisting that he is aware he is not among its primary user group, Kiekbush still claims the right as arbitrator of whether or not Pinterest is a valid application of networked technologies, and whether or not Pinterest’s content is a worthwhile use of the technologies’ affordances.

The wedding-obsessed-woman trope is common shorthand in tech culture – it



characterizes women as idle dreamers rather than active creators as they passively bide their time shopping and fantasizing about their fairy tale prince. The prevailing fiction of these idle dreams

Fig. 10. Screen capture of the main user landing page on the Pinterest social media website

serves to marginalize web site content that is perceived as specifically created for a female audience. For example, after the wedding of Catherine Middleton and Prince William, a Wikipedia contributor created an article describing Middleton’s wedding dress. This was followed almost immediately by repeated attempts by members of the Wikipedia editorial community to delete the dress article, with editors citing a

range of derogatory responses to the submission of the article from 'retarded' to its mere presence as a motive to cease volunteering as an editor altogether (Wikipedia 2011). The relationship between the Pinterest member community and the wedding obsessed-woman trope receives the pie chart treatment in the 'Pinterest User Pie Chart' post by 4GTV.com blogger, Moye Ishimoto, ascribing the vast majority of Pinterest users as either 'women planning their wedding' or 'women who wish they were still planning their wedding'.

If the punditry is to be believed then, Pinterest is a feminized online space that is either about marketing or sharing (or weddings) – it certainly is not about creating. It is not a valid use of the affordances of networked technologies, but then, apparently, in general, women cannot fully engage the robust creative possibilities of online technologies the way men can, either because women are social creatures focused entirely on sharing retail content, or because women do not understand the purpose of the internet.

Twenty-first century literacy researchers have challenged the dominant narrative that women's online literacy practices are inherently bound up in essentialist gender differences, and therefore it is a given that women's primary roles in online spaces are those of disempowered consumers rather than empowered content creators and producers (Boyd et al, 79–81; Thomas; Gee and Hayes 2010). Researchers examining the intersection of programming and gender argue that while there are certainly gendered gaps in digital literacy and technological adoption, those gaps, in some measure, reflect broader cultural narratives about what is permitted

and expected of women, and who has agency to determine whether women have fulfilled those expectations within those constraints (Butler 2004). In other words, a determination of what it means to be digitally literate; what is an appropriate use of networked,



Fig. 11. Pie chart posted by Moye Ishimoto on g4tv.com 24 January 2012.

online technologies; and who is empowered to make these determinations is bound up in masculine narratives that grant men the right of arbitrator over the adequacy of women's performances and the value of women's contributions. Thus, the narrowness by which we define digital literacy has its motives in gatekeeping, designed to reinforce and reify common knowledge beliefs and values related to women's unsuitability for the fields of informatics and computer science (Margolis et al 1999; Beckwith and Burnett; Kelan).

Additionally, I suggest that so bound are we by our own cultural and social beliefs about technologies in general, and digital technologies specifically, that we may unconsciously conflate legacy artifacts with materially dependent design conventions, causing us to misconstrue emergent literacy practices grounded in reciprocal culture or in broadly shared human experience (rather than the reified tacit knowledge inherited from legacy models) as error. And because we may misconstrue emergent literacy practices as error, we may also dismiss as wrong, inappropriate or 'not getting it' the digitally literate acts of women simply because they do not look like what we are expecting as defined by the hegemonic, masculine

technological narrative that privileges 'creating' over 'sharing'. In challenging some of these narrow definitions of digital literacy, I argue that what is needed is a re-seeing of women's online spaces with an eye for digital competencies defined not only by their relationship to design legacies, but also by the way those spaces and their members engage the technology's affordances in the expression of what we think of as good effect. In other words, a determination that someone is digitally literate should be dependent not only on who they are or what they use the technologies for, but also on how well they employ the affordances to accomplish the goals they established for their own projects.

The agency of objects: rejecting myths of neutral machines and passive users

This project challenges the over-arching narrative that women's online practices and interests are largely those of passive consumers, and that this passive consumption necessarily positions women's online literacy practices as deficient and auxiliary to the practices of men. This (contested) narrative constructs social media and social networking sites as locations of passive consumption and defines legitimate use of the internet narrowly as active content creation, such as contributions to Wikipedia and Reddit. There is user metric data supporting the notion that women at times engage the internet differently than men. Some studies suggest that nearly 70% of social media users are women, and it is apparent that women are largely absent from some key collaborative, content-creation websites: less than 10% of Wikipedia's contributors are female, and less than 30% of Github's contributors are female ("Report" 2012). I disagree, however, that women's absence from content-creation collaborative projects is a result of a gendered deficiency. Instead, I argue that women were screened out of key collaborative roles first, and then the remaining online activities available to them were gendered. In addition, I

argue that some of these perceived differences are rhetorically constructed narratives of gender and power, while others arise in the alienation of women from institutionalized ways of knowing.

Although Pinterest is generally and pejoratively described as a female online space, one that is frequently characterized as disorganized, confusing, frivolous, and unusable by the digitally literate, the 'real' internet users, I disagree with this assessment. Instead, I argue that Pinterest's member community demonstrates rich digital literacy practices by creating elaborate information-sharing networks and by collectively and individually organizing information as pastiche, montage, art, and, ultimately, as a statement of digital/virtual identity. I argue that a deep grasp of computing methodology is required in the creation of these information networks and data schemata. In addition, in their leveraging of this deep knowledge, I suggest that the robust Pinterest community stands in resistance to gendered perceptions of women's digital literacies and limits; their perceived limited grasp and thus limited ability to fully make use of the affordances of networked technologies; and the consumer-centric assumptions about women's online experiences and contributions. While the gender gap in digital literacy and technological adoption receives a great deal of scholarly attention, almost no attention is paid to the culturally situated methods and practices of software and technology developers – methods and practices that encode culture-specific narratives and values within the designs they produce (Beckwith and Burnett 108; Weismann). Yet, as Bruno Latour reminds us, when we focus solely on the social constructs, the tools 'vanish from view' (*Reassembling the Social* 70).

In this paper, I approach the digital spaces themselves as mediating objects in an attempt to make visible the text of the design of those spaces. Utilizing Latour's notion of the agency of objects within Actor Network Theory (ANT), I

describe and analyze some conventional development and design practices intended to do the semantic work of conveying the meaning and use of digital spaces and technologies; and I draw some parallels between that design acting as c/overt discourse and some of the broader cultural asymmetrical discursive practices and power relationships that may serve to marginalize female actors uninitiated in the masculine discourse of design.

Using my own experience as a stakeholder in and producer of online, networked technologies and the principles of inclusive, culturally situated design described by Janet H. Murray in *Inventing the Medium: Principles of Interaction Design as a Cultural Practice*, I hypothesize that:

Given that there exists a persistently widening gender gap beginning roughly in the late 1970s with the advent of personal computing, and continuing through the rise of globally networked computing, while women have made gains in other science, technology, engineering, and mathematics disciplines, they have lost ground in computing and informatics (Stross).

As women have been largely absent during the construction of this recent history, they may lack the historical, or 'legacy' knowledge of the evolution of technological design.

Digital design inherits its building blocks from legacy models. It is commonplace for designers to erroneously assume that given the embedded, (legacy), tacit knowledge, the prescribed use of the technology is intuitive (Murray).

As women were largely absent during the canonical development of this tacit knowledge, women's computing practices may not bear the expected marks of literacy exclusively grounded in legacy knowledge.

Thus, women's online activities may not appear literate if the presence of evidence of legacy knowledge is defined as the threshold for digital literacy.

However, if an inclusive, culturally situated approach to design is accepted as digitally literate, women's online activities may be seen to reflect rich, culturally situated digital literacy practices.

To conclude, I will describe some of the potential outcomes of the discourses of these mediating objects as they come into contact with female actors; and I will suggest some implications for how we think specifically about gender and

technology, and more broadly, how we might reconstitute a more complex and inclusive vision of what it might mean to be digitally literate.

#### Re-reading the interface: design as discourse

If the digital technologies can be read as rhetorical texts, then they must also reflect, with varying degrees of intensity, the cultural context within which they are situated, a context from which women are largely excluded (Sullivan; Bratich, and Brush). This is perhaps a more difficult logical step given that it suggests that the digital technologies are not only texts, but they are texts that speak something into the room that women may not have the legacy knowledge, cultural context, or gendered problem-solving practices (to name a few) to interpret (Beckwith and Burnett, 112; Olesky et al, 115). While gender theorists generally associate power with social systems, and a website may not be what we generally think of as a socially constructed system, it may be tempting to reject as unreadable the text that is the technology. However, rejecting these texts as irrelevant obscures gender imbalances while simultaneously encouraging the sentiment that gender imbalances are no longer relevant (Kelan 500). With ANT, Latour complicates our notions of socially instantiated systems of power. Rather than being monolithic forces we encounter as we navigate our daily lives, Latour characterizes the social ties that bind those systems as weak and in a persistent state of renegotiation given that 'the social' is not material. Actors create things to help them act on the social, an unstable social that is always in a state of negotiation as other actors intersect in networks of the social (66). As we ignore as irrelevant the cultural context within which the development of digital technologies is situated, we reinforce the entrenchment of those cultural values – values that are generally conceived of as alienating to women.

Latour proposes monitoring the actors as they encounter 'things they have added to social skills so as to render more durable the constantly shifting interactions' (*Reassembling the Social* 68). Through this monitoring, we can trace the actions, reactions and interactions of actors and objects, and actors and other actors, to find the more nuanced interplay of power. Under this model, objects necessarily have agency because they influence the behavior of the actor as their design acts on the actor. Latour emphasizes that the objects do not turn actors into puppets, but objects do narrow the possible paths the actor may take because the objects introduce measures of constraint (71–72). Latour offers the example of a speedbump as an object whose design shapes interaction and suggests what action is appropriate to the user. If you see a speedbump, you slow your car. Speedbumps suggest that slower speeds are the preferred mode of transit across the space, and by the aggressive stance of their design – erupting from the surface of a regular plane, they suggest consequences for rejecting the appropriate response suggested by the presence of the speedbump. In other words, the design of the object suggests the kinds of actions that are privileged, but only if the actor can read the design text. An actor may inadvertently make self-marginalizing choices by misreading or even being unaware of the presence of the text. Problematically, every aspect of this design, along with all of the iterative processes that engaged to arrive at the design, are born of a complex discourse whose literacy practices are often closed to women in the ongoing problem of access.

### Re-reading Pinterest

The much maligned Pinterest is the fastest growing standalone social networking community in the brief history of social media, providing URL sharing to its 11 million strong membership base estimated to be 87% female (Shontell). The



media covering the technology sector may trivialize Pinterest, but something about it clearly appeals to women given its growth trajectory and demographic. Given that community members co-create its content, Pinterest does not draw its membership based on its content offering, but rather on the appeal of its interactive design, its authoring tools, and its reciprocal community. From my perspective of a feminist technologist, Pinterest is valuable as a case study in that as a site where 87% or more of its members are female, it is much maligned not for its content or its community but because it is read through male cultural scripts of how women should spend their time, women as a second tier choice for expertise and experience, and men as the arbiters of what constitutes 'good', 'valuable', or 'competent' in terms of the knowledge of women and the worth of how that knowledge is leveraged. The nuanced feelings of alienation in online spaces structured on visible but unstated gendered scripts are unknowable. It is irresponsible research to overgeneralize that women often feel like visitors in spaces dominated by masculine discursive practices, but unless feminist researchers activate Latour's trace, the ways in which the configuration of the space is acting on the ways women read the space, and in turn how their reading of the space does or does not color their interactions within the space, goes critically unexamined. I argue here that the elements of the discourse of design in computing mirror some of those dominant discourses feminists actively resist, and that these discourses can be made visible through an examination of ANT trace (Butler 1990).

While linguistically, it is expected that tools be inextricable from the culture with which they are assembled, it is teleological to draw a straight line between the disciplinary knowledge of computer science that is built upon traditionally masculine ways of being, knowing, and privileging, and the sometimes actively and sometimes incidentally constructed culture that might be inhospitable to women. These feminist

technologists do know: indexing and cataloging information for retrieval and manipulation are core concepts in computing.

Complex computer systems are constructed atop long held legacy design conventions that assume that the application of order gives rise to control, and that control gives rise to efficiency. Control and efficiency are the gateways to power over the storage, retrieval, manipulation, and conveyance of information – a semantic construct firmly entrenched in the masculine dialectic (Butler 1990). What is unknown remains a classic problem in feminist rhetorics: how to imagine what cannot be imagined – what discourses would be encoded in systems designed outside of a masculine narrative? If discussion of exclusionary narratives of what it means to be digitally literate is obscured by gatekeeping practices of referencing legacy scripts that those who are outside of the discourse cannot know, then we must step off of our habitual paths and re-examine women’s online practices beginning at the end result – what has been accomplished? And then we may begin to ask ourselves how to describe in inclusive language those complex processes and practices that lead to competent demonstrations of digital fluency.

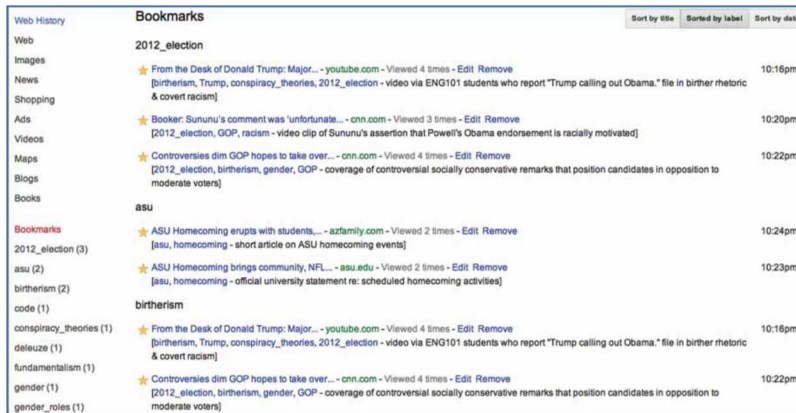
An example of a legacy practice encoded in design is the critical concept of semantic trace – design cues that convey contextual clues about what information is being presented to the user, and like Latour’s speedbump, suggest to the user how

Patient-name	Insurance-co-name	to correctly interact with the interface. For the sake of processing efficiency, stored
Patient-street-address	Insurance-co-street-address	
Patient-city	Insurance-co-city	
Patient-state	Insurance-co-state	
Patient-zip	Insurance-co-zip	

Fig. 12. A simplified example of semantic trace enacted in database design.

data are 'normalized' into irreducible and non-redundant elements. When data are removed from their context, sifted and sorted into granular chunks, contextual meaning is lost. Application programmers generally need to understand the significance of the data in order to create the applications that use the data. Thus the designers, to convey relationships between the various data elements, apply a semantic trace design strategy. The resulting data design schema includes semantic cues, perhaps in repetition of prefix of field names that contain related data, or hierarchical cues within table names to convey the nested dependencies of data. The programmer must then develop a user interface that reconstitutes for the user that which was parsed for the sake of the processor (Murray). The meaningful significance of that data must be maintained through its various transformations from user to screen to computer program, and so the programmers and designers maintain the semantic trace design strategy throughout those transformations in an effort to maintain the connection between data and meaning. Figure 12 is a simplified example of a data design strategy featuring semantic trace. A doctor keeps computerized records of patients, but labeling the fields related to a patient simply as 'name', 'address', and 'city' would be problematic because patient files contain multiple addresses, including patient address, insurance company address, billing address, etc. In the semantic trace data schema, the prefix 'patient' is applied to all fields related to the patient's address, while 'insurance-co' is applied as a prefix to all fields related to the insurer's address.

Semantic trace is an example of design literacy – if you can read the design, the data are made meaningful. Problematically, the ubiquity of trace in systems design can cause the designer to assume that everyone has access to this literacy – that the presence of trace is not the tacit knowledge of someone steeped in a design



legacy, but instead a kind of commonsense knowledge drawn broadly from shared human experience (Murray). Conflating tacit knowledge

Fig. 13. Google+ bookmarks sorted by label

with commonsense leads to interface designs that are only 'readable' by those already familiar with the concepts of trace and the legacy presence of trace in the on-screen arrangement of data and user interaction cues (Bowker). Trace is a hierarchal concept common to what we think of as masculine discourse and master narratives (Butler 1990). The knowledge of trace can also be gained by an introduction to the inner workings of the computer, knowledge that Margolis and Allen's research found was far more likely to be present in male computer users than female computer users. In other words, the organization of information in top-down and nested hierarchies is more likely to be native to males than females, and intimate knowledge of a computer's strategies for data handling is also more likely to be native to males than females. Given these potentially native groundings, it is not much of a stretch that male users than female users receive the discourse of semantic trace more readily.

Pinterest is a URL-saving and sharing website that does not use the digital discourse of semantic trace, while Google Bookmarks, the URL-saving and sharing platform of the predominantly male audience of Google + does use semantic trace. When a user opts to save a URL using Google Bookmarks, the user is prompted for a name, URL, labels, and notes describing the link. These data elements are used in creating the visual, text-based hierarchy under which the links are organized. Once the bookmark is added, the user can view their entire collection of bookmarks alphabetized by name, or sorted within the sub-headings of the user's labels. Pinterest's primary design concept in building its member/user experience is to provide a visual tool to 'share and organize things you love' (Allen & Grosse). Pinterest members create any number of 'virtual pinboards', and use these boards to amass collections of URLs in order to personally save and/or socially share them. The primary Pinterest member interface design is then a rectangle representing a pinboard. When a member 'pins' a link, the site scripts scrape the html for image tags and then produce a data set of those images from which for the Pinterest member may choose one to assign as the visual representation of her saved link. Once she has selected her image, Pinterest offers her the option to assign the pin to a specific board and attach a text description of the pin. The pinboard rectangle interface contains a grid of images with one-to-one associations with links that have been applied to the board.

While link saving and organizing services are nothing new, and, in fact, organizing and visually representing saved data are primary functions of user interfaces, Pinterest diverges from standard programming and design conventions in at least two significant ways: a non-normalized, member-selected icon assigning strategy and the comingling of the system rules maintenance task and the data acquisition tasks. I argue that it is these points of divergence from the legacy

conventions that are the source of much of the derogatory commentary reported by the technology industry media that surrounds Pinterest. Community members do not have to engage legacy scripts in order to network with other members, create content, and engage in self-expressions of digital identity because the Pinterest interface does not require it.

The Pinterest interface design bypasses the problem of fluency and interpretation in its outside-of-convention design choices for the visual representation of saved data. Certainly, the underlying structures exist – code is still hierarchal, modular, and object oriented; procedures run on specified, linear paths – but there is no system-based attempt to convey the significance of the underlying in order to the Pinterest member. There are no rooted-in-legacy, standardized, system provided, and meaning-laden icons to represent data types and their associated purposes. Pinterest members choose an image from a set culled from the URL they are saving to visually represent the data. The schema rules for image selection are left to the individual member, who may establish her own schema rules consciously or leverage unconscious but personally meaningful rules – perhaps all of the links to household items are signified with an image of the item, while links to OpEd pages include an image of the originator’s masthead. The schema need only be meaningful to the individual member.

A second significant difference is in the Pinterest member’s ability to save a pin and categorize that pin in one interface screen with one logic step. Those individual pinboards serve as the classification system for the pins. Pinterest users can create pinboards for any collection of links and label the collection in any way meaningful to the individual member. The user-driven classification system is not new: consider the contact management application that provides a user with standard data fields and user-defined data fields. If an individual user determines

that it is meaningful for her to store the federal tax ID numbers of all of her vendors in her contacts, she may create a user-defined field for this purpose. In many applications, she may also be able to closely limit the format in which this segment of data will be accepted. However, the establishment of user-defined fields and template masks for the data segmented in those fields are, by design convention, segregated to the system rules functions of the application. By convention, data are input from one access point. System rules that regulate the consistency and granularity of data are input and maintained from a separate access point. The iterations of design that resulted in the determination that the segregation of the maintenance of systems rules from the input of records was 'best practices', are so long settled that they predate the graphical user interface (GUI). There has never been a version of the Windows GUI that did not have a 'Settings' menu to access system rules.

By contrast, Pinterest members can save a pin and establish a pinboard from the same entry point. The Pinterest user interface affords no options to regulate the consistency of board names or link text. This legacy 'feature', so ubiquitous as to be invisible in every day interactions with technologies, is simply nonexistent in Pinterest. With no design assumption that the member's primary intent must necessarily be to regulate the consistency of board names and pin text descriptions, the Pinterest member has no need to understand the control based purpose of systems rules, the conventions that go into making decisions about the granularity of segmentation with the establishment of system rules, or the relationship between the rules and the data. She is certainly free to establish either consciously or unconsciously her own rules, for example, she might apply a naming convention that implies purpose, e.g. research-based collections are named first with research and then with the research subject. Or several product listings she is saving as possible

gift ideas for friends and family might be sorted into individual boards named for each individual person. However, effectively sorting, managing, and retrieving the data do not require fluency in these standard conventions.

#### Implications and conclusions

Pinterest is one example – there are many others – of the ritualized marginalizing of online spaces and digital practices of women. As an online space, Pinterest was first gendered, then it was evaluated through the lens of a cultural narrative that defines women’s online practices as mere ‘sharing’, which is deficient and trivial compared with the important work of serious content creation. This important work is defined by a masculine narrative of what should be produced and how it should be produced by the affordances of digital technologies, and guarded by the male privilege that grants males the right to assess the competencies and contributions of females. I argue that it is the narratives of computing legacy discourse working in concert with the cultural scripts that define the perceptions of women’s work that may initially limit women’s computing practices to the borderlands of social media and sharing. Then, those spaces are gendered and found deficient. The rule is decided, and then the evidence is contrived to support it. In the Pinterest community, female users are collaboratively curating massive collections of information and building complex and far-ranging networks for sharing and maintaining those collections. I argue that these are valuable creation activities that are devalued as part of a technological cultural that reflexively trivializes anything perceived as of interest to a primarily female audience. In short, women’s digital literacy competencies are measured first by their association with gender, then by their relative interest to a male audience, and finally by a skewed assessment of the



value of the end result. Or, rather than measuring women's digital literate practices, rationalizations are found to devalue them.

We should not decide whether a person has demonstrated competencies with digital technological affordances based on who they are and what they use those affordances for, whether it is to share tips on recreating at home a professional-looking pedicure, or to exchange ideas for the design of DIY weddings. As technological insiders, and with more than two decades as a professional technologist, I identify as an insider, we are making a grievous error when we conflate tacit knowledge with common sense and use this as a measure of what digital literacy looks like. As we do with common sense, we denigrate anyone who does not possess tacit knowledge. Instead, we need to take a step back from our beloved legacies and re-imagine what digital literacy looks like. We can begin with re-seeing what women produce when they leverage the affordances of digital technologies. We can make some attempt to fracture the binary of creating versus sharing. With Pinterest, predominately female users have produced a robust, supportive, online community whose rich literate practices make use of visual organizational schema that bypasses legacy scripts. And because they bypass legacy scripts, these visual schemas are accessible to a broad audience. These visually arranged interfaces may explain why these design strategies are beginning to emerge in digital spaces as diverse as digital comics produced in a vertical, Pinterest-like layout to the image-driven, tiled interface design of Microsoft Windows 8. Yet, the evidence demonstrates that many voices inside the technology industry roundly reject technologies that are not built upon legacy models. Perhaps, this is because a more broadly defined digital literacy and digital legitimacy would bring more women's voices and women's ways of knowing into the foreground. And this in turn

would place more technological clout in the hands of women and challenge the scripts of women as technologically deficient.

#### Chapter Four: Attack of the Fake Geek Girls: hegemonic masculinity and policing geekiness: The rise of the geeks

Armed with his game controller and action figures, the basement dwelling geek is a popular cultural trope. With the mainstreaming of technological skills, games and comics into popular culture, the geek archetype is having its moment. Comic book adaptations rule the global box office, and *The Big Bang Theory* (2007), a sitcom exploring the friendships of a group of geeks, was the top rated scripted program on American television in 2012-2013 (Barnes; Bibel). Even as the geek is everywhere, the durability of geek marginalization persists with alienation and humiliation playing out as popular themes in geek-related entertainment (Bennett and Yabroff; Ensmenger). It is perhaps surprising that rather than leveraging newfound semi-legitimacy to construct an inclusive subculture, vocal, predominantly male gatekeepers have united against a common enemy: the Fake Geek Girl who, according to these policing voices, is an opportunist who engages geek culture for the sole purpose of exploiting the sexual vulnerability of authentically geeky males. Girls and women who express geeky interests discursively construct sexualized identities for themselves so as not to violate gender norms that generally do not make space for females with singular interests. Male geek culture discursively constructs itself as sexually unsuccessful heterosexuals, and in the process invalidates any *sexy* female geek representations or homosexual geek representations. In this culture, legitimate geeks are only heterosexual, only male, and only socially inept (Alexander, McCoy and Velez 167-170). In other words, for girl geeks, a cultural double bind exists: in order to be geeky, girls must be cute or sexy, but if they are cute or sexy, male geek culture delegitimizes them. This paper analyzes internet rants condemning the Fake Geek Girl, in an effort to illuminate the complex social and sexual scripts that reify heteronormativity onto the identity work

of females who are attracted to, proficient with, or express geeky interests in science and technology, and their imaginative subcultures.

Making claims about geeks and nerds from behind the lines

James Paul Gee writes that, 'A Discourse is a sort of "identity kit" which comes complete with the appropriate costume and instructions on how to act, talk, and often write, so as to take on a particular social role that others will recognize' (*Social Linguistics and Literacies* 142). To be a geek or a nerd requires a particular passion for and

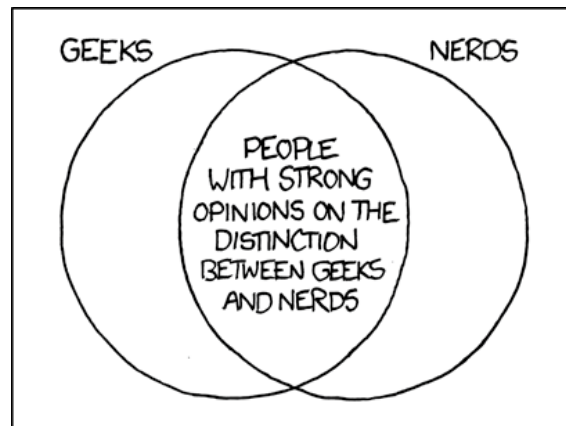
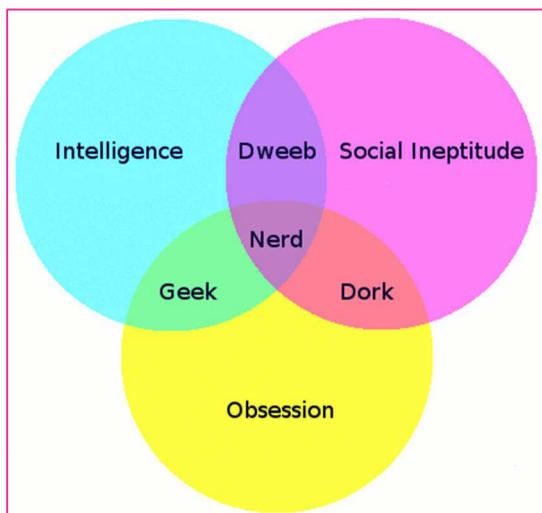


Fig. 14. Geeks and Nerds Venn diagram from the webcomic XKCD.com

devotion to a narrow segment of knowledge – there are comic book geeks, computer nerds, video game geeks, music nerds, super hero geeks, cosplay geeks, and a seemingly endless spiral of specializations within subdivisions. These subdivisions of geeks who can perform as and engage effectively with other comic book geeks and nerds who can make computer code jokes and dress and socialize from a position of acceptance with the computer nerd community are fluent in their own Discourses. Gee makes a distinction between lower-case d-discourses, the generic discourse that flow around us everyday, and big-d Discourses as the performative identity kit that demonstrates initiation into one of these specialized Discourse communities. These discourses as specializations within the broader geek Discourse community – those who share the common language, performance, and socialization of the awkward, obsessed, marginalized geek. The commonality of obsessive engagement and narrow

focus plays out in continuing subcultural debates around membership and identity qualifications. Researching and writing about online, discursive constructions of geek and nerd identity can immediately bog down in definitions of who is a geek, who is a nerd, and who has the power to decide. The online comic XKCD.com 'a webcomic of romance, sarcasm, math, and language' humorously represents this conflict as data in a Venn diagram – the joke is that in order to be a geek or nerd, you have to debate who is a geek and who is a nerd (Monroe).

Mashable.com, a popular technology news aggregator site with more than 20 million unique views, offers a definitional Venn diagram that defines geeks, nerds



and dorks as positions within the intersections of intelligence, social ineptitude and obsession. And while the online definitional debate no doubt continues, it remains that the terms geek and nerd are often used interchangeably, e.g. the popular social media resource, knowyourmeme.com has

Fig. 15. Nerd, Geek, and Dork Venn diagram from the technology news aggregator, Mashable.com.

listings for *idiot nerd girl*, *fake geek girl*, and *fake nerd girl*, all referring to the existence of a female who allegedly infiltrates geek or nerd culture for the purposes of exploiting the male members of various geek and nerd subcultures, both in real life and online. For the purposes of this paper, geek and nerd will be used interchangeably because given that all definitions privilege intelligence, social ineptitude and obsessive engagement, I am positioning these subcultures as collectively devalued by the hegemonic masculine ideal: aggressive, virile,

heterosexual and male (Connell). In other words, within the constraints of this project, it does not matter if you define yourself granularly as a member of a geek or a nerd subculture, but that your subculture is othered by the dominant culture because otherness is the common discursive thread. Otherness is also the operator that pushes geek girls into the closed loop of conflicting Discourses of feminine identity within hegemonic masculinity and a geek identity that cannot be sexually or socially competent. These conflicting Discourses - girls must be social and sex objects and geeks cannot be sexy or social - make the possibility of a discursive identity for the female geek unattainable.

Because geekiness/nerdiness as identities are the result of some intersection of knowledge literacy, social performance and special interest, the specifics of which signal to others of membership in the subculture, geekiness and nerdiness can be seen as 'socially situated identities' (Gee 2001). Those who share these identities engage in the Discourses specific to their subcultures, and in broader, overlapping Discourses designed to situate an individual geek within the broader geek culture. Being a geek is not just about what geeks talk about, or what geeks say to each other about their special interests and obsessions. It is the 'coordinating [of] language with ways of acting, interacting, valuing, believing, feeling, and with bodies, clothes, non-linguistic symbols, objects, tools, technologies, times, and places (Gee 2001, 37-38). One space where these coordinations can be observed is geek conventions. Conventions, or "cons" in popular discourse, are fan gatherings organized around a specific geek subculture. They can be enormous, like the Comic-Con International held annually in San Diego, the largest con in the nation that includes panels and booths representing the industries of film, television, graphic novels, science fiction, and comics. And they can be smaller and more narrowly focused like Copper Con, held annually in Phoenix, Arizona and emphasizing science

fiction and fantasy writers and characters. Geeks of all types gather at cons - making hotel reservations, buying advance tickets and spending months planning their cosplay, short for costume play, outfits. Cosplayers dress up like their favorite film, comic, and video game characters to participate in pageants and contests. These costumes are generally elaborate and handmade, with obsessive attention to detail. Awards are given and bragging rights are determined. Cons are sites where geek obsessions are put on display, the more obsessive a geek's attention to detail and depth of canonical knowledge, the more authentic the geek. Geeks test each other on canons, commitment to their individual fandoms, and commitment to the geek Discourses (Bury). Geeks are shuffled into hierarchies based on their demonstrated authenticity.

FWIW (for what it's worth), some caveats

In this project, I discuss and analyze three examples of online *rants* related to fake geek girls. I suggest here that there are several limitations to this project. I am female, a lifelong computer nerd and a science fiction geek. While I do not personally cosplay, I have close relationships with a number of women and men who do. I admire their creativity, ingenuity and fabrication skills. I do, however, annually attend geek technology conferences, both professional industry-focused and consumer focused, and routinely experience sexism and harassment in those contexts. It is fair to say that I am personally invested in this discussion of geek girl identities. Also, my analysis is limited to selections from three rants that were written and posted to blogs and social media sites by Joe Peacock, John Scalzi and Tony Harris. A rant is a time-honored online genre: "an extended, always passionate monologue about an unusually-narrow topic that is of almost obsessive interest to the author" (Knobel). If these rants were written and posted by members of private

communities I was performing research within, I would likely have used pseudonyms for the authors' names. For this project, my selections were all written by public figures who maintain highly trafficked social media profiles for the purpose of promoting their own work and engaging their fans. These rants then received viral dissemination across a range of social media platforms and were widely discussed in popular media. Peacock, Scalzi and Harris have themselves discussed the public response to their rants in interviews and follow-up posts. Those follow-ups from the authors might make for an interesting direction to take this project next, one that examines the positionality of certain high-profile male geeks and their rhetorical negotiations of claims of misogyny and bullying within the geek community. I acknowledge that this paper only examines the initial posts written by these authors, that the authors have engaged in additional commentary related to their rants, and that these follow up discussions are beyond the scope of this paper.

In this space, I cannot possibly represent the scope of this debate as it reverberates through the internet. The myth of the fake geek girl did not originate with Tony Harris in 2012, however since 2012, the authenticity and ownership of geekiness is frequently referenced tangentially to other discussions related to women in the video game industry, female gamers, and even in discussions about women in the technology sector (Plunkett; Sampson; Davis; Wallace). At best, my examples are a narrow segment of a much larger, on-going conversation that is in many ways itself situated within an even larger national conversation about women, agency, marriage and equality. Yet, I think my discussion of the examples is important for the very reason that they are representative of the kinds of barriers, marginalization, and contradictions women and girls face regularly while negotiating their identities in these professional and popular cultural contexts that are generally constructed as masculine domains (Tiidenberg). I feel that there are many reasons that women



cannot afford to be shut out of these geeky contexts, but I will offer just one here: Jane Margolis' and Allan Fisher's research that I will discuss later in this paper finds that computer geeks are most successful in their computer science education if they identify as geeks at a very young age (Margolis and Fisher). There is an ever-growing gender gap in the technological industry. If this global digital network is the future, then very few women are having a hand in building our future. *We need girl computer geeks.*

#### Performing femininity/performing geekiness

What is a Fake Geek Girl, and from what base does she launch her evil schemes? It may be useful to begin with a brief discussion of the *girl geek* label. The inclusion of the female gender marker, *girl*, suggests that the generic label, *geek*, is inadequate to describe the female geek experience. In a 2008 *Newsweek* feature on a female college engineering students titled "Revenge of the Nerddette: As geeks become chic in all levels of society, an unlikely subset is starting to roar. Meet the Nerd Girls: they're smart, they're techie and they're hot," authors Bennett and Yabroff argue that unlike *Voodoo* and *Mad Magazine's* historically male representations of the socially awkward geek, today's female geeks 'grew up on gender neutral movies like *Hackers* and *The Matrix*, and saw the transformation of Willow on *Buffy the Vampire Slayer* from awkward geek to smart and sassy sex symbol. Their exposure to these 'gender neutral' role models has, according to the writers, allowed female engineering students to construct their identities beyond those of the stereotypical male geek:

These girl geeks aren't social misfits; their identities don't hinge on outsider status. They may love all things sci-tech, but first and foremost they are girls and they've made that part of their appeal. They've modeled themselves after ... actress Danica McKellar, who coauthored a math theorem, wrote a book for girls called *Math Doesn't Suck* and posed in a bikini for *Stuff* magazine. Or even Ellen Spertus, a

Mills College professor and research scientist at Google and the 2001 winner of the Silicon Valley Sexiest Geek Alive pageant.

While the writers describe *Hackers*, *The Matrix*, and *Buffy the Vampire Slayer* as gender neutral, the *girl geek* characters in these films, Kate played by Angelina Jolie, Willow played by Alyson Hannigan, and Trinity played by Carrie Anne Moss, are highly sexualized on the screen. Trinity, for example, is difficult to defend as 'gender neutral' when she spends most of her screen time in a patent leather catsuit. In this case, 'gender neutral' does not mean the absence of gendering scripts, but the presence of conventional gender norms, the need to be a 'sassy sex symbol.' These assertions that sexualized female geeks are gender neutral are to declare that for a woman, to be sexy is the neutral position. Indeed, the girls interviewed by Bennett and Yabroff self-identify as girls first and geeks second, discursively constructing identities that juxtapose sexiness and tech-savviness in self-described efforts to resist having their identities subsumed into the awkward, self-involved male geek stereotype. It seems then that Girl Geek is the intersection of two stereotypes: the obsessive geek and the feminine sex symbol.

The sexy spin on geekiness is not simply shaped by popular culture. In April 2007, *Prism*, the journal of the American Society for Engineering Education, published a feature on female engineering students at Tufts University titled 'Piercings Not Pocket Protectors' that describes them as "cute"; with lip piercings and tattoos, and defines the Tufts engineering program as one that appeals to female students because women are allowed to have interests outside of engineering (Loftus). This focus on cuteness and broader interests here is significant given one of the issues raised in the Margolis and Fisher study was that the female gender norms do not generally allow for the single-minded disciplinary focus permitted of male scientists. Margolis and Fisher argue that to excel in STEM requires a singular focus

that in males can be viewed as commitment, but in females can be perceived as selfish or socially dysfunctional. Neither selfishness nor social dysfunction are acceptable traits for females (*Unlocking the Clubhouse*). Cindy Foor and Susan Walden's 2009 NWSA article "'Imaginary Engineering" or "Re-imagined Engineering": Negotiating Gendered Identities in the Borderland of a College of Engineering,' documents in the findings of their ethnographic study that male and female engineering students discursively construct female engineers as 'softer' scientists and engage in lengthy discursive proofs demonstrating female heteronormativity. These serve to reinforce that while women can be engineers, there is an appropriate approach to constructing a female engineering identity 'without the threat of committing gender inauthentication (Foor and Walden). In other words, a girl can be a female and a geek, but she must always first be female.

#### Hegemonic masculinity and the male geek

The Fake Geek Girl is a 'thing': a meme, a trope, and a much discussed threat in geek-oriented corners of the internet. But she gained access to the broader public consciousness with the viral dissemination of comic book artist Tony Harris' November 12, 2012 Facebook rant against female attendees of comic book conventions, in which Harris purports to defend the (male) geekdom from the invasion of the 'fake geek girl,' defined by what he describes as 'the rule' of the con-attending geek girl. The gist of Harris' post is that while geeks are willing to acknowledge their situation within the cultural margins, they will not fall victim to the wiles of the Fake Geek Girl. And she who would attempt to take advantage of the socially awkward male geek is simply a pathetic fraud. In short, women are socially competent, sexual aggressors. Geeks are not sexy, and geeks are not social.

Connell defines hegemonic masculinity as “the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women” (*Masculinities*). Males do not have to measure up to the masculine ideal to inherit the privilege of patriarchy, and while male geeks with their self-described social deficiencies, construct their identities as deficient compared to the masculine idea, those constructions acknowledge that while they may be inferior to the ideal, they are still superior to females. Kendall argues that this male geek objectification of females in geek spaces is an important identity ritual, “creating sexual and gender narratives that may bear little resemblance to other aspects of their lived experience but that nevertheless comprise important elements of their masculine identities and their connections with other men” (Kendall). Being a geek may invalidate a man’s masculinity by acknowledging his social incompetence and lack of aggression and virility, but sexually objectifying female geeks re-inscribes that hegemonic ideal.

Harris’ Facebook rant occurred at what was perhaps a kairotic moment in online geek culture because the pressure had been building for months. Through the spring of 2012, the discussion of who could be an authentic geek seeped out of the darker corners of online comic and game forums and into mainstream media with pieces like Tara Tiger Brown’s ‘Dear Fake Geek Girls: Please Go Away’ in *Forbes* magazine and Esther Zuckerman’s ‘Taking Back a Meme: Idiot Nerd Girl’ on *The Atlantic Wire*. On July 24, 2012, CNN’s *GeekOut* blog posted an opinion piece by website designer and contributor to *CNN* and *Huffington Post*, Joe Peacock, titled ‘Booth Babes Need Not Apply. In it, Peacock attempts to divide women who attend comic conventions into two categories, those who are ‘real’ geeks and those who

possess a 'mediocre' physical appearance, but dress up and attend cons to take advantage of introverted, male comic book fans:

I call these girls '6 of 9'. They have a superpower: In the real world, they're beauty-obsessed, frustrated wannabe models who can't get work. They decide to put on a "hot" costume, parade around a group of boys notorious for being outcasts that don't get attention from girls, and feel like a celebrity. They're a "6" in the "real world", but when they put on a Batman shirt and head to the local fandom convention du jour, they instantly become a "9". They're poachers. They're a pox on our culture. As a guy, I find it repugnant that, due to my interests in comic books, sci-fi, fantasy and role playing games, video games and toys, I am supposed to feel honored that a pretty girl is in my presence. It's insulting (Peacock).

For those fluent in geek culture, '6 of 9' is an oblique reference to 'Seven of Nine,' a character on the 1990s television series *Star Trek: Deep Space Nine*. Seven of Nine, played by Jeri Ryan, was a liberated, former-member of the Borg collective who shimmied around the fictional universe in figure-revealing, silver cat suits and high heeled boots. In the Star Trek canon, the Borg are a cybernetic race with a hive mind enslaved to a hive queen. The near-transparent references to masculine anxieties over female sexuality were not lost on critics, who panned the addition of the Seven of Nine character in the fourth season as deliberate fan service to boost flagging ratings through overt sex appeal (Snierston).

The internet response to the Peacock piece was immediate and vocal from fan and gamer communities. CNN posted a counterpoint arguing that female geeks, like male geeks, attend conventions not to titillate but to connect to the community (Dempre). Science fiction writer John Scalzi weighed in on his own popular blog with a post titled 'Who gets to be a geek? Anyone who wants to be,' with which in his own performance of hegemonic masculinity, he calls out Joe Peacock:

Hey, Joe: Hi, I'm John Scalzi. I am also a longtime geek. My resume includes three New York Times bestselling science fiction books, three books nominated for the Best Novel Hugo, six other Hugo nominations (as well as Nebula, Locus, Sidewise and other award nominations), one novel optioned for a science fiction film, a stint consulting for the

Stargate: Universe television show [...] I was a special guest at this year's ComicCon. I am the toastmaster of this year's Worldcon. I outrank you as Speaker for the Geeks. You are overruled. Your entire piece is thrown out as condescending, entitled, oblivious, sexist and obnoxious (Scalzi).

Even as he attempts to subvert the forces that would disqualify women from geek identities, Scalzi relies on the dominance practices of hegemonic masculinity, aggressively marking out his more successful career and broader power base as his own authority in opening the gates to geek subculture for women. While it is fair to say that it was Scalzi's intention to argue for the legitimacy of female geeks, his ranking system has the effect of both reinforcing the masculine norms and further narrowing the access points for female geeks who, because they struggle for legitimacy, may not have the opportunities to amass the tools, knowledge, d(D)iscourses, literacy practices and other signs of dominance in the geek subcultures (Margolis and Fisher).

But even as the discussion of geek gatekeeping was ubiquitous, perhaps no instance of the Fake Geek Girl trope garnered as much public attention or spurred as broad a response as the November 12, 2012 Facebook rant of comic book artist, Tony Harris:

I cant remember if Ive said this before, but Im gonna say it anyway. I dont give a crap.I appreciate a pretty Gal as much as the next Hetero Male. Sometimes I even go in for some racy type stuff (keeping the comments PG for my Ladies sake) but dammit, dammit, dammit I am so sick and tired of the whole COSPLAY-Chiks. I know a few who are actually pretty cool-and BIG Shocker, love and read Comics.So as in all things, they are exception to the rule. Heres the statement I wanna make, based on THE RULE: "Hey! Quasi-Pretty-NOT-Hot-Girl, you are more pathetic than the REAL Nerds, who YOU secretly think are REALLY PATHETIC. But we are onto you. Some of us are aware that you are ever so average on an everyday basis. But you have a couple of things going your way. You are willing to become almost completely Naked in public, and yer either skinny( Well, some or most of you, THINK you are ) or you have Big Boobies. Notice I didnt say GREAT Boobies? You are what I refer to as "CON-HOT". Well not by my estimation, but according to a LOT of average Comic Book Fans who either RARELY speak to, or NEVER speak to girls. Some Virgins, ALL

unconfident when it comes to girls, and the ONE thing they all have in common? They are being preyed on by YOU. You have this really awful need for attention, for people to tell you you're pretty, or Hot, and the thought of guys pleasuring themselves to the memory of you hanging on them with your glossy open lips, promising them the Moon and the Stars of pleasure, just makes your head vibrate. After many years of watching this shit go down every 3 seconds around or in front of my booth or table at ANY given Con in the country, I put this together. Well not just me. We are LEGION. And here it is, THE REASON WHY ALL THAT, sickens us: BECAUSE YOU DON'T KNOW SHIT ABOUT COMICS, BEYOND WHATEVER GOOGLE IMAGE SEARCH YOU DID TO GET RED ON THE MOST MAINSTREAM CHARACTER WITH THE MOST REVEALING COSTUME EVER. And also, if ANY of these guys that you hang on tried to talk to you out of that Con? You wouldn't give them the fucking time of day. Shut up you fabled liar, no you would not. Lying, Liar Face. Not Comics. You're just the thing that the Comic Book, AND mainstream press flock to at Cons. And the real reason for the Con, and the damned costumes you're parading around in? That would be Comic Book Artists, and Comic Book Writers who make all that shit up (sic) (Harris).

In short, Harris claims that female cos-players who are not truly (subjectively) 'hot' in real life, dress up in comic or game costumes and attend cons only to prey on the affections of vulnerable geeky males. Harris' rant, situated within both geek culture and the broader discussion surrounding the place of women in that culture, may simply have been dismissed as an ill-advised bit of temper on a Facebook wall frequented by Harris' own fans. However, screen captures were taken and reposted, and Harris' rant went viral across the internet.

Gee and Hayes describe identity building as the modes of communicating and acting, as well as shared commonsense and common knowledge, that are expected of people who share a life world, such as convention geek (2011). In his rant, Harris relies on a number of commonsense and common knowledge points to both define himself as a member of a coalition of legitimate geeks, and to delineate certain types of women who do not share the geek lifeworld. Most significantly, Harris constructs comic conventions as heteronormative, masculine spaces as the framework of his rant. With his opening sentences, he defines comic convention attendees as heterosexual, and suggests that the attractiveness of the female attendees is a

relevant factor in determining the legitimacy of the geekiness of female attendees. His first two sentences announce that he is not sure if he has shared this information with his audience before, and he does not care if he has, implying that it is important enough that it bears repeating. He then writes: "I appreciate a pretty Gal as much as the next Hetero Male," and follows in the next sentence with "[...] dammit, dammit, dammit I am so sick and tired of the whole COSPLAY-Chiks." Harris then argues that he does know a "few" female cos-players who are "pretty cool," of course it is a "BIG Shocker" that these women are legitimate exceptions to his "rule." Harris signals that cons are to be viewed through a heteronormative lens when he, as a man with considerable name recognition within the comic book community, begins by defining his viewpoint as a heterosexual one. Throughout his rant, he discusses males only in the context of their (potential) sexual pursuit of women, while women are defined as sexually predatory creatures of varying levels of physical attractiveness. He is speaking from a "Male" perspective on the subject of "Chiks" and "Gal[s]." Chicks and gals are generally marginalizing terms that distance females from parity with males. Harris establishes the centrality of these concepts by capitalizing them (Harris).

Harris also assumes there exists an objective attractiveness standard by which all female cosplaying con attendees can be measured. He does not say this explicitly, rather he gestures at this when he directs his "rule" to "Quasi-Pretty-NOT-Hot-Girl(s)." He does not have to explicate the meaning of "Quasi-Pretty-NOT-Hot" to his peer audience of "REAL Nerds" because it is assumed that they know. It is apparently common knowledge that "REAL Nerds" rarely talk to women, make a distinction between "pretty" and "hot," and feel preyed upon by poser females in their midst. Harris does not shy away from speaking for his audience with: "all [of us];" "[w]e are LEGION;" "any con;" and "we" to describe the people who think in



this manner - essentially, every male, at every con. He does explicitly separate the not pretty or hot enough females from the rest of the authentic nerds when he invokes "YOU Liar Face(s)" who are "not comics" to direct his rule at the offending women (Harris).

While Harris does not identify the characteristics of an adequately 'hot' female, who, one presumes, is attractive enough not to hunt men at cons because non-nerdy males would pay attention to these women, he does construct and identify for those to whom the rule is addressed:

BECAUSE YOU DONT KNOW SHIT ABOUT COMICS, BEYOND WHATEVER GOOGLE IMAGE SEARCH YOU DID TO GET RED ON THE MOST MAINSTREAM CHARACTER WITH THE MOST REVEALING COSTUMER EVER [emphasis is original] (Harris).

Here, I draw attention to two points Harris sketches about nerd/geek identification. First, in addition to being a heterosexual, masculine culture, by declaring the kind of women who cannot attract the attentions of non-nerdy males to be the type still unattainable by nerdy con attendees, Harris indirectly introduces another qualification to be an authentic nerd: you must be a male who is not appealing enough to attract even a "quasi-pretty" female. Harris draws this distinction when he juxtaposes authentic male nerds against the quasi-pretty-not-hot female who does not know anything about comics. She is "PATHETIC" in Harris' words, so then, extending his logic, the nerds who could not attain her anyway fall in the less-than-quasi-pretty-not-hot and less-than-pathetic categories [emphasis is original] (Harris).

Heterosexuality remains a persistent cornerstone of hegemonic masculinity and male geeks tend to define themselves as failures in their sexual conquests of women as compared to (in their understanding) the masculine ideal. This constructing of women as objects of conquest rather than as peers or people justifies

their objectification and their disgust at female geeks who exist as those objects. Kendal writes that “[w]hile the hegemonic gender order thus depicts women as inferior and not acceptable identity models, it nevertheless requires that men desire these inferior (even disgusting) creatures” (Kendall). To perform masculinity is to perform heterosexuality, but performing heterosexuality requires successful sexual conquests of women. Male geeks, by definition, cannot claim these successes, yet they must still reconcile their identities within hegemonic masculinity. In this process of reconciliation, male geeks redirect the blame for their failings as men not upon themselves but on the females in the subculture, reinforcing a loathing of themselves and the women around them.

Second, Harris determines that these quasi-pretty-not-hot female cosplayers “dont know shit about comics” assuming that women wearing the most “mainstream character” costumes are imposters who did not scout out their costumes through a personal engagement with comics themselves or comic fan culture, but rather they chose their costumes by merely executing a Google image search (Harris). Here, it is important to note that Harris constructs a closed loop for female cosplayers: they are not ‘real’ because they have chosen mainstream costumes. It is therefore common knowledge that real nerds choose more obscure, less mass-marketed characters. The problem here is that the comic and video game canon of female characters is much shallower than that of male characters. So, by having relatively fewer options than male characters (if female cosplayers choose female characters to emulate), then female cosplayers are more likely than male cosplayers to choose a mainstream costume because those are among the only choices available to female cosplayers.

## Opening the closed loop

Female geeks, in order to perform heteronormativity and not commit gender inauthenticity, must foreground their sexuality for the purpose of marking themselves as female first and geek second. Male geeks gatekeep geek culture by first assessing female geek physical attractiveness, and then testing female geek competence. However the tests are rigged because sufficiently attractive women are assumed to be sexually predatory, while unattractive women are apparently rejected wholesale as male geeks assert the privilege of hegemonic masculinity to demand females voluntarily accept their own objectification as the cost of admission. Female geeks are faced with the need to prioritize their cuteness or 'hotness' to negotiate the feminine gender norms that do not allow for social awkwardness or unattractiveness. This very sexual attractiveness that female geeks must foreground to join the geek community marks them as frauds - fake girl geeks instead of authentic girl geeks. Within this discourse there seems to be no quarter for an authentic girl geek. Males can be authentic geeks, but females never measure up.

## Chapter Five: Findings and Conclusions

### In Summary

In this project, I applied theories of discourse analysis, digital rhetorics, feminist theories, and digital literacies to gendered and marginalized online spaces to make visible and to interrogate hegemonic masculinity and normalized gender binary narratives of power and privilege that underpin the design assumptions about who makes and uses digital technologies, as well as the popular disclosure circulating around and through these digital technologies. I found evidence of many gendered and misogynistic assumptions about women, women's roles, women's interests, and women's competencies that have unfortunately been transferred from face to face interactions to digital spaces. For example, cultural assumptions about the frivolity of women's interests, endeavors, issues and labors make their way into the assumptions and discourse surrounding how and why women use the internet. The field of digital rhetorics, with its emphasis on how digital technologies are designed and used, and how those designs act rhetorically on audiences, in my cases to suggest normalized and transgressive digital interactions, are an important research lens in this project because they expose the power and privilege narratives coded into those digital artifacts. Once these ways of knowing and affirming the norm are made visible, then it becomes possible to examine the literacy practices that emerge within these systems of knowing and norming, and to explore the relationship between the digital objects and literate practices. Finally, applying discourse analysis to the circulating conversations around and through these objects and practices, it becomes possible to uncover some of the deeply gendered beliefs and assumptions that underpin the production and application of these technologies.

Used together, these lenses provide a useful set of tools for methodically resisting the mystique of technologies that are, simultaneously, represented as so

highly technical as to be opaque and mysterious, and as ubiquitous to everyday life as to be invisible to critical examination. Moving forward, I expect to continue to refine and expand these tools and apply them to a wider array of digital spaces and contexts as a kind of feminist resistance to both the unilateral adoption of highly political digital technologies and the replication of the narratives and assumptions they make commonplace.

### Findings & Contributions

In this project, I affirmed and built on prior research that there is a close and reinforcing relationship between masculine supremacy, geek culture, and technological literacies and competencies. I found that male is the default body and positionality of a maker and sophisticated user of digital technologies, and that this maleness is reinforced by discourses of policing within geek culture. Further, I found that geekiness is characterized as a narrow and consuming obsession, the kind of necessary focus and commitment assumed to be an essential trait of a maker and competent user of digital technologies. The freedom to be singularly obsessive, however, is a male cultural privilege that is largely denied to females within the hegemonic gender binary matrix that expects women to be social, to meet the needs of others, and to not be unseemly or awkward – traits identified with obsession (Romano). Therefore geekiness and digital competency are self-reinforcing structures of maleness that nullify women’s ways of knowing and eliminate women from consideration. Digital competency is then largely a closed, self-replicating loop that eliminates women by gender performativity expectations rather than by any intellectual or conditional measure.

I also found that these assumptions of maleness and male privilege extend beyond issues of who belongs to geek culture, who can be competent in performing

geek identity and geek culture, and who can capitalize on the resources of geek culture to produce and use digital technologies. Through my methods of discourse analysis, I found that because male is the default body of digital privilege, males assume the right to comment on, assess, critique, and reject largely female digital literacy communities and practices, not because males have any insider status or investment in those communities, but simply because they are male, and they inherit the privilege of assuming legitimacy and competency even in female-centric digital and social domains.

Finally, I found that these beliefs, assumptions, and structures of privilege and power are a two-fold, self-replicating process. First, these beliefs, assumptions and structures function as identity work in online spaces, with males articulating their positions of power through the deliberate marginalizing of predominantly female spaces. These demonstrations of power are used to elevate male practices and construct male spaces and contributions as the legitimate work of the internet. Second, because these technologies are largely designed by males who share these assumptions of who uses and makes digital technologies, as well as who has the power to legitimize competency, the designers of these artifacts encode their beliefs and assumptions in the software reinforcing and re-inscribing the system of masculine supremacy.

This research contributes to a long legacy of critiquing the “politics of the interface,” (Selfe and Selfe 1994) and calling attention to the marginalizing systems of power that legitimize some users and leave others behind. It also contributes to important feminist resistance research that seeks to expose these systems of power and privilege and find ways to resist them, particularly in a contemporary rhetorical context of a ‘war on women’ and a postfeminist consumer culture that drives the development and implementation of new technologies and products. This research

also calls for serious reflection and critical consideration of the adoption of classroom technologies and digital pedagogies for the students these endeavors may undermine, disempower, and marginalize. It also proposes some suggestions for resisting these injustices in the classroom and calls for further research to develop more methods of resistance.

### Limitations

Because this project is comprised of case studies, I organize this discussion of the limitations of this project by case.

#### Jezebel.com

I opened this dissertation with a description and discussion of the rape pornography spamming of the feminist media website, Jezebel.com. I chose to position this case in the introduction because I aim to bracket this dissertation project with the gender binary framework. In my Jezebel case, the female editorial and writing staff experienced this trolling as threatening, humiliating and emotionally disturbing; while male managing editors and platform technologists encountered the trolling as a mere inconvenience consistent with their response to most other routine technological bugs and limitations. I argued here that the distinct differences in experience could be attributed to the instantiated cultural gender binary. While I employed theoretical lenses against my case studies to make visible the binary assumptions and systems of power that are encoded in situated knowledges and commonplace discourses circulating within and around my cases, the Jezebel.com example by contrast invoked the gender binary to describe how male and female Jezebel.com editors and commenters experienced a specific type of harassment, the

GIFs of rape pornography, quite differently because of their relatively positionalities within that binary system.

The male editorial staff at the Gawker network were either ignorant of, oblivious to, or insensitive to the very specific gendered threat of that rape pornography. They were concerned about the annoyance of moderating spam, and they expressed some level of concern for their female colleagues related to the hassle of dealing with the avalanche of comment thread moderation labor related to that spam, but they did not encounter the GIFs themselves as harmful, threatening or hazardous. By contrast, the female editors, moderators, and commenters at Jezebel.com described the sexually violent and misogynistic character of those GIFs as a physical and mental health risk. They felt threatened and abused. They elaborated on this risk explaining that over time, the exposure to sexual violence was a source of on-going damage to their well-being. I felt this Jezebel case offered a straight-forward demonstration of how gendered experiences and masculine privilege work on the users of digital spaces in clear contrast to the assumptions that digital spaces offer neutral experiences, or the commonplace assumption that affordances of digital platforms are neutral and act on everyone in the same ways. Here, in the Jezebel.com case, it is very clear that women and men encounter and experience this particular organized spamming campaign very differently.

In privileging the narratives voices and lived experience of this case over dissertation genre expectations, I opened this dissertation with a provocation. While a conference talk, a scholarly lecture, or an “un”conference-formatted symposium are all genres that employ the device of provocation to spur discussion and audience engagement, in employing a provocation at the beginning of this dissertation, I established a tone and expectation for the project that is more emotional, informal, and sensational than is typically expected of the dissertation genre. This is a



strategic risk that I chose to take for two reasons: first, because I wanted to starkly illuminate the very real difficulties of being a visible woman online, and second, because I wanted to telegraph a feminist commitment to authentic representation of marginalized voices and lived experience. Yet, I feel that at times this provocation introduced a kind of imbalance given, at surface level at least, the less-than-serious artifacts of study: the cosplayers of fan conventions who are excluded by the Fake Geek Girl meme, and the female pinners of recipes and makeup tutorials who are disparaged as frivolous consumers by the pundits and journalists of the tech media.

Additionally, I feel that the Jezebel.com case demands further rigorous exploration and discussion that is beyond the scope of this dissertation. I feel it is ripe for an analysis of the disciplining of transgressive women with the weapons of rape culture. I feel much more scholarly investigation could be performed with the striking difference between the positionality of the two distinct groups of males from this case: the male editors of the Gawker network who could not see the rape GIFs for the gendered threat they represented, and the male members of 4CHAN who clearly understood rape GIFs to be a specifically gendered threat because they chose these specific images of virtual sexual violence to harass and intimidate the very female and openly feminist Jezebel.com community space. The duality of this ignorance and cunning, where two groups of males are concerned, is striking. How could one technologically literate group of men be unaware of the threat, while another is so aware of the threat that they employed it strategically? Although it could not be addressed here, I think this question, and this issues raised here, represent a need for further study.

Finally, I feel that there could be significantly more investigation and analysis of rape GIFs as tools of online harassment leveraged against women. For example, it seems evident that because a rape GIF is a digital artifact, if that digital artifact is

leveraged in a virtual space against virtual users, then it is a virtual rape threat. Is it a virtual rape? If so, how is this virtual rape experienced by women compared to rape in physical space? And is the insensitivity to these images expressed by some males online related to the "rape, rape, not grey rape" rhetorics of the conservative backlash against female victims of rape that circulates culturally but was brought to the forefront of public discourse in the political sphere of the 2014 midterm election cycle? The rich collection of scholarly work on digital embodiment and virtual experimentalism could be employed to further explore and explain this practice of harassing female-identifying online users and spaces with rape GIFs.

### Pinterest

In my analysis of my Pinterest case, I opened my chapter with a discussion of the popularity of Pinterest, its steep growth rate, its appeal to online retailers due to the platform's efficiency in driving Pinterest users to those retail sites, and to market researchers who use the Pinterest data to chart trends and shape advertising and product campaigns. This brief glossing serves to skim coat the inherent capitalism that underpins the Pinterest platform. It obscures that Pinterest was constructed, like nearly all online social media platforms are designed, atop a monetization model. In other words, the designers of these websites want to draw users and want users to share information about their likes and interests, because the data produced by those transactions is incredibly valuable to retailers and can be used to generate revenue for those same website designers and their investors. In the economic model of internet startups, monetization models, or how websites make money, are generally the foremost concern of internet software developers and investors. My Pinterest case largely avoided the issues that would merit a Marxist critique. And while I am focused in many ways on rehabilitating the Pinterest user community

because a masculine-oriented tech press so heavily criticizes it, Pinterest, in some ways, earns the consumeristic criticism it receives. This Marxist critique is tangential to my research interests here, but it certainly merits exploration, commentary, and critique at another time.

Pinterest's community, with their pinning and repining of products and lifestyle aspirations, replicates and circulates postfeminist rhetorics of capitalism and consumption; of self-help; of self-improvement; of makeover tropes; of the neoliberal location of inequality in personal responsibility rather than structural and institutional injustice; and of new femininities and domesticities. In chapter three, I described Pinterest as an aspirational site, and indeed women pin images of home décor ideas they would like to replicate, of makeup and hair "looks" they would like to try, and of entertaining strategies they would like to employ. I chose specifically to not engage the problematic postfeminist rhetorics of Pinterest because some of the criticism Pinterest receives in the technology press confronts these postfeminist rhetorics, while also retaining the misogynistic themes. In short, in some instances, technology journalists defended their misogynistic critiques of Pinterest by pointing to a postfeminist obsession with self-improvement and consumption, and I wanted to rupture this closed critical loop rather than potentially reinforce it.

The specter of postfeminism is particularly felt in the misogynistic discourse circulating around Pinterest that constructs women as passive consumers; obsessive consumers; purveyors of fantasy and not reality; and of over-primp-ers who are at all other times expected to be attractive and sexually available to a heteronormative masculine culture, just so long as those same male users do not, in their own online spaces, have to encounter any of the female grooming products or practices that help produce this veneer of sexual commodification. The duality of this masculine view, that women are vain and males should not have to be exposed to the products

and practices related to that female vanity in their online spaces, but that women should be sexually attractive and available at all times for male consumption, suggest that theories of performative masculinity and masculine identity work could be employed to further flesh out the interplay of power, narrative, and representation beneath the misogyny I explored in the discourse surrounding Pinterest.

#### Fake Geek Girl rants

In chapter two, I discuss theories of gender performativity and the binary notions of gender that inform ways of knowing, like public and private, professional and domestic, and making and consuming, that color interpretations of the behaviors and practices of males and females in real spaces. My work in this project assumes that these real space theories translate neatly into digital spaces. But I do not think it is entirely clear that this transfer happens so neatly. I think this area in particular is one that is under-theorized in the disciplinary discourse of digital rhetoric.

#### Community

I use “community” often to describe digital spaces because it is an easy shorthand to describe the gatherings of people who interface within the structural confines of a digital platform or social space like Pinterest or Facebook. Yet, community is also a nonspecific and general term. In his work describing passionate affinity spaces, James Paul Gee cautions that “community” should be used carefully when describing collaborative efforts in online spaces because of its lack of specificity and because of the meanings it carries with it from literacy theory. He argues that community suggests relationships and interdependencies that are perhaps not present or not fixed in all digital spaces. This is why Gee uses his term “passionate

affinity spaces” to describe digital spaces where people with otherwise no geographical or filial relationships converge to work in concert toward shared objectives. When I use “community” throughout this project, I feel I am, unfortunately, using the term in the same way that it is used in literacy theory. But because I am describing digital spaces, community might mean all the things it means in the sense of literacy theory, along with additional implications I do not flesh out. I think community has some of the same problems that gender performativity has in that it does not neatly and easily translate from real spaces to digital ones. My work here could do much more, I feel, with explaining and describing the meaning of community in this context.

#### Heteronormativity and Whiteness

All three of my cases explore gender as a heteronormative and cisgendered performance, which treats desire as a male-bodied to female-bodied configuration, and describes bodies that are biologically in alignment with gender identity. There is no discussion or analysis of LGBTQ-identifying persons’ experience in these cases or the experiences of those who might not be cisgendered-identifying. Digital scholarship has explored the wide range of non-cisgendered and non-heterosexual possibilities that are supported by online communities, like otherkin, asexuals, and pansexuals. This project largely omits the spectrum of identities beyond narrowly defined heterosexuality and cisgender that flourish online. This dissertation project also does not address issues of race and ethnicity, nor does it explore or describe instances where race and ethnicity complicate narratives of power in digital spaces. These issues all demand acknowledgment and attention in digital scholarship where, with the exception of the work of a handful of scholars, including Jessie Daniels, Jenny Korn, and Andre Brock, they are under-represented and under-theorized.

Recommendations for instructors in mediated-classrooms:

While the case studies for this project are extra-disciplinary, as a writing studies scholar engaged in important disciplinary conversations about diversity; inclusivity; programs situated within local places and contexts; monetization/data-ization student work; and student retention; I am moved to include here some recommendations and considerations for writing instructors thinking about incorporating digital pedagogies and digital technologies in their course designs. My professional background in software development has informed my research in digital pedagogies and drives me to challenge digital narratives of power in my own teaching (“design like a girl”). This project makes visible and describes narratives of power and marginalization that permeate digital technologies and digital culture. In this section, I briefly connect some of the findings from my case studies with specific curriculum and classroom management concerns. And I make a few recommendations and offer a few considerations for writing studies scholars and instructors working with digital pedagogy and digital technologies.

In my discussion of the Jezebel.com case, I offered an example of a digital artifact, the rape pornography GIF, which was encountered and experienced differently by the males and females in that case. While rape is perhaps an extreme example, it is important here to note that the use of the rape GIF as harassment is possible because patriarchal hegemony is largely the dominant discourse in digital spaces. While networked technologies offer many opportunities for counter-hegemonic resistance, those discourses are generally transgressive and marginalized (e.g., the difficulty faced by female geeks who are labeled “fake” when they attempt

to enter online fan communities). I recommend here that writing studies practitioners approach their digital curriculum designs mindful that patriarchal hegemony is interwoven throughout digital technologies and discourses and watchful for students who may be marginalized and excluded by this discourse. I recommend making this hegemony visible where possible, critically engaging students with examinations of this hegemony, and being receptive to student voices of resistance to or discomfort with digital pedagogies. It is possible that student expressions of frustration, insecurity, a lack of confidence, and or a rejection of relevance are sourced in feelings of alienation from or marginalization by the masculinist norms of digital tools and cultures.

One example of making this hegemony visible is a discussion of the use of color in digital design. In my digital course spaces and digital course document design, I employ color schemes that are either gender neutral (defined from an essentialist perspective that many of our students understand and occupy), like orange and green, or are associated with the female gender performance, like red-violet and fuchsia. Then, I assign a visual rhetorical analysis exercise of these classroom spaces and course documents, in part, so students can confront their gendered expectations in relation to digital spaces. In all cases where I have assigned this visual rhetorical analysis, students have, without provocation, commented on my use of “unprofessional” colors in what are otherwise sophisticated and highly usable designs. As part of the assignment, I critically counter the charges of “unprofessionalism,” and engage students in a discussion of the parallels between what they have experienced as “professional” design and their opinions of what constitutes features of femininity in digital design. I direct the discussion toward questions of usability and invite students to interrogate their own design assessment practices. As a result of these classroom practices and strategies, students develop

some ability to approach design critically with a stronger awareness that design is strategic and rhetorical, and that digital design shapes their assumptions and experiences while they are in digital spaces.

In my discussion of Pinterest and fake geek girl rants, I demonstrated that because male supremacy is largely the dominant discourse in digital cultures, tools, and spaces that males inherit authority and expertise from that dominance, even if they are not members of the communities or users of the tools they criticize or reject. I further demonstrated that even lower status males, and/or socially marginalized males, benefit from the system of male supremacy in these contexts. Finally, I demonstrated that the system of masculine supremacy in digital tools and contexts is heterosexual and, as a byproduct, consistently sexualizes women, thus women are often sexual commodities and consumable objects in digital contexts. I recommend in teaching and classroom management practices that practitioners remain watchful for both the obvious and subtle leveraging of this masculine privilege and entitlement. One subtle example of occasions when this entitlement might be visible is when students are given the opportunity to select their digital objects of study: they may make different choices based on gendered structural inequities.

For example, I often assign a rhetorical analysis of a website that students visit frequently or feature topics related to the students' personal interests. Male students routinely select websites that feature content of stereotypically male interests like sports, "bro" culture, and video games - interests where representations of women are often highly sexualized. Female students routinely select more gender-neutral websites, like those that feature network news or television programming -- even if the female students are passionate about



stereotypically female interests like fashion trend aggregators, cooking blogs, or beauty blogs.

When I interrogate their choices, male students typically make no comment about their choices related to their gender, while female students typically comment that their choice reflects a “serious” interest rather than a more “trivial” subject, like their interest in makeup which they fear might mark them as unintellectual. When pressed, male students do not express any discomfort with sharing their writing projects that feature highly sexualized female representations with their female peer reviewers, but female students will express concern that male peer reviewers will not give good feedback on, or even more telling of the issue of privilege, may not “want” to read papers about topics that are perceived to be exclusively of interest to females. I recommend here that students be encouraged to choose topics of interest, and that instructors when preparing the assignments prompts, lesson plans, and classroom exercises that support the assignment include examples of websites or digital contexts that feature content stereotypically associated with female gender performance and female interests in an effort to normalize these interests and work against masculine privilege. I further suggest that throughout the project, the instructor build in reflective components that consider gender, incentivize peer engagement with feminized content, and if necessary, incentivize this student engagement with classroom policy or grading.

In my discussion of Pinterest, I pointed to examples of discourse where Pinterest’s design is characterized by technology pundits and technojournalists as messy, ugly, nonstandard, frustrating, busy, and otherwise unappealing to males. I demonstrated that much of this discourse emerges from software development design practices that privilege symmetry, order, hierarchy, rigidity, and legacy elements. Further, I linked these design practices to masculine narratives of control

and discipline. These rhetorics of design and usability are also present in our technical communication textbooks and assignments. Our rhetorics of usability and usability testing are also drawn from these same design principals.

At the 2013 ASU Composition Conference, I gave a talk provocatively titled “design like a girl,” where I demonstrated the presence of these design principles in our technical communication and professional writing curriculum, as well as our multimodal design pedagogies. I argued then, as I do now, that multimodal design in particular is an expression of digital identity, and that these multimodal pedagogies can alienate identities that are excluded from heterosexual masculinity. I recommended that these hegemonies are acknowledged and critiqued where possible. I also recommended that this curriculum is taught with sensitivity to this alienation, and is overtly framed for students as a kind of code-switching where it applies to tech and business communications. I further recommended that where it applies to multimodal composition outside of the technical and business communication disciplinary discourse, that multimodal composition assignments can empower students by overtly situating the assignments as digital identity-work. When assessing these compositions, it is important to keep this identity-work in mind, as well as to consider the student’s objective when assessing design strategies and choices. For example, many gothic design elements, like elaborate fonts and deeply saturated colors, are generally considered to be poor website design because they can hamper usability. Those elaborate fonts can be difficult to read on screen, and those saturated colors can make navigation difficult. Yet, if the student’s objective was to design a website portal for a steampunk or gothic cosplay community, those gothic design choices would be appropriate for the student’s identity work and the purpose of the composition.

## Implications of Future Research

This research project proposes a set of methods and lenses that when employed together allow for close examination of the systems of power and privilege that underpin the development of digital technologies and the narratives that circulate in popular discourse about who is a legitimate user and what is a legitimate use of digital technologies. I propose to continue to develop and refine this analytical approach so that it can be deployed against more digital contexts, technologies and practices with an aim toward finding more avenues for digital feminist resistance. One productive outcome of this research would be a handbook for employing these analytical approaches in scholarly digital research, with the aim of making visible a richer and more diverse collections of voices, ideas, contexts that comprise scholarly thinking on digital spaces and boundaries.

I also see this research as informing digital and multimodal composition pedagogies, as well as technical communication and digital rhetorics pedagogies. Given that my research makes visible the gendered assumptions about “good” design, both in what that looks like and what it is used for, I contend that current pedagogical approaches instantiate and reinforce these oppressive narratives in ways that disempower and de-legitimize a number of our students, their interests, and their ways of knowing and constructing digital identities. Even if I as an instructor cannot change the media and technological industry preferences for masculinist design paradigms, I can teach students to critically and rhetorically engage those paradigms, and I can delineate teaching practices that do not label as incorrect or illegitimate ways of digital making and identity building that do not conform to these hegemonic norms (Selber). I draw parallels here to pedagogical approaches to composition that endeavor to not erase or de-legitimize artifacts of heritage language in student composition.

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