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The Good, The Geek, and the Ugly: A Critical Examination of the Portrayal of Geek Women in Popular Media

by

Alexis J. Leon

A Thesis

Presented to the Graduate and Research Committee

of Lehigh University

in Candidacy for the Degree of

Master of Arts

in

American Studies

Lehigh University

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ALEXIS J. LEON

Thesis is accepted and approved in partial fulfillment of the requirements for the Master of Arts in American Studies.

The Good, The Geek, and the Ugly: A Critical Examination of the Portrayal of ALEXIS J. LEON	f Geek Women in Popular Media
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"The geek of the Earth are a tribe and they are mighty."— Ian McDonald, *Planesrunner*

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ABSTRACT

This thesis performs a critical examination of the misrepresentation of geek women in popular media. Part one describes the evolution of the geek through television and film and discusses the continued marginalization of geek women. Part two performs a close reading of two specified episodes of *The Big Bang Theory* and examines their continuous reinforcement of negative stereotypes as pertains to geek women. Part three performs a case study of two self-identified geek women with a significant online presence. By comparing these real women to the characters seen in the show, the author elucidates the misconceptions made about geek women that are perpetuated by popular cultural icons such as *The Big Bang Theory*, and the deleterious effects this has on the geek woman's perception by herself and by others.

Geek. Nerd. Dork. Dweeb. Every one of these words conjures an image in the mind of the reader, images which are likely an amalgam of characters seen in popular television and film. It's also very likely that they employ any number of negative character traits: poor hygiene or posture, thickly-lensed glasses, pocket protectors, and some sort of technology, be it a calculator or personal computer. It's also a safe bet that the majority of these images are male. The very absence of female images from which to cull is exemplary of a negative stereotype that women geeks, nerds, et cetera, either do not exist, or exist in such a minority that they hardly merit mention. The few depictions of these women that are seen in popular culture are often merely a feminized version of their male counterpart, and still incorporate and perhaps even amplify negative stereotypes such as those mentioned above. Inaccurate portrayals for men and women not only reinforces negative stereotypes for geeks, but also reinforces negative stereotypes about gender, to the point where sexism may be considered "normal" within the context of the geek community. And to a point it is normalized: despite their becoming more mainstream and more visible in popular culture, geeks do continue to marginalize women within their own community.

This marginalization of geek women is a direct result of the perpetuation of key gender stereotypes both within the community and at large. These stereotypes have arisen alongside the unusual evolution of the geek, an evolution which has always relied on depictions in films and television but which is fostered in the collective and popular culture. The first part of this paper performs an exploration of both the word "geek" and the idea of the geek, from its rather sensational beginnings as a carnival freak show entertainer, to the modern-day detectives and scientists seen more and more frequently in prime-time television. Initially, geek men and women both were perceived to be obsessive about mostly obscure interests, to be socially inept but technologically astute, and to be both sexually undesirable and inexperienced as a result thereof. But as technology rose in prevalence and importance, the geek began to experience a similar rise in popularity. This was reflected in the characters seen after the tech boom of the 1990's: Chuck

Bartowski from 2004's "Chuck," with his kung-fu skills and computer-like brain, is a far cry from pocket-protector wearing Eugene in 1984's "Revenge of the Nerds." Geek women, however, did not enjoy a similar evolution, and many of them are still seen as glasses-wearing, almost incidental side-kicks: characters like Laney Boggs from 1999's "She's All That" still bear a striking resemblance to Velma of 1969's "Scooby-Doo." Even within a single show like "Criminal Minds," there is a marked difference between sexy-smart field agent Dr. Spencer Reid and Special Agent Penelope Garcia, the quirky and bespectacled blond always seen at her computer bay. As will be expounded later in that section, the modern-day geek man is celebrated for his intelligence, and is allowed to be obsessive about a specialized field or obscure interests. Meanwhile, the geek woman labors under a prevalent suspicion of her intelligence, and is challenged when she expresses interest or shows an aptitude in a presumably male field such as science or technology. And where heterosexual geek men may complain about the lack of women who share their interests, they also still operate under the presumption that geek women are physically unattractive and thus sexually undesirable, continuing to perpetuate that particular stereotype.

These gender stereotypes are not limited to within the community, but are reinforced by popular, mainstream shows such as *The Big Bang Theory*. Part two performs a close, critical reading of two episodes chosen from two separate seasons. Both these episodes include storylines which feature the two women scientist characters, Amy and Bernadette, who have been regular fixtures since season four of the now-seventh-season television serial. While the show, and other serial sitcoms like it, cannot pretend to have an entirely honest portrayal of geeks, they do play a part in expanding the definition of "geek," specifically geek masculinity. But their portrayal of women scientists within the show do a disservice to geek women with their inability to be equally expansive as pertains to geek femininity. Regardless of storyline, the four, main, male characters are often seen in their offices, presenting on academic panels, or performing experiments to prove

theory; the women scientists are more often relegated to serving the storylines of their male counterparts or that of the original female character Penny. They are rarely if ever seen performing science, and when they do it is in service of a joke, usually one that undermines the seriousness of their profession. Storylines such as Amy working on a tobacco study are prolonged simply for the running gag of seeing a monkey smoking a cigarette, and not because she has made a breakthrough discovery which warrants her continued research. The women are continually undermined as scientists in favor of adhering to rote women's sitcom characters, and as such do nothing to advance the perception of geek women.

The inaccurate and unrealistic portrayal of geeks, particularly women, is best seen when contrasted against actual, self-identified geek women. The third part of this paper performs a case study of songs written by a popular online geek folk duo, providing artifacts both written and performed by geek women, and draws comparisons between these real-life geeks and their fictionalized sisters. This paper serves to deconstruct what the geek girl has become in popular culture, looking at the most recent and most visible examples as seen in *The Big Bang Theory*, and comparing them to actual geek women with a substantial online, public presence. But to better understand where these stereotypes may have originated, it is crucial to examine the geek's humble beginnings and rise to a tenuous popularity.

EVOLUTION OF THE GEEK: FROM ALIEN TO AWESOME

The word "geek" has evolved significantly from its purported origins, even more so in just the past two decades. It is described as a variant of the Low German word "geck," which translates roughly as a fool or simpleton. This may seem at odds with the modern parlance describing someone who is more intelligent than average, but "geek" was originally used in the early 1900s to describe any performers traveling with the side- show of a circus. William Lindsay Gresham's 1946 novel "Nightmare Alley" specified the geek as the person who portrayed the

"wild man" character. The book was made into a film in 1947 starring Tyrone Power, further popularizing that definition.² In 1970, Arthur Lewis' book "Carnival" introduced the idea that the geek was specifically the person who mutilated animals for money, biting the heads off chickens and tearing snakes and rats apart with their mouths. Thus in the 70's "geek" became a descriptor for anyone who worked outside the mainstream or behaved in a non-normative manner.³ It became synonymous with "nerd," another term for the awkward outsider, and was used liberally and alternately for individuals who were seen as weird, socially awkward, intelligent, technologically astute, or some combination of these traits. Whatever the use, it was intended to have a negative connotation and spoke to the "otherness" of the subject in question.

Somewhere in the 1990's, alongside the growing popularity and necessity of personal computers, geeks began to rise in both visibility and perceived social status. The growth in technology's popular usage meant greater demand for those with technical prowess. The idea of the geek became complimentary as their technical skills became an asset to corporate functioning, and geeks became more visible as their interests became more and more a part of the popular culture. Acceptability meant the number of actual identified geeks became greater (or perhaps simply more evident), and a rise in social status meant those newly discovered numbers could begin to think of themselves as more than mere cult or abnormality. "Geek" began to describe people who had a passion for a particular topic, and invested energy into knowing that topic. These interests were not necessarily abnormal or esoteric: one could just as easily be described as a "history buff" or "foodie" as a "numbers geek." All of this has paved the way for the geek's rise to chic, an evolution that is reflected in the change in popular depictions of nerds and geeks over time.

The improved image of the geek can also be seen in the proliferation and variety of definitions for "geek" available on popular websites. Urban Dictionary is one, and functions as a wiki which relies on visitor-generated and moderated content. It contains definitions written by

individual users which are then voted up or down, and their placement on the website is dependent on their number of thumbs-up and thumbs-down. This is note-worthy when looking at the first four definitions, whose descriptions range from "The people you pick on in high school and wind up working for as an adult" to "An outwardly normal person who has taken the time to learn technical skills." But all of the definitions are overwhelmingly positive; or at least, they speak to positive traits, such as a technical expertise and the economic security which can follow from having such expertise. Perhaps the best example is the fourth definition on this site, which breaks down the word geek comparatively along the lines of social and technical skills:

	Technical Skills	Social Skills
Normie	No	Yes
Geek	Yes	Yes
Nerd	Yes	No
Dork	No	No

Figure 1

Even before reading the definitions which follow, the table is telling in two important ways. The first is the use of the word "normie," which describes an individual who has no technical skills but possesses the social skills that allow them to operate inside mainstream culture. But the word seems pejorative and delineates the "normie" as being unexceptional (it is an exclusionary term specific to the community and used internally, in perhaps the same way that someone who identifies as homosexual may use the word "breeder" to refer to a heterosexual person). The reader may suspect from this exclusionary behavior that this table has been developed by a self-identified geek, particularly when we note that in this table the geek has no lack. Meaning that in the table above, the geek is affirmative for both technical and social skills, whereas the other three all are lacking in at least one of those fields. This implies a wholeness and well-roundedness

embodied only by the geek. Though this table has likely been created by a self-identified geek, that it has been "up-voted" to fourth place (with 2,883 thumbs up versus 1,315 thumbs down, as of February 2014) belies an agreement on the part of the Urban Dictionary community. Elsewhere online, Merriam-Webster uses a two-prong definition that moves between negative and positive ideas, defining geeks alternately as "a person who is socially awkward and unpopular: a usually intelligent person who does not fit in with other people" and "a person who is very interested in and knows a lot about a particular field or activity." The latter definition was referred to above, and the wording speaks more to passion than to an unhealthy obsession. Wikipedia, another user-moderated site, follows a similar path by citing the word's "different connotations ranging from 'an expert or enthusiast' to 'a person heavily interested in a hobby." But the site alludes to both the self-awareness and exclusionary tendency of the geek community by specifying that "the term is also used self-referentially without malice or as a source of pride. Its meaning has evolved to connote 'someone who is interested in a subject (usually intellectual or complex) for its own sake." Popular belief seems to distinguish geeks from nerds by arguing that nerds excel in school, whereas geeks are extremely knowledgeable in an area of their choosing, but not necessarily academic in nature. All this points to the glorification and ownership of an individual's geek-hood, and may be viewed as an indirect result of a wider acceptance of geekdom in mainstream and popular culture.

In addition to their general visibility, the male geek has seen a rise in allure. Though not interchangeable, the geek and nerd characters are somewhat indistinguishable from one another when it comes to their depiction in popular culture; for the purpose of this evolutionary journey, the author may use the terms synonymously. Movies like "Revenge of the Nerds" (1984) had characters who displayed every visible signal that they were outsiders, from their high-waisted pants, thick-rimmed glasses, pocket protectors, and unusual hair. Despite the movie's promotional poster (where the two leads are draped in cheerleaders) they were depicted as being

sexually inexperienced and socially inept. They were also exceptionally intelligent, notably more so than their peers, and had to use that superior intelligence against the brawn of their aggressors.

The modern geek man has evolved into someone with significantly more cultural cache. Still super smart, his intelligence is an asset and, in many cases, his means for earning a living. More at ease socially, he occasionally works with and is even friends with women. When there is no romantic partner in the picture, there is also no implication of sexual unavailability, which allows an audience to assume the inverse can be true. And even when seen to be physically slight, he can carry a weapon, reason with his enemy or, thanks to modern technology, wield the power of his mind against a potential threat. Typically, though, his intellect is held in high regard and his threats are minimal as a result. These traits all became manifest in a geek's "show about nothing" when in 2007, *The Big Bang Theory* gave us a sitcom which centered around the daily lives of four adult, professional academic men. All four work at the same research university and are friends outside of the office, sharing interests in comics, gaming, fantasy and science fiction franchises, and a host of other "geeky" pastimes. Two of the four men have girlfriends and a third is even married. These geeks have a close social circle, lucrative professional positions, and romantic partners, all while firmly maintaining their geekdom.

While the geek man may have risen in status, the geek woman has not evolved to nearly the same degree and has somewhat stagnated. This could be due in part to a presumption of the gender of the word itself; it is even part of the reason the author feels the need to specify between the geek and geek woman. As stated above, geeks began to be more visible when technology became integral to corporate and now daily life. Tech, however, was largely presumed to be a man's game, both then and now, despite women's representing nearly 40 percent of those professionals working in information technology in the late 1980's. This meant that despite the rise in overall cache, "geek' occupied a decidedly masculine territory of American culture, and neither girls nor women felt welcome." If we subscribe to the belief that geeks are intelligent

(though not as exceptional as nerds) it edifies the presumption of the geek as male since "brilliance has traditionally been, with few exceptions, associated with masculinity." Because of this, intelligent women could be seen as unnatural, and as such their depictions veered towards the freak show origins of "geek" more than anything else. They tend to be presented as hyperfeminine to disassociate from their masculine intellect, and as a result tend also to be sexually objectified, again, perhaps as a means to "overcome" the unnaturalness of their intelligence. ¹³

One of the first geek women, Velma from the 1969 animated children's show "Scooby-Doo Where Are You?" was portrayed as being pasty, freckled, short, and a mousy brunette, all of which was amplified when juxtaposed against the leggy redhead Daphne. Despite arguably being the brains of the group, Velma was constantly being jostled and losing her glasses, which meant she spent valuable time on her hands and knees looking for them when she could have easily solved whatever mystery had been put before the gang. ¹⁴ Geek women were intelligent, but never so smart that they might risk overshadowing their peers with their "monstrous" intelligence. They were deferential to both men and women, being established as intellectually inferior to the former and aesthetically lacking when compared to the latter. ¹⁵ As such they were undesirable and sexually unavailable, traits which were attributed to and then carried over from their geek, male counterparts. Strangely, today Velma is often celebrated as the originator of geek chic, and a fair number of geek girls "cosplay" ¹⁶ as the supersleuth. ¹⁷

Despite remaining largely the same, the geek woman has undergone a strange journey that saw her beginnings in her younger self: the geek girl. High schools on the small screen saw a sudden crop of smart girls who were either shy and timid¹⁸ or sarcastic and knowing,¹⁹ but all of whom seemed to be just one makeover shy of a high school takeover. This translated into a glut of feature films which all had a geek girl on their roster.²⁰ She became so prevalent, in fact, that when the 2001 parody "Not Another Teen Movie" hit there was a character named Janey Briggs²¹ who was both a composition and caricature of the now iconic geek girl: super smart, largely

awkward, sexually inexperienced, and in need of that one extreme makeover which would allow her to recognize her potential to be, well, an attractive and acceptable "normie," and a geek no more. What set these characters apart as geeks were their combination of intelligence and indepth knowledge of any of a number of topics which were typically integral to either their character's interaction or a larger story overall. What each of these characters held in common was something paramount to any high schooler: they become fixated on pursuit of a romantic partner, and their geek status was either a hindrance to be suppressed or a charming character trait to be exploited in that pursuit. It is the rare fictional, characterized geek that can revel in her intelligence and passion for her own sake.

Eventually the geek girl was forced to graduate and grow up, and the early 2000's gave way to the newly updated, adult geek woman. Like the geek man, she is a practicing professional whose job relies on her using her intelligence, whether combined with technology or the power of the pen and her words. Although her specialization may involve solo work in a lab or a bay of computers, she works well with others and may be considered a social creature. She works especially well with men, which is important because typically her team leader or boss is a man to whom she must defer. She is aesthetic enough to be considered a viable sexual partner, but not so pretty that she might distract from the matter at hand.²² She is knowledgeable, passionate, loyal, and smart, and with all that going for her one would suspect her to have gotten at least as far as her male geek counterpart. On The Big Bang Theory, professional scientists Dr. Amy Farah Fowler and Dr. Bernadette Rostonkowski-Wolowitz manage to embody all of these traits but also face a unique challenge: they live in a show that also has geek men characters, ones which were established well before the appearance of either woman, and whose relationships with these women are the reason their characters were even introduced. As a result, their characters are consistently undermined in service of those four male geeks, as will be explored more fully below.

Given their numerous depictions on television and in film, the idea of the geek has clearly managed to penetrate the popular culture. Yet despite becoming more and more mainstream, identifying as a geek still constitutes being part of a subculture, one which is still somewhat insular and prone to being exclusionary; internal language like "normie" and separatist attitude as pertains to "dorks" and "nerds" would support this. This exclusivist attitude extends to sex and gender, and given the prevailing presumption of the geek as male, it serves to further isolate and denaturalize the geek woman. The presumed female minority has given rise to themes like the "Idiot Nerd Girl" and "Fake Geek Girl," popular memes based on recurring ideas perpetuated on both sides of the argument: men who decry women whom they assume identify as geeks only because it is popular, and by extension wish to garner male geek attention but don't know their source material; and women who may actually know the material better than their male peers but are subjected to constant scrutiny and demands that they establish their geek credibility. The implication is that with the rise in popularity of geek culture, these men who identify as geeks have become so desirable that women will pretend to be part of that same subculture in order to open up their dating pool. It is especially interesting that these women's credentials are typically only called into question when they refuse to be sexually available to those same geek men who thought they were the entire reason for the "geek girl" having identified as such. There seems to be some correlation between a woman's geek credibility, or her investment in the subculture, and her being sexually available to another member who is equally invested in that subculture. What doesn't seem to be a factor is whether, by removing the identifiers of the subculture, the woman would be sexually available to that same individual in a different situation. In other words, it never occurs to these male, geek police that the woman is simply not interested in them as a person. They assume that it is a failing on the part of the woman and that she cannot be a geek such as their self because, as mentioned above, the geek never lacks.

Given what we have seen in the "evolution" of the popular representation of the geek girl, it is no wonder geek men would presume that any woman presenting herself as a geek is either to be sexually objectified and readied for an awakening, or taken under the wing of a male geek mentor. However, the serial and fictionalized world of entertainment condones only a narrow view which trades in stereotypes, and may be reflective of the popular vision though not necessarily the reality. This inaccurate and somewhat antiquated representation would seem to support the notion that "(c)hange in cultural perception lags behind change in behavior," as authentic geek women have progressed well beyond their two-dimensional, "celluloid" counterparts. In the next section we will take a closer look at examples of these fictional geek women characters which, despite being portrayed by live actors, in many ways remain two-dimensional.

THE CINDERELLA SCIENTIST

There is perhaps no greater argument for the mainstreaming of geeks than the appearance of a popular television show which centers around four geek men and their everyday lives. ²⁵ CBS's *The Big Bang Theory* is arguably a popular television sitcom: now in its seventh season, and having been renewed for an historic three coming seasons, the show regularly attracts more than seventeen million viewers in the adult demographic for each new episode. ²⁶ Debuting in 2007, the sitcom relies on two related premises: one, that pretty women are neither smart nor appreciate smarts in their men. And two, that smart men could not possibly appeal to pretty women, at least not enough for there to be dating (or perhaps more importantly, consensual sex). Season one's introduction of a pretty woman living across the hall from two smart men sets up these premises, and continues to lean on them six seasons later. Even the show's title, with its simultaneous reference to a known creation theory and the slang for intercourse, relies on the presumably humorous incongruity of science and sex. When the audience is not laughing at

juxtaposition of these two unlikely "species," they can certainly laugh at the broad stereotypes of geeks and nerds that the show perpetuates.

Perhaps the most accurate trait of the geek community as shown in the series is that despite the introduction of two more regular women cast members, the show continues to be sexist in its overall portrayal of women. The newly evolved "sexy geek" men characters marginalize both the women who are directly involved in their lives as romantic partners, and those general women on the peripheral of their social circle. This is especially detrimental because, despite being recognizable stereotypes, an audience which believes the characters to be accurate portrayals of geek men may extrapolate that these are accurate portrayals of geek women, especially the women scientist characters. Inaccurate portrayals of both the men and women serve to reinforce negative stereotypes for both; for the show's larger audience it reinforces the notion that such marginalization is normal and permissive behavior for members of this community. This section provides a close critical reading of two episodes of the show in order to examine the ways in which *The Big Bang Theory* perpetuates harmful stereotypes which serve to further marginalize geek women, whether through sexual objectification, professional dismissal, or any variety of behavior which is part and parcel of the broad stereotyping that is the show's calling card. It is a rampant sexism cleverly couched in the guise of a joke, a sort of humorous white-washing which relies on a (sad) clown's white grease paint.

In season six's "The Contractual Obligation Implementation" Leonard has joined a committee whose goal is to encourage women to pursue jobs in the sciences. Admirable, one might think, until we realize that he is trying to elicit advice from his two male friends, and that his volunteering is not entirely altruistic. Serving on different committees is a mandatory part of their university positions, as he reminds Sheldon and Howard and effectively explains the episode's title for the audience. In spite of the obligatory nature of serving, Leonard maintains that this is a cause he is in favor of: "Yeah, well, it's in our contract to serve on a university

committee and frankly, this is one I believe in. OK, here we go: encouraging more women to pursue a career in the sciences."

When he attempts to enlist his colleague's assistance, Howard can't seem to take the offer seriously and cites his inability to connect with the opposite sex as reason enough to not contribute: "Come on, if I was any good at convincing women to do stuff I wouldn't have spent so much of my twenties in the shower (laughs)." Howard cannot miss an opportunity to sexualize women, no matter the context nor the conversation. Their word choice is also telling. Leonard wants to "encourage" women to pursue STEM careers, that is, he would seek to engage women to participate in these fields, and especially to foster those who have already shown an interest in these fields. Howard understands the objective to "convince" women to participate, and believes the goal to be manipulating them into acquiescence. His thinking relies on coercing agreement with his viewpoint, that is, to force a woman to accept his idea of women in science rather than understand and encourage a woman's own idea of their role in the sciences. His self-deprecating comment reinforces the stereotype that portrays geeks and nerds as being sexually inexperienced or unavailable, as well as their being socially inept enough to reveal such personal details, even with friends. It is also indicative of the sexism which pervades this scene but is vocalized by the most obviously sexist character, and will become progressively more obvious as the episode continues.

Is it noteworthy that in an episode whose description states that "women in science" are the topic, the opening scene focuses on three men but shows neither of the two women in science who are featured as part of that show's regular cast. Bernadette and Amy are not even mentioned as the conversation continues, even though Howard and Sheldon, their respective partners, are directly involved in this conversation. Sheldon instead maintains that the discussion as a whole is a "waste of our time," which elicits disgust from Leonard. Sheldon's attempt to clarify only makes it worse:

SHELDON: "If you ask me this whole thing is a waste of our time."

LEONARD: "Helping women?"

SHELDON: "Helping *anyone*. People should take care of themselves."

LEONARD: "Oh, like yesterday, when you made me drive you to the dry cleaners, the pharmacy, and the post office?"

SHELDON:" I'm not saying people can't use tools. Even an otter picks up a rock when he wants a clam."

Sheldon resents being forced into such things and will later in this scene state that he is too smart for "banal committee work" especially. On the surface he may come off as egalitarian, since he maintains that helping anyone is a waste of time. However, this is also indicative of narcissism that only an educated, white man could employ in this situation. Sheldon's attitude may be equally dismissive of both sexes and thus equally offensive. However, his failure to recognize his own privilege means that he also fails to recognize why someone might need assistance of any sort to attain similar status. He ought logically to have recognized the necessity of the inclusion of women, but with narcissism goading his primary objective he, too, forgets what and who the conversation is actually about. Leonard tries to press the point of Sheldon's alleged egalitarianism and the conversation becomes even more sexist:

LEONARD: "You don't think it's worthwhile to try to get more women working in science?"

SHELDON: "I think that's incredibly sexist of you. I believe in a gender blind society like in Star Trek, where women and men of all races and creeds worked side by side as equals."

LEONARD: "You mean where they were advanced enough to invent an interstellar warp drive, but a black lady still answered the space phone?"

HOWARD: "Ah, I did spend a lot of my shower time with Lieutenant Uhura."

Once again, Howard is unable to let pass any opportunity to be a misogynist, and he will continue to undermine his colleagues' attempts to make any serious progress or ask other serious questions within this scene. As Leonard points out that Star Trek may have been gender neutral but was still racist, Howard's idea of diffusing the topic is to sexually objectify Lieutenant Uhura. When Sheldon later agrees with Leonard's suggestion of the blind peer-review process to combat sexism, Howard counters with a sexist remark about a "Van Nuys pole dancer" whose stage name is ostensibly gender neutral, though a name like "D. D. Melons" is unlikely to apply to a male

dancer. The writers identify both sexism and racism in this single scene, but immediately undermine what had the potential to be an intelligent and relevant discussion; by dismissing these points as unimportant, they're effectively dismissing the conversation as a whole, despite their posing the original questions. Howard even attempts to close the subject by deciding they have "really helped women today," and suggesting they play video games with the time they now have free. Leonard's final plea to his friends is met by a personal attack:

LEONARD: "Guys, *please* don't make this the school project where I'm the smart kid doing all the work while the slackers sit back and watch."

SHELDON: "Oh we're not. This time, you're the smart kid doing all the work while the even smarter kids sit back and watch."

HOWARD: "So you think I'm one of the smarter kids?"

SHELDON: "No, you're a tool I was using to make my point."

At this point the theme song and introductory credits roll. In the span of the conversation, the men have reinforced the notion that male elites may decide what is best for women. Their casual exclusion of the women scientists in their lives indicates for the audience that they are not even worth mentioning. Sheldon's final observance that Leonard is the smart kid is doing the work identifies that the "even smarter kids" feel their time is better spent playing video games. The writers have effectively prioritized this question they've posed as being less important than beating a next level.

Even post-credits, the very next scene of the episode returns to these three men, two of them now playing video games, and does not introduce the women scientists. In fact, in this scene the only mention of women begins with Leonard complaining about the sexist nature of the video game that Sheldon and Howard are playing, namely, that the avatars in play are both animated, buxom women with scant armor. Both men reply that in fact their women warriors are incredibly strong and capable, and therefore are not sexist because they "wield an axe" as well as any male character in the game. Howard, however, adds that they can wield those weapons while having breasts that could "nurse a family of forty and... still have enough left over to open a Baskin

Robbins." Once again, Howard undermines the argument in order to sexualize women, no matter the context of the discussion. Sheldon, rather than chastise Howard for his comments, takes up his thread and adds: "Mother, warrior princess, franchise owner, I hear glass ceilings shattering all over town." It is unclear, given the character's delivery and his admitted penchant for misreading social cues, whether he is being intentionally sarcastic or unintentionally ironic. What is clear is that for the two on the couch, playing the video game takes precedence over assisting Leonard with the "question" of women in science; this plays to the stereotype of the geek gamer, and also establishes these characters' priorities as skewed towards personal entertainment more than social justice. As with the overall storyline, the writers briefly allude to a more serious issue, namely the sexual objectification of women in video games. The seriousness is swept aside with a few quick, witty remarks, which dismiss the original issue by justifying their actions and without ever directly addressing it. When Leonard's appeals for help go unanswered he goads Sheldon into helping by sarcastically remarking on using his (Sheldon's) superior intellect. Here Sheldon pauses his game just long enough to make an immediate and apt contribution: he suggests that to encourage women in sciences they must engage girls in middle school rather than in college, so there is still time for them to decide to specialize in those fields at a university level. From this the men extrapolate that they should visit a local middle school, specifically Howard's, to use as a testing ground to implement Sheldon's idea (likewise effectively completing the reason behind the episode's title).

While the three men come up with a possible solution and way to test their idea, aforementioned scientists Bernadette and Amy are enjoying a "Girls' Night" with Penny and Raj. It is the third tableau of the show overall and long after the first commercial break when the audience first and finally sees the women scientists. Raj is also seeking assistance and solicits the girls' collective wisdom: he needs an idea for a "killer first date" with his new friend Lucy. Ignoring their professional expertise, Raj is appealing to their gender or, more precisely, to the

stereotype wherein women are expert in matters of romance and relationships. This is in direct contrast with the rather academic argument the three men are having in the previous scene about a social and professional issue, and contrasts the women's conversation about the personal matter of the man in their midst as being in no way related to the sciences, nor to their respective fields. It also illustrates that in a conversation about women in science, not only have the women not been invited to take part in the discussion, but they are shown to be engaging in a conversation that has nothing to do with science. Their professional expertise is undermined for the audience by the explicit appeal to their femininity rather than to their intelligence, and the audience can essentially forget that they should have been included in Leonard's sub-committee.

The idea that dating and romance are specializations of the female gender is a key stereotype which the writers assume the audience will both recognize and accept without question. Raj believes that a successful and appropriate date is exclusively in the power of these three women to design for him. If any of the three girls were friends with Lucy, this might make sense and could be a matter of pooling their collective knowledge. But none of them has ever even met Lucy; if they had, they would know about the character's crippling social anxiety and would not make suggestions ranging from "a wine-tasting in Skid Row" to Disneyland. Raj presumes that because of their gender they will automatically know his friend better than he does, despite his being the only person in the room to have ever interacted with her. Their ignorance of Lucy is perhaps what makes it easier to stray off-topic when the mention of Disneyland encourages each to remark on their experiences of the theme park (and to ultimately decide to skip work and spend the day there together). But Raj is quick to bring them back in line when he complains: "Excuse me, I thought we were trying to solve my problem... I'm a man who can't talk to women trying to figure out how to go on a date with a girl who suffers from such crippling social anxiety she can't stand to be around other people." This remark serves as a stark reminder for the audience that the entire reason these three women are gathered in this room is not to talk

about their professions, nor to talk to or about each other, but to talk about the problem they have been brought by this fourth, male character. The decision Raj ultimately makes, to picnic in a library and for he and Lucy to text on their phones rather than speaking to one another, is never suggested by any of the girls: in the end, Raj alone comes up with this idea that suits he and Lucy's needs and follows their distinctive character traits, and is perfect for the pair. The audience could thus read the women as being ineffective, as well as being selfish, since Raj was "forced" to think for himself when they became too involved with their Disney planning.

In addition to playing to gender stereotypes, this scene does nothing to individually characterize or distinguish any of the three women, but instead paints them with a broad brush into their respective character types. It ought to have provided an opportunity for any one of these women to talk about what interests them individually, what perhaps has been effective in romancing them, and to cite specific examples of memorable dates each has had. Instead, the dialogue serves to solidify their character types, specifically with Amy as the Brain and Penny as the Slut.²⁸ It is Amy who makes the comment about Skid Row, explaining that statistically women find shows of bravery attractive and therefore Raj should put himself and Lucy in a dangerous situation. Bernadette uses this as a jumping off point and recommends Disneyland, specifically Space Mountain, saying that Lucy will be clinging to Raj in her fear. Penny's contribution to this is to remind them that there is a camera at the end so you have to "make sure all your clothes are back on" before that point of the ride. This is the third pointed reference within this single scene that has been made to her history of promiscuity, as Bernadette notes when she ties up the gag by asking Penny, using Penny's own words, "Another joke (based on past experience), huh?" This comment is in line with Bernadette's own character typing as the Bitch; the rest of the episode sees her vacillating between female camaraderie and insistent bullying, with a sharp tongue to reinforce the latter. The outcome of this discussion is not what Raj should do for his date, but the decision that the three women should play hooky from their

jobs and go to Disneyland together. This means that the two women in science will be spending the episode decidedly not performing in their respective fields.²⁹ Raj will spend the rest of the episode courting Lucy, and we need no longer follow his particular storyline for the purposes of this paper. The sexism his character embodies, wrapped up in a creepy/shy "nice guy" routine, will be discussed further in the second episode's review.³⁰

The next scene manages to cram several negative stereotypes into a mere minute of screen-time with a scene that crystallizes what is problematic for so many geek fans: is the audience laughing with these characters or at them? When we next see the three men they have arrived at the middle school and are casually walking the almost-empty hallways. Leonard remarks that the only thing which has really changed since Howard attended as a student is that now "he's an astronaut," in addition to being as short and as nerdy as he was then. When Howard reaches his old locker, he pauses to reflect on his time at school, and when he begins with "I have a Masters in Engineering..." the audience might think he is about to cite an influential teacher who set him on the path to his eventual profession. Instead, he wonders aloud at how a school bully was able to fit both him and his briefcase in the locker he now stands in front of. The scene ends when Howard bumps into a student, one noticeably taller than he and dressed in camouflage print, and who gruffly dismisses Howard's protestations. The dialogue has established the physical inferiority of Howard both then and now, and in alluding to his briefcase the writers may as well have said he wore a pocket protector, as they set him up with a penchant for dressing and acting outside of his peer group. What could have been a triumphant return to his alma mater serves instead to reinforce his position as an outsider, perhaps now more so than ever.

The next scene opens in a car with the three women en route to the theme park. Rather than discuss the shared experience ahead of them, the conversation serves to highlight their differences and to drive them more towards stereotypic characters and further from an actual representation of authentic women. Because they are "playing hooky," the first question

Bernadette asks is what they told their respective bosses. Amy (a first time truant) gleefully relates the detailed story she made up for her boss about having food poisoning, becoming more excited and caught up with each successive step in her farce. When Bernadette asks Penny how she got out of work, Penny deadpans, "I work at the Cheesecake Factory, I said 'bye'!" The audience is reminded that Penny's character works in the service industry, and that her training and pay grade are well below that of the other two women. This is an unnecessary denigration of her position, since she has on other occasions extolled the flexibility of her job (a necessity for a struggling actress who must take time to go on auditions). Additionally, Bernadette herself has worked at the restaurant in the past; it was how she and Penny first met, and what prompted Penny to introduce her to Howard (whom Bernadette married in the conclusion of season 5). But Bernadette does not defend Penny's job, nor does she answer her own question; as the conversation turns to their plan for the day, she states that her first stop will be "that place where they make you over into a princess," elaborating that they do hair, makeup, outfit, "the works." Penny is incredulous at first, having assumed the women would "get drunk and go on rides" during their stay in the park. But as Bernadette describes the process, she says it might be fun to become Cinderella, with Amy agreeing heartily. At this, Bernadette becomes stone-faced and intones "We can't all be Cinderella." Amy, recognizing a potential conflict, asks how they will decide. To which Bernadette replies: "It's simple. It was my idea, I'm driving, I'm Cinderella. You bitches got a problem with that, we can stop the car right now." With that ultimatum, the scene ends. Amy the Brain has put an inordinate amount of thought and details into her truancy, whereas Bernadette the Bitch is pleasant until the other women threaten her established plans, at which point she ironically refers to *them* as the bitches in her thinly veiled threat.

This is the culmination of a power play among the three women which has been set up from the moment the camera brings the scene into focus, and which provide subtle details to further establish their stereotyped roles. Amy is seated in the back seat of the car but in the center

so that she can speak to both Bernadette, who is driving, and Penny, lounging in the front passenger seat. Amy was the last to join the group of friends, and her relationship with the two other women usually includes her fighting to feel included. This often results in her being deferential to one or the other, and explains her being relegated to the backseat. Bernadette's driving is likely the result of both Penny's having an old, unreliable vehicle, as well as serving Bernadette's need to control most any situation she finds herself in. Penny's character would gladly be a passenger over the driver, and would much rather offer gas money than blow the mileage on her own ancient car. Rather than focusing on professional traits, the discussion highlights the differences in their jobs only to point out the economic disparity among the three of them. This is an especially curious point to make given that they are going to Disneyland, a theme park where the entrance fee for a single adult ticket is \$99.00.³¹ Even more interesting is the discussion about the makeovers. One wonders whether Penny would be as excited or so quick to agree if she knew that the makeovers run almost \$200.³² Despite not driving, the trip will definitely be most costly for Penny, yet she seems unconcerned about anything more than whether or not the three of them will be drinking at the park in addition to going on rides. Bernadette is determined to live a fantasy as a princess, regardless of what her friends plan to do. Both these agendas underline that the women are pursuing somewhat hedonistic pleasures instead of working in their respective professions. The characters that were first portrayed as selfish, ineffective romantic advisors are now being depicted as pleasure-seekers rather than professionals, as the two women scientists are no closer to doing anything scientific in the episode. They are also unrealistic in that it is unlikely a waitress would spontaneously decide on such an expensive day-trip that would also cost her lost hours, whereas the other two have fulltime jobs that presumably afford them vacation and sick leave. This scene hinges on each character having money that a job would afford them without ever showing them working that job. It supports a fantasy ideal wherein women have expendable income but never have to get their hands dirty earning it.

When we return to the middle-school in the next scene, we find the three men speaking to a group of teenage girls. This is the "test run" Leonard suggested in the second scene, and events will unfold so as to support the idea that these men suffer from social inadequacy and are hardpressed to connect with women, even young ones. Two noticeable pieces of classroom décor let the audience understand that they are in a science classroom. It is not made clear how or why the group of approximately two dozen girls were selected for this particular presentation. Did the students elect to hear them, or test well in standardized science tests, or are they perhaps in an advanced placement STEM class at the school? If they were selected by a teacher, that teacher is conspicuously absent, which is also unusual for a presentation in a public school made by three adult, male, outside persons (even if one of them is an alumnus). Leonard is the first to speak directly to the group, and his attempts to connect directly with the girls involve awkward language and a chipper tone of voice that sounds like forced authenticity (as opposed to the chipper tone that often tries to mask discomfort with public speaking). He introduces Sheldon as the first speaker with Bob Barker-levels of enthusiasm and added jazz hands for effect, which make Sheldon's monotone opening line of "Hello, female children" all the more ridiculous by their opposition. The only thing less enthusiastic than Sheldon's introductory sentence is the response from the students: a slow and scattered clapping, despite Leonard and Howard's own manic applause to lead them off.

Sheldon's earlier assertions as to his not being sexist, coupled with his logical approach to life, might give the audience hope for a pointed and encouraging story of women in science. He starts strong, talking about Marie Curie and her work with radioactive isotopes; while he speaks the camera focuses on a girl in the front row checking her nail polish and another browsing her smart phone, clearly disinterested in the presentation, but faithfully representing the stereotypic Millenial who is interested largely in themselves and their media. The camera returns to Sheldon as he describes the effects of Madame Curie's research on her person, that her "vomit

and stool became filled with blood." At this detail, the camera cuts to Leonard and Howard looking horrified, and when Sheldon states that Curie was "poisoned to death by her own discovery" the camera returns to the horror of his male colleagues rather than the students who are supposedly his audience. Sheldon concludes by assuring the girls that "(w)ith a little hard work, I see no reason why that can't happen to any of you." At this, Howard covers his face, and the camera cuts to a pair of girls who shake their heads toward one another in apparent confusion as opposed to Howard's disgust. Were they not listening to the beginning of the story, or are they uncertain whether Sheldon intends to be taken seriously? Regardless, Sheldon seems to vocalize exactly what the girls are then thinking when he turns and asks of his colleagues: "Are we done? Can we go?" His impatience is certainly fueled by his disinclination towards helping others, coupled with his belief that his time and intelligence are not be squandered on such trivial matters at these. But with this group, who were not privy to that conversation, it could come across as his belittling this precise exercise as being unworthy of his time and talent. The girls could interpret Sheldon's behavior as an authority figure's implying that they are unworthy. And, if they should decide that all men in science are as dismissive, how could they be expected to want to enter those fields of study? Despite his best intentions towards neutrality, Sheldon may in fact have further discouraged these girls.

The next scene still takes place in the middle school, and adds male posturing to the mix of what ought to have been a teachable moment in order to further dissuade these young women from ever contemplating a career in science. Howard closes his presentation with inspirational thought: "The thing to remember is, you can go to outer space, too!" At this he opens the floor for questions and the following exchange takes place with an earnest redheaded girl:

GIRL: "Did you go to the moon?"

HOWARD: "No, but I DID go to the International Space Station!"

GIRL: "Did you get to fly the rocket?"

HOWARD: "No, but I was IN the rocket, I didn't... actually..."

GIRL: "So you just flew around? That's kind of like my uncle, he's a flight attendant."

HOWARD: "No (laughs) see, I'm an American Hero, your uncle brings people NUTS, okay?!?"

At this point, Howard has escalated to an aggressive defense of his self-importance, and Leonard feels compelled to step in and diffuse the situation. What can be seen in this exchange is that, though thankfully absent of his typical hyper-sexuality, Howard is still adamant about performing his idea of masculinity. The girl's questions are designed to illicit information, to better understand his role on his recent space mission, but Howard interprets them as questioning his significance in the mission. The girl makes a correlation to a situation she is familiar with, but rather than use this as an opening to reach an understanding, Howard shuts down the comparison and insists on maintaining the superiority of an astronaut over a "flight attendant." His offense is understandable when the camera shows Sheldon nodding assent to Leonard, displaying that he thinks very little of Howard's accomplishment or of flight attendants as a profession. The writers were especially careful to make the comparison that the girl describes deal with her uncle and to use the words "flight attendant" as opposed to the archaic and gender-specific "stewardess." Nothing in the girl's tone or body language indicates that she is mocking or even challenging Howard, but he immediately feels the need to defend his position as an "American hero" and to also belittle her uncle; in so doing, he shuts down any further communication with the girl. What could have been a prime opportunity to discuss available engineering or aerospace jobs open to women devolves into an assertion of professional superiority and serves only vaguely to assuage Howard's own bruised masculinity.

Leonard's attempts to connect with these young women will not fare much better, as his attitudes towards education and choosing a profession belie the safety and certainty of a particular class standing as opposed to a genuine curiosity or desire to pursue scientific study. After intervening with Howard, Leonard describes his own work in theoretical physics and cites specifically his work with lasers. A black girl in the front row raises her hand and asks, "How did you decide to become a scientist?" Leonard congratulates her on a "good question," which is not

only condescending but also rewards a question which makes him the topic of conversation, as opposed to requesting information the girls can directly use. He relates that both his parents are scientists and that he sort of "fell into" science. This isn't a very passionate answer, and does not really explain why he chose his particular field. It makes his choice sound somewhat passive and speaks to his privilege: with parents in the sciences he would be expected to gravitate towards a similar field, and as a white man with similarly educated parents he would have ample opportunities to further that choice, necessitating neither passion nor drive to complete his studies. He goes on to say that when he was the girls' age he wanted to be "a rap star," which draws an incredulous look from the young woman with the fascinating nail polish mentioned above. He specifies that he wanted to be "like Snoop Dogg, but with a healthy respect for the police." This point draws laughter from the girls. The tenor of the laughter is unclear: incredulity about what he perceived to be a second, viable career choice; perhaps discomfort fueled by confusion at the dated reference to this particular rapper; or disbelief at the idea of this bespectacled white guy as a rap artist, much less a rap star. But Leonard interprets the laughter as derision, comparing it to his own mother's reaction when he announced his desire, and he then rattles off four or five rhymed lines about her subsequent ridicule. He ends with an awkward hand gesture that seems to be his ignorant attempt at a "gang sign." At this, the camera cuts to the black girl who asked the initial question, her face in complete disbelief at his response; her peers immediately behind her are also visible, and are also visibly uncomfortable, either hair-twirling or cutting their eyes at one another. Leonard, perhaps feeling the awkward silence, says "That's just a little freestyle," at which point the camera cuts to Howard and Sheldon's reactions before it leaves the scene. This response would have been just as weirdly inappropriate had the questioner been white, but it also reveals Leonard's deep-seated resentment of his parents more than it answers the original question. It implies that the answer to the question of why he went into the sciences is that his parents made him do it, not because of any strong desire on his part. For these young women, he is not encouraging them to go into the sciences; he is actually discouraging

them from making decisions on their own behalf, and rather is encouraging deferral to an authority figure over passion or predisposition.

Leonard's pitying personal revelations continue into the next scene which opens with him sitting on the teacher's desk at the front of the room. He is tearfully complaining about other decisions his parents made for him over his own choices, the first being that he "never wanted to play the cello." At this, the camera cuts to the girls looking at one another, clearly bored, clearly tired of this ongoing lamentation. He continues with dialogue which is especially inappropriate for this all-girl, middle-school audience: "How do you meet girls playing the cello? 'Hey, hey you wanna come over to my house and listen to me play an instrument that sounds like a suicidal bumblebee?!?" At this point, the viewing audience knows that Leonard is so far into his recollections of the past that he has lost sight of his present, and rather than addressing the girls in front of him about the topic he himself proposed among his friends. He draws focus back to his personal failings, which further ostracizes his all-women audience, and successfully eliminates any chance of this being a scientific discussion. His colleagues recognize it, too, and at this point the camera focuses on Howard as he leans into Sheldon and quips "Quick, pull the fire alarm. Let's get out of here." Howard's attitude seems to be that they should cut their losses and exit quickly, despite their having not yet made a clear case as to why these girls should be interested in careers in the sciences. At Howard's remark, Sheldon quickly stands to address the girls, cutting off Leonard and, once again, having the answer literally at hand as he holds up his mobile phone and explains:

SHELDON: "Hello again. Yeah, um, I don't know if women in general have been actively discouraged from pursuing the sciences, but, it's clear you young women here today have been. While I was listening to my colleagues waste your time, it occurred to me that it might be much more meaningful to hear about women in science from actual women in science. And I happen to know two brilliant examples who have agreed to speak to you on the phone right now. Uh, Dr. Rostonkowski, Dr. Fowler, are you there?" AMY (speakerphone): "We're here."

SHELDON: "Thank you for taking time out of your very busy schedule to enlighten these young women."

At this point in the episode, the scene cuts away to reveal Amy and Bernadette have answered his call while still at Disneyland, and are now decked out in full princess regalia with Amy dressed as Snow White and Bernadette as Cinderella. This is the first and only time that any of the men in the episode have acknowledged the women scientists in their midst, and the first time they are addressed by their respective titles as "Doctor." Although Sheldon is sincere in his thanking them for taking time out of their "busy schedule" to speak remotely with the middle-school girls, the viewing audience knows that the women are in fact engaging in a day of leisure, and so his compliment reads to the audience as ironic humor and undermines the respect with which it was spoken and which these professional women ought to deserve. As the conversation continues, the shot widens to reveal Penny sitting nearby on a bench, unable to contribute to that particular conversation and eating popcorn in a bored manner while dressed as Sleeping Beauty. As Bernadette and Amy continue their teleconference, their actions run counter to what they are saying.

AMY: "It's our pleasure. I'm Dr. Fowler, and I'm a neuroscientist."

BERNADETTE: "And I'm Dr. Rostonkowski-Walowitz, and I'm a microbiologist." AMY: "The world of science needs more women, but, from a young age we girls are encouraged to care more about the way we look than about the power of or minds" BERNADETTE: "That's true. Every one of you has the capacity to be anything you wanna be."

PENNY (aside): "Unless you wanna be Cinderella."

BERNADETTE (turning to Penny): "Come at me, see what happens."

The importance of Amy's message is lost in her garbled words, which are distorted because she is studiously applying lipstick even as she decries vanity. Although the girls on the other end cannot see either woman, the audience can, and her primping undermines for viewers the message she is trying to impart. Penny's comment provokes Bernadette's ire, and her immediate aggression is made humorous rather than dangerous by her princess attire, though containing no less a threat. The scene's message seems to be that even for these women who are arguably smart and accomplished, it is still important to look nice and to buy into the cult of femininity. Because what could be more feminine, or more a celebration of aesthetics, than being a Disney Princess?

That the two women are giving these girls a motivational speech about not relying on the typical traits of the feminine while buying into that cult is incongruous itself. But they are also extolling intelligence and self-sufficiency while dressed as two of the most passive characters within the Disney cannon, which for the audience renders their commentary completely ridiculous and undermines any credibility the women may have had up to that point. Diminishing the professional life of these characters is bad enough. But the writers have crafted this speech to serve as a punch-line rather than a call to action, and in so doing have suggested that women can have either their femininity or professionalism, but if they attempt both simultaneously, one of them may ring false.

In terms of the objectification and marginalization of these women scientists, arguably the worst is yet to come. When Bernadette had made her case for being Cinderella, the audience is given no context as to the reason for her commitment. Regular viewers would know that she comes from a middle-class, blue collar family, but there is no reason to think that hers is a "ragsto-riches" story. Howard has never been portrayed as having rescued her or allowed her to rise to a higher economic class or way of life, and in this episode he is certainly neither princely nor Charming. Aside from Bernadette's being pushy, the audience is left to think that Cinderella is simply her favorite and that she wants to emulate something she loves about that character. However, the very end of the episode sees Howard returning home exhausted and dejected from his day at the middle school, and Bernadette calls from off-screen that she has a surprise for him. His interest piqued, he mutters under his breath, "Please be Cinderella, please be Cinderella." When Bernadette appears in the doorway, blue ball gown and tiara in full effect, and refers to him as Prince Charming, he responds by tearing his shirt off over his head and pretending to gallop towards her as though on a noble steed. Ostensibly, the princess makeover was a bonding event for the three women to do as part of their day off together. Now the audience can see that this was one part of a role-playing sex game between Bernadette and Howard, with a character that he

seems to have a particular affinity for. This is not to say that Bernadette does not also enjoy the role-playing, or that she did not have a hand in which princess she chose. However, without any additional context, the episode can be read as though the entire outing for the women was built around this moment of pleasure for Howard. This overt sexualizing and culmination of fantasy is supported by the reaction of at least one of the other men's storylines: the scene goes on to show Leonard's decidedly amorous reaction to seeing Penny in her Sleeping Beauty garb, despite her own indifference to being made up. The final shot reveals Amy lying across a couch, entreating Sheldon for one kiss to wake Snow White from her slumber. The difference is that in this iteration, it is Sheldon who is indifferent, whereas Amy both feels amorous and attempts to use her costume as part of a role-playing game which she initiates.³³

It is noteworthy that of the four men that comprise the main cast, it is Sheldon who comes up with the solution to the episode's "problem" not once, but twice. Sheldon's asexuality seems to allow him to be the least gender biased of the bunch; it would be markedly easier to avoid sexism if you have a tendency to not see others as sexed or sexual beings, least of all ones' self. Although portrayed as somewhat robotic, Sheldon's desexualized approach to the question of women in science allows him to view the question from a purely logical standpoint, rather than from a sense of social justice like Leonard, or from Howard's hyper-sexualized viewpoint. Sheldon is an equal opportunity offender in that he doesn't deride people based on sex or gender, though he does for intelligence. His partnership with Amy relies on his seeing her as an intellectual partner, rather than being physically attracted to her. Although his behavior directly supports the stereotype of the asexual nerd, Amy's admiration and interest supports the evolution of the new geek, and portrays Sheldon as being so intelligent as to be above physical urges, as opposed to the option being entirely unavailable to him.

In *The Big Bang Theory* it becomes clear that the women are secondary citizens as often as they are secondary characters. In an episode with 13 distinct tableau revolving around three

separate storylines, only four scenes include the women of the cast. Of those four scenes, exactly one refers to them as being women in science; the other three are focused on their gender and especially their femininity as explored through the idealization of the same, namely, the Disney Princess. Because in that single scene where the two women are acknowledged as working in the sciences, their fantastic, ultra-feminized clothing neatly undermines the very message they are delivering at that moment: that young girls should develop their minds and not be as concerned with their appearance. That they cannot actually be seen by the young women they are speaking to does not mitigate the audience's being in on the joke as these two women decry vanity while touching up their lipstick; it is ultimately the audience for whom the message is packaged in bright satin and bows.

In the end, the episode about "women in science" relies on the performance of femininity and utilization of sexual currency over the intelligence and accomplishment of both its women in science. The audience cannot blame the male characters' oversight, least of all that of the women's respective partners, for having not thought to include them in the conversation about women in the sciences when the men see them as women first, sexual objects second, and as scientists third, at best. If the women themselves do not push to be acknowledged as scientists, or at least as professionals, it cannot be expected that they would be easily recognized as such. The writers have done these characters, and the women in STEM careers they are meant portray, a great disservice in making them mere extensions of their male partners, rather than individual characters in their own right.

The limited and largely negative portrayal of women in the sciences is hardly confined to this one episode. In the second episode discussed, Amy and Bernadette get to enjoy their own storyline, and there will be a handful of professional women present at a university mixer which two of the male characters will attend. However, in both cases, the scenes will still be social as opposed to professional, and science is barely present, much less performed. And in the case of

the university mixer, the women's primary purpose for being there is to provide an opportunity for Raj to hopefully hook up with one of them. The objectification of women as targets rather than colleagues will be present throughout Raj's storyline. Amy and Bernadette will also become targets based on their appearance rather than their professional standing. Even with neither Penny nor their partners present, these two women fall into the trap of comparison and competition and will eventually resort to discussing aesthetics in order to find their middle ground.

Season seven's opening episode, "The Hofstadter Insufficiency" (2013) has Bernadette and Amy together at a neurobiology conference out of town, where none of the other characters should be able to pull focus and where perhaps they will be able to develop as characters in their own right. However, the audience first learns about their business trip when Howard is introducing a plan for Raj to meet women, the above-mentioned Lucy being now out of the picture. The previous season may have ended with the major plot point of Leonard's being sent to sea as part of a scientific expedition, but two of the lead female characters attending a work conference is only important for explaining their convenient absence and creating the opportunity for the other storyline. The episode pairs the remaining characters off in similar fashion: one follows Penny and Sheldon learning to cope with missing Leonard, both in their respective ways and in shared company after Sheldon has a nightmare concerning Leonard's fate and seeks assurance of his safety from Penny. The other has Howard and Raj at a social event sponsored by their university, where, as mentioned, Raj is looking to meet someone new among the crop of fresh "post-docs." A large part of the episode focuses on Penny and Sheldon spending an inordinate amount of time together missing Leonard, hence the episode title. There are also a handful of scenes with Leonard despite his being at sea; but, as the titular character for the episode and as the focus for two of the other characters, the writers couldn't dismiss him entirely. The two women's conference storyline utilizes a little more than four minutes in the entire episode, and in those four minutes they spend less than 20 seconds talking about their respective

professions. As stated above no character in the episode is seen in a truly professional setting, much less performing science. This is true even of Leonard who is supposedly on a floating lab, and especially not Raj and Howard, who are at the university's event not to discuss their specializations with colleagues but to find Raj a date. Opposing the spirit of the episode's title, this section will focus largely on Howard and Raj's storylines as compared to Amy and Bernadette's, and will integrate Sheldon, Penny, and especially Leonard only at the conclusion.

The first scene following the opening credits opens in the university's cafeteria where Raj, Howard and Sheldon are having lunch. Raj is mourning Lucy's departure, saying that just that morning he had seen her face in a grease stain in the parking garage and then at lunch seeing her smile in the crust of a chicken pot pie. Howard, fed up with Raj's mooning behavior (and after violently stabbing the offending crust into crumbs), suggests that he attend a welcome reception being held that night to meet some of the incoming "post-docs" the university has hired. To the audience this logic may seem to be more sound than trying to meet someone in a bar: the women at this function will have similar educational backgrounds, may work in a field similar or related to his own, and as an added bonus must live locally because they work for the same institution. Unfortunately, it also speaks to two larger societal beliefs. First, it addresses a culture of immediate gratification where because pain is unpleasant it is best avoided but at second best needs to be eliminated immediately, usually by distraction more than actually dealing with whatever is causing that pain. Secondly, and more disturbingly, it proposes that to a certain degree (or developmental point in a relationship) women are interchangeable. This could be reflective of Howard's pre-marital mindset, where women were like collectable figurines to be procured at all cost; or it may be that his limited knowledge of Lucy allows him to be more dismissive of her as a person and of her impact on Raj's life. It could also be that he simply wants Raj to stop incessantly talking about her for his own sake, a sentiment Sheldon certainly holds. He had already admonished Raj in that earlier cafeteria scene for focusing too much on his

"earthly woes" rather than his duties as an astronomer. While this is reflective of both the character's being self-centered to the point of ignoring the emotional needs of others and his belief in the superiority of matters of the head over the heart, it also supports the show's overall tendency to belittle any emotional upheaval that might lead to a character's genuine growth in favor of the quick laugh. And in the end, this scene only serves to provide reasons for both Howard's availability, and for the girls to have their own storyline in another location.

Howard's mention of the conference conveniently leads into the very next scene where the audience first sees Bernadette and Amy. Despite their storyline centering on professional development, they will not be acting professionally in any of their four scenes together. Instead, they will continue to discuss men, either their respective partners or strangers who find them pleasing in a social setting, reinforcing the belief that, at least on television, women cannot have both a personal and professional life. Although the audience knows they are at a "conference," thanks to the set-up by the men in the previous piece, the scene opens with the two unpacking in their hotel room and talking on their cell phones with their partners. Bernadette is chastising Howard for what we can infer from her end of the conversation is suggestive language, and Amy is chastising Sheldon for his request that she bring him bed bugs. Both sign off with endearments, and the scene concludes with Amy refusing to sleep in her garment bag (certainly the suggestion is an endearment in Sheldon's own way). Nothing within the actual scene provides context as to where the women are, nor for what reason. All it serves to do it establish that they are together but separate from their partners, and further characterize each respective partner: Howard as being hyper sexualized, and Sheldon as being prone to myopic, selfish behavior and requests.

When we return to the university later that evening, Raj is speaking with a young woman and enthuses that her paper on "jellyfish neural nets sounds so interesting." Rather than elaborating on her work, her clipped response is that "it is" and that he can download her paper on the university server. He responds that he will, and that she may do the same for his own work.

She replies "I will," the conversation dies, and she turns abruptly away with no further comment. In this brief interaction the writers manage to reinforce the idea that geek women, even as adults in a semi-professional setting, are as socially inept as their male counterparts are presumed to be. The dialogue also establishes her as working in the realm of biology or neuroscience; as applied sciences both are considered feminine in comparison to theoretical sciences, such as the physics that Raj practices.³⁴ By assigning the post-doc a traditionally feminized field of study, the writers have likewise feminized the character and reinforced that she is a woman scientist, as opposed to simply a scientist. This of course works for the overall purpose of the scene which is for Raj to meet women, not other scientists. Raj's response to her departure is an overly-optimistic gesture indicating the interaction ended on an upswing: a wink, a point, and a clicking of the tongue. Nothing the audience saw would indicate success as far as connecting with this woman, certainly nothing that would warrant a "Fonz." But everything in Raj's internal monologue, coupled with his low bar for success, would point towards his presumed prowess and further feeds his delusion of actually connecting with people. However, he's not entirely deluded: at Howard's inquiry, he replies that if one likes factual statements and awkward silences then the conversation "was bananas!" What is not entirely clear is whether he is employing sarcasm or reinforcing his low standards for evaluation. Their conversation changes again when Howard notices a familiar face at the drinks table:

HOWARD: "Check it out: Mrs. Davis from Human Resources is here. She's probably on the lookout for sexual harassment."

RAJ: "Ugh, great, there go my chances of being sexually harassed."

HOWARD: "Her husband left her for a hot, young undergrad..."

RAJ: "They're so much better than the old ugly ones!"

This conversation makes several observations about the characters and their attitudes toward women, and relies on more assumptions of the audience's prior knowledge and general feeling. First, they would need to know the situation that led these two to know Mrs. Davis, or Howard's comment seems an indirect corollary. But given that the first time they encountered her was

because a harassment suit had been brought against Sheldon at the university, ³⁵ Howard's comment makes a little more sense than merely presuming that HR offices are on the prowl for miscreant behavior. Raj's comment, however, indicates that he doesn't understand the gravity of harassment or the aggression that is inherent in it. Despite being an ethnic minority in the show, his male privilege allows him to make a joke about such behavior. He seems able to misconstrue 'harassment' as 'interest,' and would see such behavior not as aggression but as a come on. When Howard offers the gossip about Mrs. Davis his feeling is unclear; a dying chuckle at the end of his statement undermines an otherwise concerned or sympathetic look on his face. But Raj's comment suggests support for Mr. Davis' decision to leave his wife; the overall aesthetic of the current crop of undergraduates apparently not only makes such behavior permissible but preferable. Raj's tone could indicate envy, even without seeing the alleged undergraduate. What is clear is that Raj doesn't take Mrs. Davis herself into consideration in all of this speculation. So when she approaches the two at the hors deuvres table, the audience may anticipate the imminent social wreck about to ensue.

(She approaches)

MRS. DAVIS: "Mr. Walowitz, Dr. Koothrapoli."

HOWARD: "Mrs. Davis, nice to see you.

RAJ: "You know, I recently read a fascinating article on infidelity among penguins."

MRS. DAVIS: "Oh-kay..."

RAJ: "So if the fact that your husband left you makes you feel unattractive just remember: penguins get cheated on, and they're *adorable*!"

(PAUSE, Mrs. Davis gives Raj a pointed stare, exits. Raj gives Howard a "Fonz.")

HOWARD: "It was better when you couldn't talk to women."

Raj's comment to Mrs. Davis comes off as genuinely conciliatory and he doesn't seem to recognize that he's made a misstep, even after she abruptly leaves. But Raj is making a faulty correlation himself: he seems to think that the obvious outcome of Mrs. Davis' husband leaving her is for her to feel unattractive. He is assuming that her sense of worth is tied up in her partner's approval, and assuming also that his approval is contingent on her appearance. We have no context to assume this is not the case, but neither is there cause for that to be the first conclusion

Raj comes to. His assumptions are perhaps a result of his own metric for ranking women, given our establishing women as interchangeable for him, and the importance he puts on appearance as exemplified by his comment about the new undergraduates as "better" than the "old" and ugly ones. It's probably a good thing Raj is confined to a lab doing experimental science and not teaching a class of these women where their grades might be contingent on their makeup rather than their merit. The last thing said in the scene is Howard's stating that it was better when Raj "couldn't talk to women." As mentioned above by Raj himself, for the first six seasons he was unable to speak around women unless he imbibed alcohol, but overcame his neuroses in the wake of the trauma of his breakup with Lucy. It's interesting that Howard is not admonishing Raj's behavior or the thinking behind it, only that he said it in public. He doesn't recommend that Raj owes her an apology, not does he display regret for sharing office gossip with Raj. His only regret seems to be that Raj discussed this openly with the subject of the gossip, although later scenes will reveal an apology is forthcoming. But what exactly can Raj apologize for if he doesn't realize his error? Further, apologizing may smooth over this incident, but it hardly changes Raj's thinking on the matter. But we cannot blame only his faulty logic when we know from the previous episode discussed that the women in this series also promulgate an aesthetics-based metric, as will be reiterated in the very next scene.

The scene cuts to Bernadette and Amy sitting in the hotel bar together, poring over the conference program and deciding which sessions to attend. An odd discussion, given that they have moved from a bedroom into a bar setting, with nary a moderated panel in site at this alleged conference. When a panel on brain lesions is of interest to them both, they decide to toast their fields of scientific study before they are unexpectedly interrupted:

BERNADETTE: "To the advancement of science!"

AMY: "And to the sick and dying who make it possible!"

BERNADETTE: "This is fun, we never really get to talk shop with Penny around, we usually just end up talking about boys."

AMY: "Which is fine, but it's nice to mix it up with a little intellectual conversation."

WAITER (setting down drinks): "From the two gentlemen at the bar..."

AMY: "OHmygosh boys bought us drinks, boys bought us drinks! Boys bought us

drinks! (To the bar side) Thank you, thank you so much!"

BERNADETTE: (whispers) "Be cool!"

AMY: "YOU be cool! Guys are hitting on us and not just to get to Penny!"

BERNADETTE: "You're right... (loudly and to the bar side) THANK YOUUUUU!"

This scene misses what could have served as an opportunity to have the women discuss their respective fields, perhaps talk about why they entered each, or even elaborate on a current experiment in which brain lesions figured by way of explaining their shared interest. Instead, the conversation turns quickly to discussing, somewhat disparagingly, their absent friend. While it does characterize Penny as being "not smart," one of the very premises the show was founded on, it does not speak to either Bernadette or Amy's accomplishments, only to Penny's deficiency. When the women are sent drinks, the very topic they were deriding in their conversations with Penny becomes front and center. Penny need not be present to introduce this topic, in spite of the other women's assertion moments before that they had been missing opportunities for other, higher-minded topics. Additionally, Amy's comment serves to point out a supposed deficiency on hers and Bernadette's parts, namely, that they are not as attractive as Penny. Rather than disagree, Bernadette says outright that Amy is correct. Not only has the conversation turned from science to boys, but it has devolved into characterization for Penny and does not focus on these two women's characters except where it can point to deficiencies. If it in any way characterizes the women in the show, it is only by comparison to Penny, and specifically to their appeal to the opposite sex rather than to their intelligence or accomplishments. It would seem that these two are using Raj's metric, and they are only as worthy as the approval assigned them by an outside, male gaze.

The women are still in the bar when their next scene opens, with Bernadette just returning to the table after thanking the two men and explaining that she and Amy are both unavailable.

Amy is gleeful at the prospect of a guilt- and cost-free drink, and Bernadette takes the opportunity to opine that if Amy had wanted to go with either of the men, "nobody could blame (her)." The

conversation immediately becomes darker, and has quickly spun out to include two more absent, male characters. When Amy demands an explanation, Bernadette responds that Amy should have free license to see other men since her "boyfriend is kinda... Sheldon." The subtext is that her boyfriend is abrasive and annoying to others, and continues to be sexually unavailable to Amy. Amy's retort is that Bernadette's "husband is extremely Howard, what's your point?" This conversation is problematic in two key ways. One is Bernadette's commentary (clearly within her role as the Bitch) and the implication that infidelity is understandable and even encouraged in certain situations. It would seem that where Raj sees aesthetics as a reason for infidelity, Bernadette deems physical intimacy a right of relationships and an acceptable currency to keep a partner. By this reasoning she of course would consider Sheldon and Amy's relationship as not being valid, and thus as not being held to the same strictures of monogamy as her and Howard's marriage. The second is that, rather than discussing what traits either woman finds attractive in a potential partner, they resort to extrapolations based on their current partners. In this case, Bernadette does not ask whether Amy would prefer a sexually available stranger; she assumes that Amy would be unfaithful because of a perceived deficiency on the part of Sheldon. Nor does Amy think to ask what drew Bernadette to Howard; she instead relies on the same characterization that they and the audience as a whole can read as being inherent to being "extremely Howard." As far as the fans are concerned no further elaboration is required for the character of Howard, but it doesn't tell the audience much more about Bernadette, only that the others think her husband is "weird and his clothes are ridiculous." It could even be read as disparaging to Bernadette, a sort of guilt by association, but again relies on the characterization of Howard in order to have any meaning. Although these two women are alone in the scene, and at a conference in celebration of their professional achievements, they invariably resort to discussing their lives in terms of their being (as specified above) women first and sexual objects second, and scientists hardly if at all. The writers have ensured these women stay within this realm of discourse by having them sent drinks by strangers who are judging them purely on aesthetics,

rather than engaging them in conversation after even meeting them inside one of the panels being presented, and being perhaps drawn to their personality or intelligence.

Two scenes later there is a thirty-second interlude where the episode cuts back to the university party, where Raj has sought out Mrs. Davis to apologize. His apology loses some steam, however, when he quickly turns the conversation back to his own heartbreak and begins to discuss Lucy to his none-too-eager audience of one. He seems to genuinely think not only that their situations are in any way comparable, but that Mrs. Davis would want to commiserate with him in this way. Only this is not a conversation and certainly not commiseration. It's Raj making an overture of peace only to successfully open a way in which he can turn the conversation back to himself, minimizing Mrs. Davis' very real pain while reinforcing the importance of his problems over the type and severity of those of this minor, female character. With Raj's good intentions established, and his fixating on Lucy still at play, we are free to return to our major female characters instead.

The next and final scene for the two women brings us back to the bedroom where we first encountered them this episode, and where once again they will resort to discussing men. As the two prepare for bed in the hotel there is a noticeable chill between them, one that is broken only when Amy, by way of proffering an olive branch, suggests that it was actually flattering for "strangers" to buy them drinks. When Bernadette agrees, Amy's follow up is to suggest they wear "hot pants" to breakfast on the chance of getting free food. Aside from wondering what sort of conference-appropriate clothing these women packed, the audience may also ask how these two intelligent women move almost immediately from feeling flattered by the male gaze, to thinking of ways to utilize that gaze to their benefit but at the cost of their bodies for barter. But now that they are speaking to one another again, Bernadette picks up the conversation's thread and asks which of the guys, hypothetically, Amy might have wanted to go with? They turn the light back

on to giddily confide in one another and elaborate on their choices, and the audience is finally treated to a little bit of what makes them tick.

BERNADETTE: "So hypothetically, if... if we were to have gone with them, which one would you have picked?"

AMY: "I think I would have gone with the short one with the goofy haircut."

BERNADETTE: "Oh good, cuz I liked the tall, thin one. He seemed intelligent, kind of a loner, maybe a little sexually inexperienced like I'd hafta teach him a thing or two. (mouths) Rowr!"

AMY: "Not my guy. I caught him staring at my rack. Be nice to be with a man who wants to know what's underneath my cardigan. (*pause for laugh*) FYI it's another cardigan."

BERNADETTE: "Your short sexed up guy kinda sounds like Howard..."

AMY: "Your brainy virgin kind of sounds like Sheldon..."

(Pause, then simultaneously:)

" 'Night."

The conversation comes to an abrupt end at their sudden shared realization. But what's important is that the discussion has again veered away from the women's individual desires and instead is reliant on an established characterization of (and comparison between) the men in the show. The audience is welcomed to familiar territory and gets the joke, as the laugh track reveals. The things they say about the men also underscore the common stereotypes attributed to typical television geeks: sexual inexperience, a haircut that belies having no obvious fashion sense, and being thin or short. These last two somewhat feminize the men without our even seeing them: describing a woman as thin or short would be complimentary, and the speaker might go so far as to say dainty or diminutive rather than short. By making these traits appealing to these women, and by extension applying them to their partners, they are reinforcing negative stereotypes of the television geek that these characters had supposedly managed to evolve past.

As established in their first scene together, these women will be focusing on anything but their conference and their professional lives, and the writers have once again ensured that the women scientists are not doing anything related to actual science. Having their scenes move between a bedroom and a bar is perhaps partially due to the logistics of setting up scenery, but it also speaks volumes that the writers did not even consider an alternate location. There have been

hotel and conference settings used in the show, but in situations where the men were engaged in a team-based Physics contest³⁶ or when Sheldon met an idol and shared a paper with him;³⁷ both of these episodes revolved around the men as scientists and performing their professions in an academic way. The women of the show are never given that consideration.

Speaking of professional men in academic settings, the next scene cuts back to the university where the welcome party is in wind-down. Mrs. Davis takes her leave to go relieve her babysitter, and Raj makes yet another gaffe by comparing her situation to his being a "single parent" for his dog. But as she turns to go, Raj seemingly redeems himself and the evening:

RAJ: "Mrs. Davis... I must confess, I came here tonight in a futile attempt to pick up some lonely post-doc, but instead I got to connect with you at a human level. That's a much better evening. ... You're a lovely person."

MRS. DAVIS: "Are you hitting on me?"

RAJ: "No, no! That would be crazy! If I were hitting on you, you'd know it because you'd feel uncomfortable and a little sad for me."

MRS. DAVIS (with a smile): "... You're sweet. Good night, Dr. Koothrapali." (Howard approaches)

HOWARD: "Looks like she accepted your apology?"

RAJ: "And then some! I think we had a moment."

HOWARD: "Please, you did not 'have a moment'..."

RAJ: "Who died and made you King of Moments?!"

The conversation continues to denigrate from there, with Raj proposing a method for seducing Mrs. Davis and Howard pointing out that in fact, Raj will do nothing of the sort, which the latter is compelled to agree with. The character of Raj seemed to have grown, to have begun educating himself on the worth of women as people, and even cites that he was able to connect with Mrs. Davis "at a human level." But that growth is cut down for the sake of the comedy in this situation, and Raj instead willfully misinterprets Mrs. Davis' conceding he might be likable to her obviously being sexually interested in him. His initial insistence with Howard only serves to reiterate him as a rather pathetic and pitiable character. His misreading of the situation allows him to categorize Mrs. Davis as a sexual object and reinforces the idea that his character is a lost cause. While initially he may have approached Mrs. Davis with the strict intention to apologize

(as Howard's inquiry suggests), his speaking with her throughout the evening now feels as though he was forging a connection as a means to an end, rather than for the sake of the connection itself. As with the first episode examined in this paper, the writers get very close to an important message, but in the end they completely undermine their message and the characters.

It is in the final scene that the visibility of women merely as sexual objects becomes especially clear for the audience. The episode both opens and closes with Leonard at sea; but in the first scene he appears as part of Sheldon's nightmare, and provokes a fear and longing that leads to Sheldon and Penny spending their storyline alternately missing and being angered by Leonard. As part of their spending time together, and in the guise of learning more about one another's characters, Penny suggests they share something no one else knows about them. Her example is that as a young actress she did a topless scene in a low-budget horror flick about a killer gorilla, which she regrets but is comforted by the movie's having never been released. Sheldon of course reveals that Howard (seasonal version 1.0) in fact found the movie and that all the men in their group have seen it. And having just met her, how could Howard do other than objectify her, and find whatever imagery he could for personal use? Disturbing recollections of Howard aside, this story sets up the audience for the final scene: the camera fades in on Penny taking a shower, and is inside the curtain with her but focused at shoulder level. As she speaks, it becomes clear this is a scene from the earlier mentioned schlock horror movie: her forced delivery and acting make that clear, as do her words expressing relief that the police captured "that psychotic, genetically engineered ape." As shrill, discordant music begins and a shadowy, hairy figure with an axe creeps into the right-hand of the screen, the picture opens out to reveal that Leonard is watching this scene on his laptop, with several people around him also focused on the screen. He proclaims to the gathered assembly, "THAT is my girlfriend, I swear to God!" The audience laughs at his enthusiasm as the others begin to chant Leonard's name (in much the same way they chanted "Iceberg!" for a drinking game shown earlier in the episode). One of two

women watching with the group even pats Leonard's shoulder, apparently congratulating him on his incredible match. As the camera's focus returns to the movie, the gorilla yanks open the curtain and Penny turns, sees him, and screams. The last frame that is frozen for the credits is her upper torso blocked by the gorilla's raised arm in attack, and her face contorted into an openmouthed grimace. The scene is less than thirty seconds but manages to establish the objectification of Penny by using one of the worst and most vulnerable situations she has found herself in and forcing focus on her naked body. It cannot be argued that Leonard is using the film by means of introduction, as he could certainly have used any countless number of pictures on his phone (which we know he has because our characters called him earlier in this same episode) or pulled up her Facebook page (since the movie proves that he has Internet access on board). And as the first film she made, he certainly is not using this to showcase her as a professional actress. His comment belies that he chose this medium as a means of bragging, but more than that, he is seeking to elicit jealousy based solely on Penny's aesthetics, as were Amy and Bernadette in the bar. Leonard is acting just as poorly as Raj, because although Penny is not interchangeable for him, she is a sexual object. She certainly serves the purpose here of characterizing Leonard by bolstering the case for his masculinity and raising him in his colleagues' esteem. We could even say that in this case, "The Hofstadter Insufficiency" lies with Leonard himself, in that he is deficient in his ability to portray his girlfriend as human to his scientific colleagues.

Within just two episodes, there is ample evidence of a rampant sexism that is perpetuated by the men and women characters, whether by projection or portrayal of traits which serve the same, and which speak to the series as a whole. While these geek men may have evolved to the point where they can use their intelligence to earn a living, and can have relationships with romantic partners, they have only evolved within and in comparison to their community, and not as part of society as a whole. Whether these characters are accurate portrayals of authentic geeks or not, to set up and maintain these stereotypes as a form of laughable entertainment conceals

their allowing the audience to regress to similarly sexist and backward thinking. Even if we believe that they are authentic representations of geeks, there is little that would suggest geek women would want to gain access to and share in the real-world community, if it would mean relinquishing hard-fought progress for their sex. In the next section, we will explore what geek women find so appealing about the geek community, and how they describe themselves to one another and to the men who share their "passionate, obsessive" interests and behaviors.

"NOTHING TO PROVE": THE GEEK GIRL IN HER NATURAL HABITAT

As is the case of any community, the diversity amongst geek women is such that no two are alike. For this reason, it is especially appalling when two women characters in a television show stand in for an entire community, and are designed to be as much alike as possible. Amy and Bernadette can be defined as geeks, whether by the definitions laid out here that speak to their being passionate specialists, particularly in one of the fields of science, and their possessing social skills; and by the wider cultural assumption that associates a proclivity for science with both geeks and nerds. In the television world, their simply wearing glasses are all the signifier the audience needs to identify them as "geeks." Whereas the men in the show have very defined styles from one another, and only one of the four wear glasses, both Amy and Bernadette are condemned to a world of skirts and dresses, typically paired with a button-down cardigan, their hair long, and their omnipresent glasses front and center.³⁹ This homogenous portrayal may work for a situational comedy that merely looks to entertain, but The Big Bang Theory has positioned itself as a more socially accurate and advanced portrayal of geeks; as such, it is impossible to have two women be seemingly individual yet hew so closely to the same stereotype. To better measure the distance between character and caricature, it becomes necessary to compare them to self-identified, actual geek women. The second part of this paper will examine women who both identify and perform as geeks for a larger audience, specifically through a substantial online

presence, and compare the "characters" they have created with those presented in *The Big Bang Theory*.

Self-described geek folk duo The Doubleclicks are a particularly interesting example of women who have successfully incorporated their geek interests into their online personas and made it integral to their livelihood as artists. The sisterly duo writes and performs original songs that are "snarky, geeky and sweet." Their name even points to their geekiness, cleverly alluding to both the common use of computer hardware and a common action of Internet users. Their primary instruments are voice, cello, and ukulele but they add synthesizers, toy piano, and a host of others as needed, and write about topics that range from dinosaurs to Mr. Darcy. Their songs rely on the general and collective knowledge of their fan community; for example, one person may not have read Austen's Pride and Prejudice, but they will likely know that Mr. Darcy is a character from that novel, and may still relate to the idea of the bad boy with a (presumably hidden) heart of gold. Even when the subject matter is more specific, such as their Dungeons & Dragons-themed love song "This Fantasy World," a listener will not need to know the exact definition of a golem or spell-choice to understand that the song refers to the singer's wish for an actual relationship outside of a game. The references may be specific but the themes are more universal, and can be understood across multiple fandoms (fan-specific communities) which allows for a fan-base that is consecutively more diverse and more inclusive because of that widereaching diversity.

To further examine this diversity and create a more inclusive description for geek women, I have chosen three songs from two albums by The Doubleclicks' for critical reading.

These songs (and their accompanying videos where applicable) were specifically chosen for their particular message but may be considered generally representative of the group's catalogue.

Although all three are written by women, only two are written from an explicitly female perspective. The third is neutral, both in its voice and in its audience. All three at some point

speak to or about the geek man, and the message varies in both the tone and method of delivery. What is important in all three are the things being said and implied about geek women, and the ways these descriptions vary from the stereotypes as established in the Introduction and perpetuated by *The Big Bang Theory* as explored in part two.

The diversity of geekdom, and of The Doubleclicks' fan-base, becomes especially evident through a participatory video music project for a recent song release. It also points to the sexism geek women have encountered as they navigate that same geek community, with lyrics that describe the marginalization that geek women face at the hands of some of their male peers. The 2013 album Lasers and Feelings features the anthem "Nothing to Prove" which serves as a retort to the subset of geek men who have made it their mission to police the borders of geekdom. Rather than attempt to speak for their audience's collective experience, the duo invited their fans to help create and be a part of their music video. Fans could submit video through various social media or in person while The Doubleclicks were out on tour. The video clips feature each person holding a sign that either affirms their status as geeks or cites incidents where they were victims of sexism and prejudice from fellow geeks. As described through the song's lyrics, the female narrator demands to know how, with such a wide variety and degree or depth of knowledge in geekdom, any one person can claim another is not geek enough and thus not a part of their culture. The video's message for inclusion and unity is bolstered by the appearance of several well-known, male, geek celebrities, such as actor Wil Wheaton⁴¹ and (yes, another) geek folk duo Paul and Storm. For these men, their signs speak directly to other men watching the video, and served to "call out" their contemporaries for being unnecessarily exclusionary and sexist.

Though identifying universally as geeks, the participants in the "Nothing to Prove" video are incredibly varied in terms of their appearance and fandom; race was not as diverse and noted only when the person's sign specifically spoke to it. The author was able to recognize references to video games, role-playing games, table-top games, television series, movies, fantasy novels,

comic books, computer technology, graphic arts, and at least three branches of science. The signs' statements also cover a broad range of geek women's experience. They include positive affirmation (I am a GEEK); fan-specific references (They can't take the GEEK from me)⁴²; moral reproach (There are no Fake Geeks, only Real Jerks); assertion or legitimization (I received my first console when I was nine years old); and subversion (My Transformers played with my Cabbage Patch Kids). The only commonality among all of the video's subjects is that they self-identify as geeks. With so many different examples presented in just three minutes, The Doubleclicks must have recognized early on the impossibility of their speaking for an entire subgroup of geekdom, even with such pointed lyrics.

It would be likewise unrealistic and incredibly limiting to even consider that characters such as Amy and Bernadette could be representative of the entirety of women's geekdom. But by their being the most visible geek women characters on a show that purports to portray the "real" and everyday experience of general geeks, viewers run the risk of making that very mistake. Failing to recognize the use of broad stereotypes in the male characters could lead viewers to mistakenly believe that geek women are what they see in the show: Caucasian, who need but also choose to wear glasses rather than contact lenses, 43 who wear their hair long and are always in a skirt or a dress, 44 awkward by association with their respective partner, and largely distinguishable mostly by their hair color or their partner. Any outside interests and hobbies that could set these two apart are only brought up when they are necessary to a larger plot involving the main male characters. For example, the audience learns that Amy plays the harp only when she is shown playing a sad song and crying over the thoughtlessness of the other two women in the series. 45 It has nothing to do with celebrating or developing her as a musician. Amy's musicality is seen as incidental to her general weirdness, whereas Leonard is depicted time and again as a true musician.

The lyrics to the song itself are as diverse as the participants in the video, and allude to a wide array of various geek activities. As mentioned above, although they employ specific reference to geek-centric activities, what begins as a universal theme of being an outsider who finds acceptance within a community quickly winnows down to specific and sexist ways in which geek women are marginalized within the community where they should feel most at home, and perhaps did at one time.

I entered this scene through rejection and honesty Nerds weren't mean, they were weird and that worked for me After 10 years of teasing when social skills failed me Dungeons & Dragons cured all that ailed me (...)

But one day, you grow up, come into your own Now geek's not rejection - it's a label I own Then ignorant haters come to prove me wrong Tell me I'm not nerdy enough to belong

As the song title suggests, these women don't feel the need to take up the challenge issued by these men. Rather than accept an arbitrary test based on what their male challengers know, the women assert what they know and love and are disinterested in proving their worth to select persons who have appointed themselves as experts and enforcers when it comes to identifying authentic fans and geeks. This is also a subtle argument for the mainstreaming of geek culture: if it were still considered un-cool and outside of the popular culture to be a geek, no one would be fighting to gain access and there would be no need to identify "real" geeks. Within such an insular community, the influx of new "fans" gives rise to the question of authenticity, and it is apparently not enough for these "haters" for one to simply say that one is a geek. The tone of the song initially is celebratory, with geek becoming "a label (I) own" rather than an epithet likely used by the "jocks" mentioned in verse 2 who make the speaker self-conscious. 47

The tone becomes accusatory when the lyrics refer to the "Fake Geek Girl test;" despite celebrating the multitude of geeks who happen to be women, the lyrics speak to the diversity in

the larger community and point out that the narrow strictures being applied to women are loosened considerably when the definition is applied to men. ⁴⁸

Fake Geek Girl test - that's a funny one, go ahead How many comic books are there I haven't read? I know it feels good to have a contest you win It would feel even better if I wanted in

So women aren't geeks, so is that your conclusion? That this is some secret club based on exclusion? 12-year-old dorks would say you're being selfish And then they'd go write in their journals in Elvish

Although acknowledging the intentions, the song begins to demean the motives of these test administrators by assuring them that although "it feels good to have a contest you win," these women have no interest in proving themselves and thus undermine any pleasure the test-givers might claim from the anticipated attack and take down. It's no fun if your target won't fight back, and these women are not taking the bait. Despite acknowledging the exclusionary nature of the geek community, this reference reminds the naysayers of the safety they found once they had gained access to that community. But this is not a request for admittance by their male cohorts; these women are asserting that they are already a part of that community. They have the credibility (as will be referred to in a later verse) that legitimizes them as members but, as pointed out, they should neither feel the need to nor be forced to prove this point: challenged to a duel, these women are walking away from the un-looked for battle with their weapon still in hand. Instead, they admonish the antagonists for having the almost "normie" mentality of presuming a lacking on their part, whether or not they can readily display the same passionate, obsessive behavior that is so admired in their male peers.

The final verses of the song return to a celebration of diversity within geekdom and attempt to create a learning opportunity for the target of the original admonishment. Saying that "all kinds of folks" are needed to round out geekdom, the lyrics speak to activities rather than sex

or gender and serve as a reminder that despite any individual's appearance, what makes this a true community are the shared interests involved.

I've got cred but honestly, I shouldn't need it This world needs all kinds of folks to complete it You've got gamers, and artists and comic subscribers Cosplayers, crafters and fan-fiction writers

You can stop - never say "fake geek" again Our club needs no bouncers - all who want in get in But go ahead, if you want, to own that role fully I ain't got nothing to prove to a bully!

Here they cite an explicit method for inclusivity where women specifically are concerned: "never say 'fake geek' again," and they reinforce this communality by asserting that "all who want in get in." They describe those who would disagree as being "bouncers," which is a telling word choice: these geek women perceive that they pose a threat of imminent danger by nature of their very existence. ⁴⁹ The lyrics within that final verse also condemn anyone who continues such sexist behavior as a "bully" and contains a two-pronged attack on the individual. First, the lyrics maintain that the speaker has dismissed the bully as being either not worth their time to explain, or as being ignorant beyond the power of the speaker, to repair. On the other side, "bully" connotes an aggressor of a geek, and by applying that word the speaker essentially puts the subject outside of the geek community. ⁵⁰ It is a subtle ostracizing that is no less artful or hurtful than the subject's passive aggressive (Fake Geek Girl) testing, and belies a sexism that continues to breed despite the progress made for the community as a whole and as part of the popular culture.

The Doubleclicks continue their upheaval of geek women's stereotypes with their decidedly sexual and somewhat sexy song "This Fantasy World" from their 2012 album *Chainmail and Cello*. This song also is written from a female perspective and counters the stereotype of the geek's sexual unavailability. The song revolves around a woman playing Dungeons & Dragons, a "fantasy tabletop role-playing game" which relies on shared storytelling

and player interaction,⁵¹ and her wish to have a relationship with a fellow gamer outside of the "fantasy world" provided by the game. Because it is a woman speaker, the song explicitly discusses a geek woman's sexuality and, given the object of her affection, implies the geek man's sexual availability. However, it also provides an unfavorable account of those geek men who are not desired by the speaker, views which serve to support the negative aspects of the stereotype. The music video for this song is animated, largely black and white line drawings, and the depiction of the gamers hews fairly close to stereotypic portrayals where their clothing or grooming is concerned.

The song describes an attraction that does not rely on appearance and speaks instead to action, although the accompanying video somewhat undermines this. The very first lines of the song are careful to describe their subject as being not tall and not very attractive, but quickly clarifies that the speaker is referring to an in-game dwarf character and not to the actual subject. However, the video depicts this in reverse, showing first the subject and then transforming them to their character. And though not described directly, the video depicts the subject through stereotypic geek and nerd signifiers: a skinny, somewhat hunched figure with an overly large head, sparse beard, and glasses. After he transforms into his dwarf character, the geek woman appears on-screen. Despite being a line-drawing, she has several highly feminized signifiers: large eyes with distinct pupils (the male geek has only dots) and framed by long eyelashes, bowed lips, and prominent breasts. But she does not have glasses and appears to be wearing shorts rather than a skirt. These depictions are especially interesting given that the artist for the video is a man, comic artist Brad Jonas. 52 Though viewers can assume the band members had some say in the video concept, the characters are drawn from a male perspective. It seems that this artist's ideas of typical geeks are in the women's favor. But the gamer girl that is depicted is a far cry from the hyper-feminized characters depicted through Amy and Bernadette.

The visualization aside, two of the three verses are dedicated to the female speaker's extolling the virtues of her male counterpart, still through his character and not directly related to his appearance. In the very first verse she says he has a "nice axe" and knows "how to use it," language which is already sexualized by its being somewhat homonymic to "ass" and the implication of knowing how to utilize one's physical attributes for some sort of gain. She also refers to a "clever spell-choice," which would indicate that she both admires intelligence and attributes that trait to the real-life subject. She states that the attraction was immediate on her part, but because she says it began when the subject "set foot in this campaign," or quest, it is unclear whether the attraction grew out of his gaming skills or his table-side, real-life personality. What is clear is that the speaker sees the geek man as a viable sexual partner, regardless of any other attributes and directly in contrast to the common definition. As the initiator for sexual relations, the speaker also defies the geek woman's being presumed sexually unavailable and implies a sexual experience not commonly associated with geeks, and thus undermines that aspect of the broader definition. However, it cannot (or chooses to not) dispel the persistent myth of the general unattractiveness of geeks, as the final verse shows:

As we finish this battle and we slay the dragon and look around her lair for loot Like golden magic items, I look around this room at all these fucking nerds and all their fucking books

And their fucking dice, and their primarily Windows-based computers and their Doritos and Mountain Dew

Everything here is disgusting but you... and Dungeons and Dragons

The descriptions of the other players in this particular campaign cites a specific sub-set of gaming geek in much the same way that "Nothing to Prove" identified a sub-set of geek men based on their sexist behavior. What is noteworthy is that the speaker has managed to set herself and the object of her affection apart from all the other gamers, dismissing them as "fucking nerds" and describing "everything" as "disgusting" and only specifying her subject as being special. We cannot presume she is the only woman on the team and thus a comparative "other." She does not

identify the sex of the other players but the video artist presumed them to be men, although nothing in the lyrics supports this. With no obvious differences, she seems to willfully ignore that she is also in that basement and part of that gaming crew. She doesn't specify where her books or dice are, or what she has against Windows OS. If she had previously overlooked those people and things she deems disgusting in order to play the game she loves, the listener may wonder what has set this single player apart, and what makes the speaker likewise exceptional. This is in opposition to the opening verse's establishment that the speaker is unconcerned with aesthetics as much as personality, but could provide support if we wanted to argue instead that geek women can be sexist and exclusionary in a way particular to certain geek men.

At the song's conclusion, the disparity between the lyrics and the video are noteworthy. The final lines have the speaker stating their desire for sexual relations; they don't go into any detail, and we are not privy to the subject's response as to whether they encourage or reject the speaker's advances. It leaves the question, and the possibilities, open-ended for both.

Yes I like playing Dungeons and Dragons with you, yes I do Yes I like playing Dungeons and Dragons, but I wanna get you out of this fantasy world And into my fantasy, and into my bed where we could have sex. Dungeons and Dragons!

Despite the song's ambiguity, in the video the subject is the last person on-screen (perhaps to book-end their being the first person seen in the beginning) and so the viewer does see a reaction to the narrator's statement: his pinpoint eyes open wide, then he looks to the side and away from the viewer as a hand comes up and self-consciously rubs the back of his neck and head before slipping off-screen. Everything about his body language signals discomfort, and his reticence to engage the speaker undermines the progress made for both sexes. Either he is reluctant because of his own inexperience and he chooses to be sexually unavailable; or he is not attracted to the speaker, which despite being based on a personal preference still somehow eliminates this particular geek woman as being a suitable, sexually available partner. She is shut down and shut

out without either of their saying another word. The video by itself ends on a note of rejection and may reinforce the negative stereotype of the sexually inexperienced geek. The song in and of itself portrays a confident geek woman who admires intelligence, is in ownership of her sexuality, who celebrates being a gamer, and genuinely enjoys a geek pastime.

The argument citing women's marginalization within the geek community is perhaps best seen by observing when it is conspicuously absent. "The Internet National Anthem," also from *Chainmail and Cello*, is written without a single gendered pronoun and is spoken through a neutral narrator. This allows the song to be universal by not specifying any one way it might be exclusive and by not having a specific voice written into the narration. Yet the geek woman is somehow portrayed through this The Doubleclicks' song by not being singly identified at all: the song heavily employs the pronouns "we" and "our," making it communal and inclusive for the listener and performer. And although the song is named as the Internet's anthem, the "we" described therein must possess a degree of technical skills to access the Internet, and thus encompasses both the nerd and geek communities. By not using gendered signifiers, the song assumes those communities are necessarily comprised of both sexes and eliminates the question altogether.

When we were but scared nerds, adrift on the blue We spotted this land and we instantly knew The wildest of chances, the grandest of views Are here in this land made for me and for you

The Internet, The internet
The place where we find others of our own kind
The internet, the internet
Where networks and servers bring us intertwined

Repeated themes from the two previous songs seen here include a sense of community, behaviors specific to that community, technical references and jargon that set this group apart, diversity within the community, and a more expansive universality that somehow still relies on exclusivity.

That is, universality for those lucky enough to have both access to the internet and a proclivity for it's purely entertainment purposes. This exclusion is negatively pointed to in the two lines that refer to "those from outside" and "the other world," having been preceded by the affirmation that the internet contains "others of our own kind." The song will move from the speakers being "scared nerds adrift" in the first line to being comfortable enough in their adopted land "to stay" by the end. In some ways this is an echo of the sentiments expressed in "Nothing to Prove," although that song moves through the geek women's desire to stay and seems to find their nation on the brink of (un)civil war.

If we accept that this anthem is all-inclusive for the (exclusive) country of geekdom, there are a handful of generalizations applicable to all its "residents," stated especially in the third stanza.

Our people are various, often hilarious

And some more vicarious, but all are welcome here

Our justice is just, and the culture robust

It can sometimes disgust but at least we are free

On the internet, the internet We give to our country our love and our pride The internet, the internet We don't need approval of those from outside

The very first descriptive word, "various," celebrates diversity because it explicitly states that these geeks are of differing kinds, aspects or characteristics.⁵⁴ Some of these people are described as being more "vicarious," experiencing an event through their imagined feelings or actions of another actually experiencing that event.⁵⁵ This is an interesting word choice given they are referring to a virtual world in which everything experienced within its borders is imagined and therefore is a vicarious experience. Whether praising those who seem more capable within the virtual world, or judging them to be less able to function offline in a more real and less vicarious situation, the song is quick to assure even lurkers⁵⁶ that "all are welcome here." Declaring their justice to be just seems presumptive on their part until we recall that as a national anthem this

only means that certain people are subject to it. What it really suggests is that the justice works for those members of a community by whom it is enforced, and that being considered "just" only speaks to the efficacy of the system and not to the ethics that underlie it. Calling the culture "robust" indicates a strength and durability, which it would have to be in order to withstand insults or accusations from those who are disgusted by it. Curiously, because that line ends with "at least we are free," it is unclear whether the culture is being judged disgusting by those from "outside" or if the community itself is acknowledging the tendency towards being disgusting but also celebrating the choice and the freedom to be so. All of these descriptions serve to reiterate the diversity amongst geeks while establishing traits that are normal within the context of this community. The line "We don't need approval of those from outside" also reminds us that this community is unapologetic and even celebratory of their insular nature.

The final stanza contains an invitation to join this insular community but sets up requirements to be accepted. In expressing these guidelines the song acknowledges that the community has become more mainstream: the population growth, which follows attaining this status, necessitates establishing rules for newcomers.

In every endeavor we'll be here forever No matter whatever the other world thinks of

The internet (internet!), the internet (internet!) You can come to work or better to play The internet, the internet Some come to Google, but we plan to stay!

Even while inviting "you" to come to the Internet, it sets up a hierarchy of those who utilize it as a tool for work rather than "to play." It implies that users who frequent the internet are comfortable enough to spend leisure time there and discern its entertainment value, as opposed to casual users who use it only "to work." The song even name-checks one of the largest search engines available within the internet but dismisses it as a tool for that same casual user by juxtaposing it against the speaker who plans "to stay." This could almost be considered a

predecessor of the Fake Geek Girl test, in that the members of this established community have set up checkpoints to determine authenticity of visitors who land on their shore. If the Internet is a country, the community has deemed Google less a River Styx than an I.C.E. office. This only somewhat contradicts the line before that insists that "all are welcome," but is in keeping with the exclusivity commonly seen with this group. Even in the face of this exclusivity, what the song attributes to the community, and by extension the geek women therein, include technical skills, a certain intelligence that would lend itself to humor, and a fierce loyalty to the "land" which has provided them opportunities they might not have in an off-line life. In writing the song from a gender-neutral point-of-view, the song can belong to any member of these communities (while quietly pointing out the relative safety that comes with anonymity in the same).⁵⁷

In examining these three songs it can be said that for these geek women songwriters, they define geek women as being smart, sexual, sensitive, loyal, and unique, to cite just a few characteristics. The self-assured, real, geek women revealed in their songs are a stark contrast to the characters seen in *The Big Bang Theory*, of either sex. The only thing they may have in common with their (female) sitcom counterparts could be the exclusionary behavior of the geek men in their lives, which in reading these songs seem to be one of the most realistic aspects of these characters. Despite what could be argued as a fierce loyalty to their friends or partners, when compared to the women in The Doubleclicks' video who are "geek girls" Bernadette and Amy seem to be less uniquely geek and merely variations on the theme of the "geek's girl."

GEEK WOMAN HEAL THYSELF

It can hardly surprise the reader that a show which relies on common misconceptions and accepted stereotypes should aid in the continued marginalization of women. Even less so when one considers that the show's very title relies on the idea that sex and intelligence are naturally juxtaposed, referring as it does simultaneously to a theory about the origin of our universe and the

slang for sexual congress. The initial premise of the show also relies on the audience's believing that intelligent men and beautiful women are different species, and that their interactions will necessarily be fraught with tension and resultant humor. As such, the intelligent woman may certainly seem monstrous, just as the beautiful, intelligent woman may seem an entirely fictional construct. And that is what these characters are: constructs which are developed according to types and to which are assigned specific traits. But audiences still connect with these characters and relate to aspects of them without demanding that they be accurate, only that they make us laugh. The author herself has been a fan since season one, and will continue to tune in to watch the continuing evolution of "ShAmy," and to wish that more geek men were as quick-witted and funny as Leonard is written. But until art begins to more closely imitate life, geek women have the power of the consumer and may seek alternate entertainment which offers a more diverse depiction of their selves.

Given that geeks seem naturally drawn to technology and are often frontrunners of the entertainment movement, and usually value ephemera before popular culture catches wind of it, it is the author's hope that geek women will not settle for such misrepresentation for much longer before looking elsewhere. This hope is bolstered by the growing availability of alternate models, especially in online media. There are blogs being written by women scientists who are discussing their fields, seeking to both educate and connect with other women, and are not shying away from discussing sexism when they encounter it.⁵⁹ There are women reading comics and graphic novels and discussing them from not just a fan's viewpoint, but a decidedly feminist perspective.⁶⁰ There are women across every fandom building costumes for conventions and posting tutorials alongside pictures of themselves modeling the finished product.⁶¹ There are dedicated YouTube channels run by women working in museums, teaching math, and playing and discussing video games of all types.⁶² With all this evidence of real, geek-identified women to counter the

stereotypes being written on television, it is only a matter of time before geek women demand that women characters be as well developed and nuanced as their male counterparts.

Geek women are already fighting back against sexism and their active marginalization; their growing visibility online and at conventions only supports this. It cannot be long before popular entertainment catches up to these cultural frontrunners. Eventually the geek woman will evolve in the popular and collective consciousness, and will be celebrated for her intelligence, interests, and specialized fields of study as much as her male constituents. Evolution typically is the result of an external catalyst, and in response to a necessity or demand made by the evolutionary object's environment. In the case of geek women, it is necessary that they become the catalyst in response to the environment.

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¹ Episode 4:21 "The Agreement Dissection" and Episode 6:17 "The Monster Isolation" for example

² The Online Etymology Dictionary

³ Stuff You Should Know Blog

⁴ This is not to be confused with "geek chic," which refers typically to a marketing tool developed in response to the sudden popularity of large-frame glasses and retro/vintage clothing, and is a result of the cultural popularity of films like *Napoleon Dynamite* which glorify the nerd-as-rebel. (Quail, 465)

⁵ Merriam-Webster Online

⁶ Wikipedia.org

⁷ Conversely, although the Oxford English Dictionary Online states first that a geek is "an unfashionable or socially inept person," it allows that with a modifier such as "computer (geek)" it can mean "a knowledgeable and obsessive enthusiast."

⁸ For examples, see Dr. Spencer Reid, *Criminal Minds*; Agent Peter Bishop, *Fringe*; Secret Agent and Intersect Chuck Bartowski/ Charles Carmichael, *Chuck*. Of these shows listed only the first, sadly, is still on the air at time of submission.

⁹ This is a direct reference to *Seinfeld*, the original show about nothing.

¹⁰ Westman, 12

¹¹ Westman, 13

¹² Conaway, 15

¹³ Geek women were discounted as early as the 1950s: "Father Knows Best" aired an episode titled "Betty the Engineer" which saw the elder daughter decide to shadow an engineer for her school's sponsored career day, reasoning that she enjoys math. She experiences ridicule from her classmates, her family, and finally the collegiate male showing her around at the career facility, and leaves before Career Day has officially finished. The episode ends with that same collegiate lad showing up at Betty's house to court her, commenting on how much better it is to see a woman in a dress and in the home (but thankfully not adding "where she belongs). Betty herself seems to agree, since she does go on a date with him that very night. (Fris)

¹⁴ Inness, 1-2

¹⁵ As examples of geek women who were encouraged to defer to their peers, Conaway cites the character of Inge in a *Gidget* episode titled "Gidget's Foreign Policy," and the character of Molly in 1973's *The Brady Bunch* episode "My Fair Opponent." Both girls are subjected to makeovers by the show's main characters, and after threatening to surpass their maker's popularity realize the "error" of their ways and retreat to sharing the spotlight. (53-55)

¹⁶ An abbreviation for "costume play," meaning to dress up as characters for conventions or other gatherings.

¹⁷ Conaway, 58. Conaway believes this is because women's braininess finally came to be valued in the 1990's

¹⁸ Examples include Topanga Lawrence of *Boy Meets World*, Rory Gilmore of *The Gilmore Girls*, Willow Rosenbaum of *Buffy, The Vampire Slayer*, and Andrea Zuckerman of *Beverly Hills 90210*

¹⁹ Examples include Lindsay Wier, *Freaks and Geeks*, Daria Morgendorffer, *Daria*, Winifred (Fred) Burkle of *Angel*, and Chloe Sullivan, *Smallville*

²⁰ Never Been Kissed, She's All That, American Pie (all released 1999)

²¹ After the character Laney Boggs of *She's All That* (1999)

²² Examples include Abby Sciuto, *NCIS*, Penelope Garcia, *Criminal Minds*, Dr. Temperance Brennan, *Bones*, and Liz Lemon, *30 Rock*.

²³ For examples, see "Idiot Nerd Girl" at KnowYourMeme dot com. For examples of the subversion of the Fake Geek Girl meme, see "A Challenger Appears for the 'Fake Geek Girl' at TheMarySue dot com. For a laugh at the sheer ridiculousness in this presumptive meme, see Patrick Willems parody horror trailer for "The Fake Geek Girl" on his YouTube channel "patrickhwillems" at http://youtu.be/7gOWt754qSE
²⁴ Westman,13

²⁵ The show is arguably popular: it was announced in March 2014 that CBS had renewed the show for an historic three seasons, in addition to the seven already aired, taking it through the 2016/2017 television season.

²⁶ See "The Millers Surges, The Big Bang Theory Tops Night as CBS Sweeps Thursday

²⁷ originally aired March 7, 2013

²⁸ These are paraphrased from the lectures of Dr. Doug Lawrence as pertains to screenwriting. Dr. Lawrence maintained that there were four standard female characters for acceptable (read: marketable) TV scriptwriting: the Brain, the Bitch, the Slut, and the Peacemaker. Characters could occasionally display traits of a combination of two or more of these tropes, but would always be best characterized by and would most readily display the traits of their single assigned role. (Lawrence)

²⁹ This is hardly unique, as the 2013 On-Screen Representations report by Martha M. Lauzen found that out of approximately 7,000 characters in 300 top-grossing films where females comprised just 15% of major characters, only 60% of the female characters had an identifiable "occupational status" which included "students" as well as professionals. And of those, when compared to male professionals, only 40% of the female characters were seen in their work setting and actually working, versus male characters at 61%. (CITE)

For an excellent discussion of Raj's "unique combination of shyness and creepiness," I recommend Juliette Harrisson's review on DenOfGeek.com for episode 7:17 "The Friendship Turbulence."

³¹ March 2014 price listed according to https://disneyworld.disney.go.com/tickets/

³² The \$200 approximation is based on the highest listed price for a child's makeover. There is no price listed for adult dresses and makeovers (https://disneyworld.disney.go.com/events-tours/downtown-disney/bibbidi-bobbidi-boutique-downtown/). According to Disboards users Minnie Mum and mom2rtk and in a discussion thread from March 2013, the park did at one time offer adult makeovers but began enforcing the age limit in 2013 in all park boutiques

⁽http://www.disboards.com/showthread.php?t=3076718)

33 This is an echo of Episode 5:23 "The Launch Acceleration" although in that episode it is Sheldonwho

initiates a Star Trek-role playing game where he was an even more enthusiastic participant than Amy, though she recognized it as a rare opportunity to connect intimately with him on his terms.

³⁴ Jowett, 36

³⁵ Episode 6:12 "The Egg Salad Equivalency"

³⁶ Episode 1:13 "The Bat Jar Conjecture"

³⁷ Episode 4:13 "The Love Car Displacement" It should be noted that in this episode the gang are at a conference because they are presenting a panel as a group, including Amy and Bernadette, titled "The Impact of Current Scientific Research on Societal Interactions." The panel dissolves into chaos when the characters' interpersonal relationships break through the superficial scientific discussion. Readers may watch a clip of the "funniest science conference ever" here:

http://www.youtube.com/watch?v=ZJvqSbsPRj8

³⁸ Conaway, 49, 51

³⁹ Conaway, 49

⁴⁰ The Doubleclicks website

⁴¹ Wheaton is best known for his having originated the role of Wesley Crusher on *Star Trek: The Next Generation*. He now runs a popular blog, hosts table-top gaming groups which are aired on his YouTube channel, is a regular figure at scifi and comic conventions, and has made several guest appearances as himself on *The Big Bang Theory*.

⁴² This is an homage to "You can't take the sky from me," quoted from the title song "Ballad of Serenity" from Joss Whedon's single-season television series *Firefly*. Despite its short tenure, the show has a passionate fan following whose combined support (along with Whedon's burgeoning popularity and power in mainstream Hollywood) led to a feature film, *Serenity*, which was released in 2005, two years after the show went off the air.

⁴³ "(G)lasses suggest a social cluelessness for these characters... 'signifiers of ugliness.' Glasses indicate that a female character is... uninterested in appearance, inexperienced in the world of romance, and lacking in the social skills that would allow her to recognize these facts and figure out how to become popular and attractive." Conaway, 50

⁴⁴ Jowett contends that brilliant women scientists, as depicted on television have to be hyper-feminine in some ways, and in others simply can't fight against the tropes assigned to their gender, namely, storylines that include romance and preclude action (45). They must seemingly make up for their masculine intelligence by hewing more closely to these popular precepts, and as long as they do so, viewers will neither expect nor demand a "better" women scientist.

⁴⁵ Episode 5:8, "The Isolation Permutation"

Wikipedia supports the positive reclamation of the word by noting that "the term is (also) used selfreferentially without malice or as a source of pride. Its meaning has evolved to connote 'someone who is interested in a subject (usually intellectual or complex) for its own sake. It also cites the word's "different connotations ranging from 'an expert or enthusiast' to 'a person heavily interested in a hobby."

- ⁴⁸ One example of this could be that if a man is seen wearing a superhero's logo, his general knowledge of the hero's origins or the world wherein the story takes place are not questioned; he is presumed a "legitimate" fan. When a woman wears a superhero logo, she runs the risk of being subjected to the "Fake Geek Girl test" alluded to in the song by self-appointed, expert fans. Tests vary, with questions that may include overt challenges like "Have you read the actual (comic) books or just seen the movies?" and implied illegitimacy couched in questions like "Is that your brother's/ boyfriend's/ Hot Topic's latest tshirt?"
- ⁴⁹ Quinn Norton pinpointed this perceived threat with reference to her experience with male-dominated role-playing games: "I was always an invader in the secret life of boys, where they are badass heroes or the voice of God. I wanted it too; I wanted a secret life... They told me I couldn't because I was a girl, and besides, I was crazy to want it. ... In gaming all the boys wanted me because I was a gamer girl, but they also wanted me the hell out of their fantasy lives. Boys get better fantasy lives. Go steal them." (Norton) ⁵⁰ According to Merriam-Webster, "one habitually cruel to others who are weaker." Given the predominant portrayal of geeks and nerds as physically small, the bully has traditionally been portrayed as preying on the same. In the context of the song, referring to "jocks" as being distinctly "other" than the speaker would support this.
- ⁵¹ Summarized from Wikipedia and the Wizards of the Coast website ⁵² Artist and Curator http://soyourlifeismeaningless.com/
- ⁵³ I assume (ha, ha) that the word choice is intentional as the level-8 dwarf described appears to be of the class Mage. Although the dwarvish "default" is a battleaxe, Mages rely primarily on spell-casting and thus have a limited range of weaponry to choose from. This range may include the axe, dagger, and quarterstaff, but "nothing awesome." This is according to veteran player Emma Chong, gaming specific to this realm since 2001.
- ⁵⁴ Merriam-Webster Online
- ⁵⁵ Summarized from the Oxford English Dictionary online and Merriam-Webster online
- ⁵⁶ Originally "lurker" was used in online forums to refer to someone who was a member but didn't post with any frequency. It has evolved alongside social media and connotes anyone who has a known habit of perusing others' activities (blog posting, check-ins, pictures, etc.) but never commenting lest they give away their online presence.
- ⁵⁷ For further exploration of hegemonic masculinity specific to online communities see Kendall, Lori ⁵⁸ The mash-up nickname for the coupling of SHeldon Cooper and AMY Farah Fowler, as given them by
- ⁵⁹ See Ann Finkbeiner's www.LastWordOnNothing.com; Vivienne Baldassare's www.physicistfeminist.com; and womeninplanetaryscience.wordpress.com
- ⁶⁰ See Laura Sneddon's www.comicbookgrrrl.com
- ⁶¹ See Stoker, Courtney's post online for several linked examples
- ⁶² See Mohammed, Hadiza and Wilkens, Kim

⁴⁶ This is in direct contrast to the male characters for whom musicianship is celebrated, such as the episode where Leonard's abilities garners an invite to the University's string quartet, although this storyline is a means to an end; his becoming a fourth in the quartet is what eventually gets him into bed with Leslie Winkle (Episode 1:05 "The Hamburger Postulate"). And despite Leonard's above-mentioned assertion that cello is in no way sexy, he has used his musicality to apologize and attempt to woo Penny, serenading her at her door (Episode 6:12 "The Egg Salad Equivalency"), and been asked to assist Howard in a romantic gesture by playing on a song the latter had written for the anniversary of his first date with Bernadette (Episode 6:7, "The Romance Resonance").

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