

GENDER-FLUID GEEK GIRLS:

Negotiating Inequality Regimes in the Tech Industry

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How do technically-skilled women negotiate the male-dominated environments of technology firms? This article draws upon interviews with female programmers, technical writers, and engineers of diverse racial backgrounds and sexual orientations employed in the San Francisco tech industry. Using intersectional analysis, this study finds that racially dominant (white and Asian) women, who identified as LGBTQ and presented as gender-fluid, reported a greater sense of belonging in their workplace. They are perceived as more competent by male colleagues and avoided microaggressions that were routine among conventionally feminine, heterosexual women. We argue that a spectrum of belonging operates in these occupational spaces dominated by men. Although white and Asian women successfully navigated workplace hostilities by distancing themselves from conventional heterosexual femininity, this strategy reinforces inequality regimes that privilege male workers. These findings provide significant theoretical insights about how race, sexuality, and gender interact to reproduce structural inequalities in the new economy.

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Sociologists studying occupational discrimination have produced a wealth of theoretically grounded empirical research on the reproduction of gender inequality (Acker 1990, 2006; Reskin 1988, 1993; Reskin and McBrier 2000; Reskin and Padavoc 1994). A stream of this scholarship developed into gendered organization theory. The foundational literature in this subfield contributed a number of key findings. These findings reveal that numerically underrepresented women in positions of power become gender tokens, and show that labor queues function to sort women into jobs and to devalue those jobs accordingly (Kanter 1977; Reskin 1988; Reskin and Roos 1990; Strober 1984). These structural constraints limit women's ability to control goals, resources, and outcomes; organize and oversee their own work; enjoy the same pay and monetary rewards as their male colleagues; and demand respect at work and in workplace interactions (Acker 2006, 443). Studies on gender inequality in science, technology, engineering, and medicine (STEM) have documented a prevailing climate that does not welcome women. Gender scholars have identified three ways in which women typically respond to this "chilly climate": (1) They downplay their femininity (Eisenhart and Finkel 1998; Faulkner 2000; Kvande 1999; McIlwee and Robinson 1992); (2) they neutralize their gender difference through discursive-positioning (Jorgenson 2002); and (3) they leave work in STEM fields, a pattern referred to by scholars as the "leaky pipeline" (Blickenstaff 2005). The limited numbers of black, Latina, and Native American women in STEM has led to studies that focus primarily upon the experiences of white, middle-class, and heterosexual women. An exception is Maria Ong, whose research illuminated the challenges that black, Latina, and Filipina American women physicists encounter when their bodily appearance is at odds with the more "ordinary" and unremarkable white, male scientist (2005, 596).

Our study departs from previous studies on STEM organizations in three important ways. First, we argue that jobs in the technology industry operate through a prestige system that differs from the "hard" sciences in which access and success is dependent upon the acquisition of a specific degree. The skills required for technical positions in the software and computing industries can be self-taught or learned on the job. Second, in striking contrast to the suggestion by male scientists that their endeavors operate in a "culture of no culture" (Traweek 1988, 162), tech firms

market their products as designed to “make the world a better place.” Their corporate discourses give the appearance of being democratic and progressive. Yet a series of recent high-profile sex discrimination cases and employee demographic data demonstrate that women are systematically excluded from leadership roles and technical positions at top tech firms (Conner 2014; Harkinson 2014; Jacobson 2014). Third, research on STEM has failed to provide an intersectional analysis of the ways that race, class, gender, and sexuality operate together to disadvantage black and dark-skinned Latina women. These women have experiences that distinguish them from white and Asian women, who represent racially dominant groups in these fields. We have learned from the whiteness studies literature that women of all racial and ethnic backgrounds are racialized and that their racial status can function as a symbolic form of capital or as a liability (Frankenberg 1993; Twine 1996, 1999, 2010; Twine and Steinbugler 2008). In this article, we examine how race, in addition to gender and sexuality, intersect to structure the experiences of women employed on male teams.

How do technically skilled women negotiate male-dominated environments in the tech industry? To address this question, we draw upon a qualitative study of 50 technology workers of diverse gender identities, racial and ethnic backgrounds, and sexual orientations. Here we focus on the experiences of 18 women who are technical workers on male teams. The majority of women employed at tech companies work with other women in nontechnical positions (sales, marketing, human resources, or recruiting). These nontechnical positions do not carry the same prestige or power assigned to programmers or engineers. Examining how women negotiate this occupational setting as racialized and gender minorities is important for analyzing structural inequality in the new economy. Our findings indicate that women who belong to the racially dominant groups in the tech industry, and who present as gender-fluid¹ and identify as LGBTQ, are better able to manage their status on male-dominated teams. However, black women who identified as LGBTQ did not report the same inclusion and acceptance from their gender fluidity. In striking contrast to their white and Asian counterparts, they did not achieve a status as “one of the guys” (Schilt 2006, 2011). We argue that these findings reflect a gendered *spectrum of belonging*—the dynamic forms of inclusion or exclusion that women experience according to their race, sexuality, and gender presentation. We build upon the framework of Joan Acker (1990, 2006) and her concept of *inequality regimes* to theorize how women in technical positions manage their gender and sexuality, embodiments that

are in conflict with the idealized tech worker. Drawing upon the experiences of women engineers, technical writers, and programmers, we will illuminate how this spectrum operates differently for women of varying racial-ethnic backgrounds, sexual orientations, and gender expressions.

INTERSECTIONALITY AND GENDER DISCRIMINATION IN THE WORKPLACE

Since the late 1970s, feminist sociologists have demonstrated that workplace cultures are not gender-neutral. In her analysis of the first generation of women in a New York corporation, Rosabeth Moss Kanter showed that numerical underrepresentation in positions of power was a woman's primary barrier to success. Consistent with her central claim that gender was an organizing force in the structure of corporations, Kanter observed, "While organizations were being defined as sex-neutral machines, masculine principles were dominating their authority structures" (1977, 46). Building upon this research, feminist scholars have complicated and strengthened this analysis to argue that gender ideologies structure how work is conceptualized and organized (Acker 1990). Gender impacts the ways that jobs, positions, and hierarchies are conceptualized and created in organizations. Men's advantages and women's disadvantages are opposite sides of the same inequality coin, produced in and through organizational practices. As organizations structure social norms, men and women routinely engage in practices of "doing gender" that reproduce gender inequality, even if unconsciously (Martin 2003; Schilt 2006; West and Zimmerman 1987).

In a groundbreaking study of transgender men, Kristen Schilt (2006) found that respondents succeeded at being seen as "one of the guys" by colleagues and coworkers following their transition. As a benefit of being read as cisgender males, trans* men received higher pay, enjoyed more authority, and experienced greater respect than they had received as women, even when they remained in the same job. Gender transition provided these respondents with new access to the "patriarchal dividend," or the myriad advantages that men in general gain from the subordination of women (2006, 465). Despite this important contribution, Schilt's findings leave unanswered the question of how nongender normative *women* negotiate occupational cultures that privilege heteronormative masculinity. Our study considers this question and also provides an analysis of how race and sexuality structure a cisgender

woman's experience in an occupation symbolically defined as masculine. By comparing the experiences of women from different racial-ethnic backgrounds, we suggest that gender fluidity, or a presentation of self that challenges gender binaries of dress and expression while maintaining one's gender assigned at birth, may allow white and Asian women to find acceptance among male peers. However, we find that black women's particular racialization restricts their acceptance in the same occupational climates.

Empirically documenting the reproduction of gender inequality in the workplace (Schilt 2006) is a challenge because gendered expectations about which jobs are best suited for women or men continue to be reinforced by ongoing occupational segregation.² Here we offer a case study of women who are negotiating twenty-first-century gender-segregated occupational environments as programmers, technical writers, or engineers. Their gender strategies illustrate both the enormous limitations that gender schemas (Valian 1998) continue to place on women workers as assumptions of essential difference, as well as the creative strategies women may use in response to environments that fail to be gender integrated. Our evidence suggests that gender distancing may only work for racially privileged white and Asian women, and that these strategies reinforce rather than undermine male privilege.

METHODS

Our study is based on interviews with employees working for technology firms in the greater San Francisco area. With a population of 852,000 people, San Francisco ranks 13th in population size among U.S. cities (U.S. Bureau of the Census 2014), yet it ranks first in the nation for the number of tech workers. San Francisco has the greatest high-tech-related job growth of any city in the United States. The tech workers who occupy these positions are predominantly white or Asian, male, and typically earn between \$100,000 and \$150,000 annually, placing them in the top 10 percent of the labor force.³ Interviews with tech workers were conducted over a 24-month period.⁴ Research began in the fall of 2014 and continued through the summer of 2016. Approximately half of the interviews were conducted in-person at the workplaces of participants⁵ or in a nearby public café. The remaining interviews were conducted via Skype. Interviews lasted between 60 and 120 minutes. Three avenues were used to recruit participants for our study. First, we contacted a manager at

one tech firm who became a key informant. After securing an initial set of interviewees, a snowball sampling method was used to identify employees at other firms and at several start-ups. Second, one of the authors attended a two-day “Tech Inclusion” Conference that took place in San Francisco during September 2015. They contacted attendees and presenters from the conference, and several of them agreed to participate in the study. Snowball sampling was also used following these interviews. Finally, one of the authors regularly attended dinners at an underground restaurant in the Bay Area and recruited San Francisco-based tech workers present at these events.

This article analyzes the experiences of a subset of women drawn from a larger sample of 50 men and women employed at tech companies. The workers we interviewed were employed in a variety of technical and non-technical positions at large firms and startups in the greater San Francisco area, including (but not limited to) Dropbox, Google, Salesforce, Square, Twitter, and Zendesk. While our sample is small, our case study provides empirical evidence about a population of workers who are difficult to access. Technology firms have been reluctant to release industry-wide or firmwide data, which could illuminate patterns of bias in hiring, promotion, and/or retention at tech companies. Given the absence of data on this industry, it is clear that qualitative case studies are needed to provide important data on the new economy.

This article draws on interviews with 18 women. Twelve of them were white, three were Asian, two were black, and one was white Latina. Our sample is also diverse in terms of sexual orientation: seven women identified as lesbian, bisexual, queer, or pansexual. Eleven identified as heterosexual.⁶ Seventeen of our participants identified their sex as female, and one as nonbinary trans*, although they chose to identify as female at work. Respondents ranged in age from 25 to 44. Their annual salaries were between \$75,000 and \$250,000. All of our participants had earned a college degree or graduate degree. Twelve participants majored in computer science, software, or electrical engineering, and six had earned bachelor’s degrees in noncomputing fields.⁷ Among the six who did not hold computer science degrees, four had completed coding boot camps after college, and two had earned master’s degrees in technical writing at elite schools (Table 1).

Prior to each interview, participants completed a survey that captured basic demographic data, including their age, race, childhood home, gender identity, sexual orientation, educational history, job title, and salary. Interviews were semistructured, and in a subset of questions in the interview

TABLE 1: Demographic Data of Participants

<i>Pseudonym</i>	<i>Age</i>	<i>Race/Ethnicity</i>	<i>Sexual Orientation</i>	<i>Job Title</i>
Sarah	41	White	Heterosexual	QA manager
Mercedes	27	White Latina	Heterosexual	Senior software engineer
Anastasia	29	White	Heterosexual	Software engineer
Crystal	45	Black	Heterosexual	Master technical trainer
Kate	28	White	Heterosexual	Software engineer
Jaime	28	Asian/Filipina	Lesbian	Software engineer
Samantha	32	White	Queer	Engineering manager
Cameron	30	Asian/Korean American	Pansexual	Technical writer
Tasha	28	White	Bisexual	Back-end engineer
Rachel	25	White	Straight	Technical writer
Jasmine	28	Black	Pansexual	Security engineer
Joy	23	White	Queer	Data visual analyst
Alex	25	White	Queer	Software engineer
Becca	43	White	Heterosexual	VP of product design
Nicole	23	White	Heterosexual	Embedded software engineer
Joelle	25	White	Heterosexual	Software engineer
Regina	24	White/Russian	Heterosexual	Software engineer
Britney	25	Asian/Chinese American	Heterosexual	Software engineer

guide, participants were asked to describe their workplace culture and interactions with direct coworkers. This included how they evaluated their “fit” with their team. All interviews were recorded and later transcribed manually.⁸ Notes were taken during the interviews about the respondent’s dress, physical features, mannerisms, and other details. Utilizing a grounded theory approach, we coded interview transcripts and used an open coding scheme to allow patterns to emerge inductively (Charmaz 2006; Glaser and Strauss 1967). Coded transcripts allowed us to identify a number of themes, including the form and degree to which participants felt accepted by their male coworkers. Triangulated with demographic information from surveys and physical descriptions from interview notes, we discovered consistent patterns of belonging among white and Asian LGBTQ women who identified as gender-fluid and/or presented as gender nonconforming; these patterns differed from the black women and heterosexual women in our sample.

A SPECTRUM OF BELONGING: WOMEN ENGINEERS ON MALE TEAMS

Geek Culture as an Inequality Regime

Our interviewees frequently described geek culture as a central feature of their workplace. What does it mean to be a “geek?” The term is currently associated with a specific class-inflected form of masculinity, masculine dress code, leisure activities, and personality traits. J.A. McArthur situates this term in a historical context noting that “geek,” like the term “nerd,” was once “an insult used to degrade and belittle intelligent outcasts” who demonstrated domain-specific intelligence and passion, but lacked social skills (2008, 4). More recently, “geek” has come to be a term used among millennials as “a label for those who demonstrate expertise in a certain field” (McArthur 2008, 4). This shift in meaning has paralleled the rise of the software and computing industries, with tech CEOs and founders achieving newfound wealth and power. Formerly something stigmatized, “geek” now has become an aspirational identity. We find that geek culture operates specifically as a racialized masculinity that shaped the environments in which our respondents worked. The tech workers we interviewed repeatedly claimed that one’s competence as a programmer, software engineer, or technical expert is evaluated, in part, by the degree of one’s geek-ness. Being perceived as geek is therefore a type of currency, a form of symbolic capital (Bourdieu 1994). Geekness is measured by one’s technical skills, but also by specific personality traits, styles of dress, interests, forms of cultural knowledge, and gender presentation.⁹ Geeks were described as individuals who enjoy computing-related hobbies, gaming, and watching television programs such as *Star Trek*, and who are fans of Japanese Anime.¹⁰

These findings illuminate a dimension that was missing in the analyses of Jane Margolis and Allan Fisher in their book, *Unlocking the Clubhouse: Women in Computing* (2012). In their interviews with more than 100 computer science (CS) majors at Carnegie Mellon, students described the typical CS major as “a person in love with computers, myopically focused on them to the neglect of all else, living and breathing the world of computing, at the computer 24/7” (McGuire 2002, 67). In addition to the “all or nothing,” antisocial work ethic identified by Margolis and Fischer, our respondents characterized computer “geeks” as white, Asian, and male. Thus, we argue that “geek” culture symbolizes a type of normative masculinity that is racialized and class-inflected.

As pervasive as it is in the software and computing industries, geek culture produces a unique occupational “inequality regime.” This concept

was first introduced by Joan Acker (2006) to describe the interlocking practices and processes that reproduce structural inequalities in the workplace. Acker claimed that all organizations have inequality regimes, which include “loosely interrelated practices, processes, actions, and meanings that result in and maintain class, gender and racial inequalities” (2006, 443). Even organizations that have explicit egalitarian goals tend to develop inequality regimes over time. These regimes do not exist in a vacuum, but are built from “inequality in the surrounding society, its politics, its history, and culture” (2006, 443). The concept of inequality regimes informs our analysis of how gender discrimination is normalized in technology firms and may be invisible to the men working on teams that have few or no women. Although racial and gender discrimination is not unique to the tech industry, the forms they take are specific to this industry and the forms of work most associated with it. The equation of a particular male embodiment with technical competence is pervasive in technology firms. The women we interviewed regularly described how these associations and assumptions negatively impacted the evaluations of their work.

The Cost of Being Conventionally Feminine: Microaggressions on Male Technical Teams

Our interviews revealed that heterosexual women who were conventionally feminine experienced routine microaggressions in their interactions with their male coworkers. Microaggressions are defined as “subtle, stunning, and often non-verbal exchanges” that function as put-downs for a person of a minority status (Russell-Brown 2009, 25). Although microaggressions are often unintended and may be invisible to the person enacting them, recipients experience them as hostile or threatening. In monocultural and male supremacist work environments, microaggressions are cumulative and may generate feelings of isolation, exclusion, shame, or fear in women and racialized minorities. Discussions of microaggressions have focused primarily on racial aggressions (Coates 2011; Goldsmith and Romero 2008; C. Pierce 1970, 1974; Russell-Brown 1998). In this section, we provide an intersectional analysis of microaggressions experienced by two gender-normative, well-educated women of different ethnic backgrounds.

Anastasia is a 29-year-old white, married, heterosexual woman, currently employed as a software developer. During the interview, Anastasia was dressed in a black form-fitting T-shirt. She wore black plastic-framed glasses, a wedding ring, and her shoulder length-blonde hair loose. She

decided to learn computer programming when her former occupation in biological research failed to provide the income and upward mobility she sought in a long-term career. With the financial support of her husband, a computer engineer, Anastasia enrolled in a 10-week certification program at an all-women's coding boot camp in San Francisco. Upon her completion of the program, she secured her first job as a software engineer through a referral from a female mentor. When asked if she ever experienced challenges as the only female developer on an all-male team, Anastasia replied,

I'm reminded every day that I'm the only female developer on my team for sure. . . . I'll be in a meeting and no one makes eye contact with me, they make eye contact with each other. And I know this isn't just in my head—I've talked to other women who have had this issue, too. And even in small meetings where it's you and two other people, and they [male developers] are talking to each other about *your* project! Or one of my male coworkers and I will talk to dev-ops¹¹ to ask questions about something . . . I'm the one asking the question, the dev-ops person . . . turns to my male colleague and explains [the answer] to him . . . it is *really* alienating.

Mercedes, another university-educated women, reported similar interactions with men at her company. A 27-year-old married, white Latina, Mercedes grew up in an upper-class family near Cancun, Mexico, and moved to the United States to earn a master's degree at Carnegie Mellon, one of the nation's top-ranked universities in computer science. Like Anastasia, she had long hair and wore glasses, a white T-shirt, and jeans during her interview. Mercedes worked as the sole woman on a team of white men. When asked about being the only women engineer on her team, Mercedes shared,

I didn't really care [at first] being the only one. But then you started noticing certain stuff. . . . When I make a decision, I get way more questions than the other guys. . . . It took me forever to earn the respect of some of my peers. And I'm kind of always freaking out that I'm going to make a mistake—that everything I've been working on is going to disappear.

Microaggressions often escalate into openly hostile actions. Describing why she left her team, Mercedes described a situation that began as a microaggression but developed into overtly abusive behavior:

The reason I actually switched teams was because I was getting tired of my manager . . . he would storm out to me and start screaming at me for something

that wasn't even my fault. . . . And I was like, "Calm down . . . it wasn't even my fault." I didn't agree with him talking to me like that in front of everyone else.

Outsider status was described as a serious problem for women on technical teams. Technical teams work collaboratively through a system of peer-based "code review," a process in which a person's teammates offer feedback on their code. A degree of discretion is therefore involved in determining what constitutes a "good" or "bad" solution to a technical goal or problem. Regular interactions among technical teammates tend to foster a sense of intimacy and a commitment. In Mercedes's words, your technical team is "your family, and your extended family is your department." For women in our sample, this close-knit team environment carried particular pressures to conform to a masculine culture or risk not being seen as a competent equal. It also meant, as seen in Mercedes's case, that assessments of whether someone's code is "good" or "bad" were interpreted through gender schemas (Valian 1998).

Although they had different ethnic and national origins, Mercedes and Anastasia both described how educational credentials and technical skills did not protect them from hostilities in their workplace. In contrast to male team members, these women were repeatedly asked to defend their work. Despite a twenty-first-century occupational context, their experiences mirror those of women in corporate and the academic environments nearly 30 years ago (Reskin 1988; Valian 1998). Unfortunately, there is no reliable industry-wide data on how many women choose to leave their teams or leave the industry altogether because of routine microaggressions. However, studies show that women employed in the fields of science or engineering leave their jobs in greater numbers (Blickenstaff 2005). The experiences of Anastasia and Mercedes suggest that microaggressions may be routine for women working on gender-segregated teams of the tech industry. Left uncorrected, practices such as explicitly sexual jokes, comments about women's body parts, and other fraternity-like hazing practices will drive women out of the profession.

Femininity as a Liability for Bisexual Women on All-Male Teams

Tasha is 28-year-old, white, and bisexual. She is employed as a backend software engineer for a social networking site.¹² She grew up in a small rural town in Wisconsin and earned her degree in software engineering and Spanish from a public research university. She later pursued a terminal master's degree in computer science. Upon graduation, she relocated to the San

Francisco Bay Area and was immediately hired at an enterprise software company with a starting salary of more than \$100,000. As the sole woman on a team of 12 employees, Tasha adopted a gender-neutral form of dress. During her interview, she wore her shoulder-length blonde hair loose with a black T-shirt and jeans, the typical uniform among the engineers we interviewed. When asked whether she ever felt out of place on an all-male team, Tasha compared herself to a female friend at work who dresses in conventionally feminine clothing and has to manage negative interactions with male coworkers. Describing her treatment by male clients on a business trip to China, Tasha recalled the disrespectful treatment she received from Asian and white male colleagues when she chose to wear a dress:

They took us on a trip to Mainland China to meet the main company . . . I was wearing dresses every day because it's hot and dresses are the hot weather "cheat coat." . . . And every single meeting, when I was introduced, as one of the engineers, there was an, "Oh!" One of their engineers just flat out stared at me and said, "Really!" . . . I was dressed up femme, and there was a constant disbelief when I was introduced to new people at the company.

Whether or not these men were responding to her wearing a dress, or to her simply being a woman engineer, Tasha identified this as a key moment in her consciousness about gender discrimination. When asked to describe the personality traits of the men she works with, all of whom are white, Tasha said,

Strangely enough I feel that the personality trait is being pushy, and *not being unique*. You don't talk about yourself. . . . You're just supposed to get the job done. And be efficient. . . . I wonder . . . if diversity calls attention to something that *is not* your tech expertise. So you're distracting.

Like in the military, individuality in the workplace did not appear to be rewarded or encouraged among the tech workers we interviewed. In this case, Tasha's whiteness, combined with her age, dress, and cultural style, allowed her to assimilate into a racialized and gendered occupational culture. Whiteness, like heterosexuality, has been described as a standpoint, a position of invisible power, in which one is marked as "neutral." It is often a taken-for-granted position of power for those who possess it (Frankenberg 1993; McIntosh 1998; McKinney 2005; J. Pierce 2003; Twine 2010; Twine and Gallagher 2008). Tasha went on to recount an incident that shows the degree to which she culturally resembles her male peers and is thus invisible as a female team member:

We had a team-building activity and we had to split up into two teams. We had just randomly shifted apart based on where we were sitting at the tables, and I was the only woman on my side. Most of the women in our company are in marketing, and design, plus our administrative assistant.¹³ But once we split up, my CEO, who is also a woman . . . she looked over and said, “Hey, we’re really unbalanced right now!” And one of my co-workers looks around on our team and says, “*Oh yeah! We don’t have any women.*” And then he spotted me and said, “*Oh shit, I’m sorry.*” . . . [laughs] . . . I don’t get treated differently because at this point, they’ve absorbed me as male. . . . I don’t dress particularly feminine, like . . . I’m wearing a dark T-shirt and jeans right now and that’s kind of my standard outfit.¹⁴ . . . At work, I’m loud, I’m silly, I’m friends with all of these people, I have a very dry, blunt sense of humor which . . . is very similar to the other guys on my team. . . . [I]t isn’t that they think of me “not as a woman” it’s that they think of me “like them.”

Tasha’s race and gender-neutral style positioned her as an “insider” within a male-dominated team and company. As a consequence, she was insulated from the microaggressions and gender-based discrimination that women who were conventionally feminine reported.

Feminist scholars have argued that gender, and specifically femininity, is a set of practices that function as a *performance*, distinct from assigned sex (West and Zimmerman 1987). We argue that femininity, or adherence to traditional gender roles, may be a liability for women in male-dominated technology firms. Under an inequality regime in which competence and cultural fitness is embodied as white, Asian, and male, women like Tasha negotiated their token presence as engineers by adopting styles, tastes, and habits identified with a race- and class-specific version of masculinity. While Tasha’s whiteness allowed her small victories with her male coworkers, our data suggests that the same may not be possible for gender-fluid black women.

Gender Fluidity: An Asset for Racially Privileged Women

The LGBTQ white and Asian workers who identified as *gender-fluid* in our sample avoided the routine microaggressions reported by conventionally feminine women like Anastasia and Mercedes. Women who identified as queer, bisexual, lesbian, or pansexual¹⁵ achieved this degree of acceptance, in part, by cultivating a style of communication and dress that made them virtually indistinguishable from their male peers. In this section, we introduce two women who represent this pattern.

Samantha, a 32-year-old white software engineer and a millennial, grew up in the Midwest. Classified as female at birth, Samantha (aka Sam) identifies as *nonbinary trans** outside of work, but as female in her workplace.¹⁶ In 2007, Sam earned a combined bachelor's and master's degree in computer science from one of the nation's top-ranked programs. Dressed in a black T-shirt, jeans, and a hoodie sweatshirt during her interview, Sam conformed to the dominant dress style found among the engineers we interviewed. She also wore her hair short, metal-framed glasses, and no makeup. A biological female with a feminine name, Samantha described her decision to identify as female at her job as a way to avoid confusion among her coworkers and supervisors.

In Sam's analysis, certain positions in the industry are defined or perceived as masculine positions, but not necessarily based on biological sex. She believed that the meanings attached to *femininity* are the problem for women, saying, "It's femininity that really doesn't correlate well with certain professionalized roles." When asked to clarify, Sam explained, "I think it would be difficult for a woman . . . to be very feminine because it's [engineering] such a non-feminine space, and part of the subculture is a creation of nerdy masculinity." When asked why a male-dominated space feels more comfortable for her, Sam replied,

For me, navigating the male-dominated world is like way more familiar. . . . I didn't really know how to have female friendships, or relationships . . . until five years ago. So to me it [male space] was a more comfortable space. I didn't really fit in, but I didn't fit in anywhere. . . . It's a funny thing, me being trans*, in that *I'm taking a more masculine expression and . . . I think that actually helps me . . .* it'd be a lot different if I were kind of transgressing gender in a different way. It would probably be a lot worse, actually, the way these things work.

Here we see the heightened awareness that Sam possesses about how femininity is a liability in her role as a software engineer. Her statement that having a more masculine expression "actually helps her" demonstrates how her gender fluidity is a strategic asset to achieve respect and secure belonging among her male colleagues.

Cameron is a 30-year-old Korean American technical writer who identifies as pansexual and gender-fluid. Cameron grew up in New York in what she described as a middle-class household. She was raised by her mother, a stay-at-home parent, and her father, a ceramics engineer. In 2007, she graduated with a bachelor's from a state college in New York.

Cameron's first job in the technology retail sector led her to pursue a career in technical writing. After earning her master's degree in this field, she was hired to work at an enterprise software company in Silicon Valley. She now works at a startup firm in San Francisco. Cameron entered the industry through her male roommates, all of whom were employed in technical support and sales positions at a computer retail store. In her retail position, she learned how to minimize her femininity, which enabled her to achieve acceptance as a computer technology expert among her male coworkers. When asked to describe her coworkers, Cameron said: "90 percent of the people who taught me about technology in that store were cisgender men, and mostly white." She explained that at work, she learned to keep a "lid on" issues of gender discrimination and racism, saying,

I learned to be less outspoken. . . . I learned to be a lot less outspoken about racist jokes, a lot less outspoken about people's perception of me—like hate speech. There was some line where it was crossed, I was like, ok, now I need to say something. But in general, it was about blending in, to be one of the guys.

Cameron was convinced that her ability to culturally "pass" as one of the guys played a major role in being treated as a competent employee by customers and colleagues. This was in striking contrast to her two feminine coworkers, whom she claimed: "Didn't last very long. They were moved into departments for not picking up on technical knowledge." When asked for her analysis of this situation, Cameron said:

Their [male coworker's] ineptitude was more acceptable because they were still one of the guys. . . . You don't need to know anything about technology to sell to that customer; you just have to talk to them. And unfortunately, there were many times where people would ask me a question only for me to see them walk to a male associate and ask them the same question or tell me flat out to my face that men just know more about that kind of stuff. Some of that was about me trying to figure out the line of being gender queer . . . where does being masculine and being male, and being feminine and being female, fit in when you're both? . . . I did act more to be one of the guys.

Part of "acting like one of the guys" involved sanctioned activities in which associates would sexually profile female customers whom they considered attractive and alert their male coworkers:

There was a system—I remember this. The guys at the security station would make a loud, popping noise and it was to let all the guys in the store know that a hot girl had walked in.

Here we see the value of Cameron's gender-fluid sexuality. It enabled her, as a female working on a male team, to be included in activities that reinforced the sexual objectification of women and the patriarchal dividend (Connell [1995] 2005). This was one way Cameron gained insider status in an all-male culture that otherwise excluded women. She experienced upward mobility in technical positions, while her femme peers were moved to nontechnical teams or forced to resign.

The Limits of Gender Fluidity for Black Geek Girls

Jasmine is a 28-year-old black pansexual woman who works as a security engineer.¹⁷ She grew up in the South and earned a degree in computer engineering from a private university in the Midwest. During the interview, Jasmine wore her hair tied back in a bun, no makeup, and a black T-shirt paired with jeans. Jasmine's first break in the tech industry came when she secured a competitive internship at one of Silicon Valley's top technology firms following her college graduation. While the program ended with most of her peers being recommended for jobs in the same organization, Jasmine reported that she and another black woman, the only women in their cohort of 30 interns, were not hired. From Jasmine's perspective, not being hired was based upon professional neglect and not receiving the training and support that her male peers received. This resulted in negative performance reviews. She described a pattern of neglect in which she was denied meaningful mentoring. Despite being an intern, her performance reviews were not accompanied with mentoring, or advice on how to improve. When Jasmine began a rotation in a customer support role, a requirement of her internship, a male peer reported to their supervisor that Jasmine was not "being customer friendly" and that she "hadn't provided accurate information." She described the consequences of this action in the following way:

Whenever I went to a performance review, it said I under-performed. And consistently half of my time during the program was trying to get out from being under-performed. Like I under-performed in their eyes so much that I had to be put under a performance review . . . the last shot before they fire somebody. Throughout this process, as a person who strives on doing well and doing good work, I consistently asked my manager, "Okay, what am I

doing wrong? What do I need to do to improve?" . . . I'd get answers like . . . "Give your manager more ammo so he can tout what you're doing." And so I did. I wrote copious amounts of notes of whatever I was doing daily, of projects I was working on. But it didn't seem like that it was enough.

Jasmine was told by her company-appointed mentor to inflate her accomplishments, a gendered practice of self-promotion that is commonly employed by men after a negative performance review. This was not advice about how to actually improve the quality of her work. Jasmine also explained how the standards of performance she was evaluated by did not apply equally to her white male peers:

In the first couple weeks of the program, there was one guy that I remember, he had basically taken advantage of . . . a loophole, in order to do a practical joke. But it was basically indirectly breaking into people's machines without asking. And he got in trouble . . . he got our whole entire class in trouble. We got delayed by weeks for that. On top of that, another guy basically posted a porn . . . a sexually averse thing. And with both of these guys, they (my managers) were like, "Okay, you get a pass. They're new. They don't know what they're doing. It's okay." . . . *They were both white guys. And there was empathy there. But when it came to my little faux pas . . . I feel like there wasn't empathy . . . both of those guys who fucked up in the beginning, they ended up getting full-time jobs at [name of the company omitted] at the end of the program.*

A challenging interaction with a customer, during an internship that was designed to train recent college graduates, abruptly ended Jasmine's transition into a high-paying tech company. Yet the egregious behavior of her two white male peers—one that posted sexist and pornographic materials on a company server and another who violated security measures by breaking into his colleagues' computers—was not grounds to fire them. Instead they were offered promotions as full-time employees. Here we see how an occupational culture that tolerates pornography, and other frat-boy practices, can powerfully overdetermine assessments of competence and beliefs about who is a qualified worker. In Jasmine's case, being the sole black woman on a white and Asian all-male team became a concrete barrier that could not be overcome by gender fluidity. In short, despite being gender-fluid and wearing the androgynous tech uniform, Jasmine never achieved the status of being treated as "one of the guys." In contrast to the white and Asian women we spoke with, Jasmine was excluded from informal activities and social gatherings with male coworkers and evaluated as an underperformer by her manager. She was neither mentored nor given

an opportunity to achieve success within her company as an intern. Instead, she was forced to leave the organization. Unlike Cameron and Samantha, Jasmine is now part of the “leaky pipeline.”

CONCLUSION

In this article, we use an intersectional analysis to demonstrate how gender expression and sexuality, in concert with race, position racially dominant LGBTQ women on male occupational teams. Our case study and findings contribute important theoretical insights to the literature on women in the technology industry. In contrast to earlier studies that show how women achieve acceptance by downplaying their femininity, our research demonstrates that gender expression is complicated by the intersecting inequalities of race and sexuality. In other words, race and sexual orientation co-determine whether a woman is allowed to be treated and accepted as “one of the guys” in occupational environments where white and Asian men are the dominant group and symbolically represent the ideal employee. We found that gender-fluid white and Asian women who identified as queer, bisexual, lesbian, or pansexual achieved the respect and social acceptance of their male peers. This granted them small victories in gender-segregated workplaces otherwise hostile toward women. As a strategy, gender fluidity may provide *conditional acceptance* for racially dominant women working on all-male teams, but it does not challenge the underlying idea that the most competent designers of software solutions are white, Asian, and imagined to be male. Thus, gender-fluid geek girls face a dilemma. In conforming to an industry-specific norm of masculinity, their conditional inclusion leaves male supremacy intact.

We argue that a gendered *spectrum of belonging* operates in occupational cultures where masculinity and heteronormativity are the norm. We conceptualize this as the ways in which nonnormative gender expressions allow gender-fluid women to find acceptance in occupational environments dominated by men. Racially privileged women in our sample, who did not present as conventionally feminine, were perceived as more competent by their male colleagues. In contrast to their white and Asian counterparts, Black women in our sample did not report receiving the same benefits from gender fluidity; they were instead evaluated primarily by their racial status (Valian 1998). Our study expands and complicates earlier research of gender scholars by showing how cisgender women who deploy gender flexibility or fluidity experience workplace benefits similar to those of transgender men (Schilt 2006). By not presenting as “femme,” and thus

not as heterosexually available, gender-fluid women in our sample enjoyed patriarchal dividends (Connell [1995] 2005) that included greater respect and acceptance, and positive evaluations of their competence.

Further research is needed on the nuanced ways that sexuality, in concert with race and class, structure the experiences of women in the new economy. We believe that such studies are particularly important for the tech industry, where black women and brown-skinned Latinas are rarely hired and experience higher rates of attrition in the industry. Technology is the most powerful industry of the early twenty-first century. The occupational environments that produce the software and computing solutions of our time demand more scholarly attention from race, gender, and sexuality scholars who seek to understand the resilience of inequality regimes. We hope that our study inspires further critical work on this industry.

NOTES

1. We borrow this term from one of our participants to describe a presentation of self that is androgynous in style.

2. This remains the case in a range of occupations including medicine, law, and hard sciences (Schilt 2006; Valian 1998; Williams 1995).

3. In May 2014, Google released the demographics of its employees. Among technical workers: 83 percent were men, 60 percent were white, and 34 percent were Asian (Jacobson 2014). Demographic representation of technical workers was similar at other top tech companies that released their diversity numbers during the same period, including Facebook, Twitter, Apple, LinkedIn, and Pandora, although there were cases of technical teams with greater proportions of Asian workers (see Conner 2014).

4. In the latter phase of research, we found Skype to be a more effective means of conducting interviews with tech workers who had demanding work schedules and were already socialized to conduct professional interactions with video technologies.

5. These interviews were conducted in a private meeting room with a door to ensure privacy.

6. We use the term trans* to refer to individuals whose gender identities do not correspond to their sex assignment at birth.

7. We define computing-related fields as software or electrical engineering, computer science, or technical writing.

8. Participation in this research was voluntary. All tech workers interviewed signed informed consent forms and were told that they could withdraw from the study at any time. All participants have been given pseudonyms. We also use generic descriptions of employers rather than the name of the company in order to protect their identity and confidentiality.

9. This kind of cultural knowledge is what Pierre Bourdieu calls *habitus*. He describes these “structuring structures” as dispositions and tastes that are cultivated primarily through one’s class position and interactions with other members of their class. Even when these dispositions are unconscious, they are practiced in ways that constructs and reproduces class difference in everyday life (Bourdieu 1984).

10. “Gaming” references the activity of playing video games online or on a personal gaming device. Anime is a genre of Japanese visual culture that features hand-drawn or computer-generated animation.

11. Dev-ops is a type of computer engineering. According to a 2015 article in the industry website, TechCrunch (<https://techcrunch.com/2015/05/15/what-is-devops/>), Dev-ops engineers perform both coding tasks (referred to as “development” tasks) and operational infrastructure tasks such as server provisioning (activating or making a server system available). Their work involves communicating between software engineers and information technology (IT) professionals and may include automating the process of software delivery and making infrastructure changes.

12. Front-end engineers tend to work on a consumer-facing side of a software product or website, whereas back-end engineers tend to work on the “server-side” of that product or website. Work functions of back-end engineers can include managing security and ensuring that databases are functioning to properly load content.

13. This administrative assistant was the only black person at Tasha’s company.

14. All of the women and men engineers we interviewed had an approximation of this same outfit during their interview. It was nearly always jeans and a black T-shirt, or, if weather demanded it, a dark-colored hoodie sweatshirt.

15. Pansexual, as defined by Jasmine, was about being attracted to people no matter their gender identity, sexuality, or sex assigned at birth. She said that unlike “queer,” a political frame that aims to challenge the homo/hetero binary with sexual orientation, pansexual was a more inclusive concept that included people across a spectrum of gender identities and sexual orientations. As she said, “I’ve been attracted to a lot of people, and it’s not just male or female. Some of them have been trans.”

16. Sam’s preferred pronoun is they/them outside of work. However, since this article is concerned with experiences in the workplace, we refer to her as she.

17. Security engineering includes a wide variety of roles involving the security of software or IT systems.

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