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"Free as in sexist?" Free culture and the gender gap

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Abstract

Despite the values of freedom and openness, the free culture movement's gender balance is as skewed (or more so) as that of the computing culture from which it arose. Based on the collection and analysis of discourse on gender and sexism within this movement over a six–year period. I suggest three possible causes: (a) some geek identities can be narrow and unappealing; (b) open communities are especially susceptible to difficult people; and, (c) the ideas of freedom and openness can be used to dismiss concerns and rationalize the gender gap as a matter of preference and choice.

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Introduction

In the summer of 2010, David Fincher and Aaron Sorkin's film about the beginnings of Facebook (*The social network*) attracted much discussion about the portrayal of women. Tracy Clark–Flory (2010), writing for *Salon*, asked why "women in one of the greatest Web innovations" were "one–dimensional characters playing gold–diggers, drunken floozies and that 'bitch' who got away?" This popular discussion about female participation and representation paralleled recent discourse in the Free/Libre and Open Source Software movement (FLOSS or FOSS). Skud (2009), a blogger at *Geek Feminism*, noted that 2009 was "shaping up to be a watershed year for women in open source. We have seen numerous high profile incidents where men have made remarks in conference presentations which have dismissed, marginalised, or upset women". In late 2010, the conversation moved beyond offensive presentations to active discrimination, harassment, and assault among conference participants (Shirley, 2010; Aurora, 2010). At the start of 2011, popular attention returned to the question of female participation by way of a *New York Times* article about Wikipedia's gender gap (LaVallee, 2009; Cohen, 2011).

In light of decades of work on bias in technology–related fields, it is startling that an imbalance in participation not only persists, but is exacerbated, in communities founded upon the liberal values of freedom and openness. Furthermore, this effect is present in projects like Wikipedia, which need not be overly technical (the focus of earlier literature) but share the liberal values and geeky esprit of software communities.

I argue the gender gap is, in part, a consequence of the culture, dynamics, and values of these communities.

First, free culture can be unappealing to those unable or unwilling to hew to the stereotypical features of the online geek (*i.e.*, an identity associated with an intense and narrow interest and argumentative style). Also, these communities' openness means that a minority of difficult members (including, for example, a sincere misogynist or an insincere troll) can disproportionately affect the tone and dynamics of interactions. Finally, the ideology and rhetoric of freedom and openness can then be used to (a) suppress concerns by labeling them as "censorship" and, to (b) rationalize low female participation as simply a matter of women's choice.

This argument is akin to that made by Jo Freeman (1996) in 1970. Then, Freeman noted that the values and rhetoric of egalitarianism in feminist collectives could also, ironically, give rise to a "Tyranny of Structurelessness" whereby unelected and unaccountable "elites" come to dominate the group. Presently, aspects of the free culture movement, including the values and rhetoric of freedom and openness can also, ironically, create informal but significant barriers to women's participation. For example, in her studies of early online communities, Susan Herring (1996) noted how an ideology that valued personal freedom and meritocratic assertiveness favored some male discussants. These same values are not only present in the free culture movement, the movement is now the most vital and popular manifestation of this early Internet ethos.

Background

I focus on communities in the free culture movement: communities that produce free works with few formal constraints on participation. The term "free culture" was popularized by Lawrence Lessig (2004) with a book of the same name. This idea was inspired by FLOSS, such as the Firefox Web browser and Linux operating system kernel. This software is licensed such that users can read and improve the source code of the software they use. FLOSS proved to be a compelling alternative to proprietary software that restricts what a user can do, including making backups or fixing bugs. (The terminology of and factions within this movement are complex, but, in short, "free software" tends to be associated with the ideology of freedom, "open source" with the openness of the development process, and "libre" with those concerned about confusion from the previous two. FOSS/FLOSS are used as monikers to refer to all of these meanings.) While such software can be obtained for little to no money, advocates stress that the important value is "free as in freedom, not as in beer." Hence, the collaboratively authored "Definition of Free Cultural Works" defines them as any work or expression (*i.e.*, software, prose, or media) that "can be freely studied, applied, copied and/or modified, by anyone, for any purpose" (Defined Freedom, 2008). This movement is also strongly associated with geek culture. A geek has a passionate enthusiasm; to be geek is "to be engaged, to be enthralled in a topic" [1]. While one can "geek out" about most any topic (*e.g.*, a "reef geek" is into aquariums) the term is most commonly associated with the online domain.

In 2007 women in computing–related positions were approximately 27 percent of the profession (National Center for Women & Information Technology [NCWIT], 2007). Yet, in FLOSS communities, women are a tiny fraction of participants — 1.1 percent in one often cited FLOSS survey [2]. One would hope that because of its greater accessibility and range of topics Wikipedia would have balanced participation but surveys indicate that women constitute less than 13 percent of Wikipedians (Nov, 2007; Glott, *et al.*, 2010). However, related figures do indicate that these imbalances are significantly affected by social context. (It is more than a simple choice by individuals.) For example, among Wikipedians who gender–identify in their profile, women are 12 percent of the Wikipedians on the German encyclopedia but 23 percent of those at the Russian one (Reagle, 2011). Also, 40 years ago there were few women in computing. (Ironically, around World War II "computers" referred to human operators of mechanical and vacuum–tube based machines, many of whom were women [Light, 1999; Grier, 2005].) Eventually women began to enter the field with their share of computer–related positions peaking in the 1980s — but declining since (NCWIT, 2007). Contemporaneously, culture and environment can be significant determinants of women's participation in computing. One can see this in the micro–cultures of a particular college or programming methodology as well as in cultures where computing is seen as a good career path rather than a masculine or personality–driven type activity (*e.g.*, Palestine, Qatar, and Malaysia) (Blum, *et al.*, 2008; Lagesen, 2008).

Scholars of FLOSS have posited a number of reasons for the likely imbalance in participation. Yuwei Lin (2005), one of the first scholars to look at gender in these communities, identifies hindrances to participation including a lack of mentors and role models, discriminating language usage, a male–dominated competitive world view, and a lack of women–centered perspectives. Based on their interviews and survey of FLOSS contributors in 2006 (yielding the 1.5 percent figure) Dawn Nafus, James Leach, and Bernhard Krieger (2006) find that "women are actively (if unconsciously) excluded rather than passively disinterested" via social arrangements; this exclusion is masked by a focus on individual autonomy and a denial that gender is an issue. Furthermore, women received disproportionate (discomforting) attention and were viewed as outsiders or technically inept. Many women and newcomers found inflammatory talk off–putting. Finally, women reported they were not able to spend as much time on voluntary activities as men. This latter point relates to the "double shift" of female time and is aptly captured in the title of a chapter in Jelena Karanović's (2008) dissertation: "Free Software Is for Free Men" —

taken from the wry observation of a female participant in the French FLOSS community who had numerous family obligations others did not [3]. Dawn Nafus (2012) subsequently argued that the culture of FLOSS itself is problematic. While FLOSS is often likened to a gift culture through which exchange creates ties and obligations, in reality code is readily given away without concern of what people do with it; it is a way of cutting ties. Other communication with users of the code, such as in producing manuals, is seen as women's work. Furthermore, "acrimonious talk", a type of "pushyocracy", alienates many and the attendant presumption of agency and choice hides the ways in which women's participation is mediated. Consequences of this imbalance are apparent at Wikipedia, where it may lead to disproportionate coverage, such as the under–representation of women on its front page, or their overrepresentation among missing biographies (RMJ, 2010; Reagle, 2011; Headbomb, 2011; Lam, *et al.*, 2011; Antin, *et al.*, 2011; Collier and Bear, 2012).

Beyond the issues of participation and representation, gender imbalance may affect knowledge production itself. In a 2010 *Science* article, researchers reported evidence of a "collective intelligence" factor that was less related to a group's average or maximum intelligence than to average social sensitivity, conversational turn–taking, and the proportion of women in the group (Woolley, *et al.*, 2010). Sandra Ordonez (2011), former communications manager at the Wikimedia Foundation, also touched on this when she argued that women should be encouraged to participate at Wikipedia so as to improve the quality of information and strengthen the community.

In sum, there is evidence that social context affects female participation and that content and collaboration can be enhanced by more balanced participation.

Method

My argument is based upon a naturalistic inquiry (Lincoln and Guba, 1985; Thomas and Jones, 2006) into gender and sexism in the free culture movement since 2006. At that time I was researching the meaning of "openness" in online communities when WikiChix was established as a female–only Wikipedian e–mail list; this prompted much discussion as it was counter to prevailing open–but–women–focused fora such as LinuxChix, Ubuntu Women, Debian Women, and KDE Women. Hence, as a researcher, user, and peripheral participant of Linux, Ubuntu, Debian, KDE, Python, Web development, and Wikipedia, I collected every instance I encountered of public discourse about gender and sexism in these communities. Sources for these discourses include specific community related e–mail lists and Web sites (*e.g.*, Planet Ubuntu), broader fora (*e.g., Linux Magazine* and Reddit), and women–focused fora (*e.g.*, the *Geek Feminism* blog and wiki). While this selection of sites spans various projects, they are instances of a larger "free culture," as Lessig (2004) tagged it in 2004. The arrival of the *Geek Feminism* blog in 2009, further identified it as a community (related to FLOSS, hacker culture, and wikis) in which gender and sexism was salient. While I reviewed the archives and Web pages of many women–focused fora; my personal engagement was limited to irregular comments at *Geek Feminism* and Wikimedia's gender–gap e–mail list.

My notes contain 200+ primary sources (*e.g.*, e–mail messages and blog postings) on imbalance and sexism in FLOSS and these are the basis for the account I present. My analysis consisted of iteratively coding (and recoding) the content of these sources into various categories, a type of "theoretical sampling" or "emergent design" [4]. Some of the resulting categories (and sub–categories) included: bias, gender exclusivity, freedom and ideology, identity (including geek feminism and imposter syndrome), the gender imbalance/gap, openness (including anonymity and friendliness), and sexism. Drafts of this analysis were shared with members of the community for corrections and feedback.

The argument

Despite the values of freedom and openness, the free culture movement exhibits the same (or worse) imbalance in female participation as the computing culture from which it arose. In addition to the reports from women as to why they've found participation in FLOSS to be difficult (*e.g.*, lack of female perspectives and role models, off–putting language, and lack of time) I argue that some otherwise commendable features of the free culture movement also contribute to the gender gap. That is, the geek stereotype and discursive style can be unappealing, open communities are especially susceptible to difficult people, and the ideas of freedom and openness can be used to dismiss concerns and rationalize the gender gap as a matter of preference and choice.

On being a geek

In 1986 Richard Stallman, exemplar hacker/geek, described the emergence of a passionate hacker culture at MIT's Artificial Intelligence (AI) Lab, including the tradition of sleeping there:

> I've always found it very comfortable, as well as nice and cool in the summer. But it was not at all uncommon to find people falling asleep at the lab, again because of their enthusiasm; you stay up as long as you possibly can hacking, because you just don't want to stop. And then when you're completely exhausted, you climb over to the nearest soft horizontal surface. (Stallman, 1986)

Yet, another member of the AI Lab found this to be disturbing. In 1976, two years after Stallman arrived at MIT, Joseph Weizenbaum wrote that these "compulsive programmers" have their junk–food brought to them and "work until they nearly drop, twenty, thirty hours at a time". After sleeping on a cot near the computer, they return to their consoles. "Their rumpled clothes, their unwashed and unshaven faces, and their uncombed hair all testify that they are oblivious to their bodies and to the world in which they move" [5]. Indeed, the "unkempt beard" has been argued to serve as a marker of masculinity and a rejection of mainstream mores (Dunbar–Hester, 2008).

Beyond a passionate intensity for computers and unkempt appearance, geeks are sometimes known for a rigid and argumentative discursive style. For instance, Stallman is also known as an ideologically passionate and consistent advocate who sometimes puts people off. (The most recent controversy of this was Stallman's sharp eulogy of Steve Jobs for Apple's "malign influence on people's computing" [diegogomes, 2012].) Indeed, it was the image of the hacker arguing about "freedom" that led to the adoption of the "open source" label: "We realized it was time to dump the confrontational attitude that has been associated with 'free software' in the past and sell the idea strictly on the same pragmatic, business–case grounds" (Open Source Initiative [OSI], 2006). This identity associated with the "compulsive programmer" with a "confrontational attitude" can be alienating to those beyond the business world.

Geek identity

Nerd and geek identity have historically been understood as being both white and masculine [@Eglash2002rs; Nakamura1998rci]. Behavioral traits associated with this identity are similarly, traditionally, circumscribed. In the mid–80s Sherry Turkle described a "computational reticence": women objected to the intimacy accorded to machines rather than people and a culture dominated by "images of competition, sports, and violence" [6]. Bente Rasmussen and Tove Håpnes found female CS students who did not want be associated with the dominate identity of "key–pressers", *i.e.*, those who were not able to talk about anything beyond computers [7]. Most recently, Jane Margolis and Allan Fisher found that many female CS students "are alienated from and resistant to a culture they find insular, isolating, and 'out of balance'. 'Scary' and 'afraid' are words that recur again and again". And not only women felt this way. While 69 percent of the female students reported feeling different from the majority obsessed with computers, 32 percent of male students felt the same. Yet, this sense of alienation was likely more damaging to women because "women report more distress and are more affected by the perceived differences between themselves and their peers" [8]. The profoundness of this alienation is hinted at in a recent study that found even an "ambient environment" of stereotypical geeky items in a room (*e.g.*, science fiction memorabilia and junk food) depressed female undergraduate interest in computer science (Cheryan, *et al.*, 2009).

In 2012 a new variant of geek identity gained popular attention, the "brogrammer", or what happens "When computer nerds become frat boys" (Fores, 2012). That is, in place of unwashed computer obsessives we have "developers who are much more sociable and like to go out and have fun" (Gagan Biyani quoted in MacMillan, 2012). Yet this willingness to leave one's computer screen for social interactions is not associated with increased gender diversity, but a "frat–house" culture. The "brogrammer" parties, binges on beer and Red Bull, and can "bro down and crush code" (Rust, 2011). While some of the exaggerated depictions are likely ironic, it also signifies a masculine–only space (*e.g.*, "can work well under the tightest deadlines, or while receiving oral sex; maintains a solid 120 wpm on the keyboard while drunk and dancing") (brogrammer, 2012). As Ruchi Sanghvi, Facebook's first female engineer, noted the creation of a "brogramming page" by her male colleagues furthered the sense of her work environment as "boys' club" (Bosker, 2011). (And this ameliorated by the inclusion of "hogrammers" [Carter, 2012].)

Consequently, scholars and community members wrestle with the question of what does it mean to be a geek and female? For instance, Rhiannon Bury's interviews with women working with information technology (IT) found that their geek identifications "were equivocal, ambivalent and context dependent": "They were at risk of being assessed by themselves and others as either too geeky in relation to non–technical woman or not geeky enough in relation to male IT experts." [9] Hence, others have found it necessary to articulate and advance the idea of a geek feminism. In 2002 linguist Mary Bucholtz (2002) coined the term *geek feminism* to identify a perspective that acknowledges the concerns of feminism while preserving a commitment to geek identity.

In the summer of 2009 this idea (coincidently) appeared in a material form by way of the *Geek Feminism* blog; the blog and wiki are about women "in a range of geeky cultures/communities/activities" such as the technology industry and sci–fi fandom, as well as FLOSS, hacker culture, and wikis (Geek Feminism, 2011a; 2011b). Here, and elsewhere in the community, people are co–opting or countering stereotypes and articulating and claiming a female geek identity. For example, Kathy Sierra (2006), a popular technology writer, argues "coding like a girl" is a positive in that good code is beautiful, simple, and elegant. (Unfortunately, about a year later Sierra was subsequently the target of virulent gender–based harassment.) A posting on *Geek Feminism* enthuses over nerdy jewelry and Ada Lovelace Steampunk fiction while asking "Who says geeky can't be feminine?" (Melissa, 2011). (Steampunk is a fantasy genre set in the nineteenth century that is characterized by steam power and clock works. Lovelace famously wrote an algorithm for Charles Babbage's (unbuilt) mechanical computer from this time period. Hence, Lovelace has become an icon for geek feminists, as further seen in the Ada Iniative, a "non–profit organization dedicated to increasing participation of women in open technology and culture" [Ada Initiative, 2012].) Dru Lavigne (2009), Director of Community Development for the PC–BSD project, attempted to reconcile different aspects of her identity: "A good friend once described me as 'a woman, wrapped inside an artist, wrapped inside an engineer, wrapped inside an excellent storyteller'. All traits that I try to bring along when I contribute to the BSD community". However, the history of associating geekdom as a male space and its defining enthusiasm has implications beyond identity.

Geek behavior

Some (typically) masculine styles of discourse and an intense focus may obscure broader human interests and interaction. Susan Herring's 2003 review of over a decade's worth of literature asked why do gender disparities persist in a new medium championed for its alleged accessibility, egalitarianism, and gender–negating anonymity? [10] Herring concluded that in online discourse one can still find (in general) that males and high–status participants tend to dominate online interaction, even under anonymity; men use more aggressive tactics; women are more likely to react adversely to aggression and fall silent or drop out; and, women are targets of male intimidation and harassment. In the FLOSS context, Dawn Nafus (2012) notes that while it is assumed that "good code would speak for itself", "in reality authors must vociferously defend their proposed code in order to demonstrate knowledge and establish what good coding is: that is, they must create the truthfulness of code, and thus technology's edge, through highly masculinized, aggressive online talking" [11]. While the option to use a pseudonym is appreciated by some women, it typically does little to change the power dynamics or styles of discussion (Selfe and Meyer, 1991).

These issues of focus, passion and (typically masculine) disursive style are also germane to the free culture context. In terms of focus, Lavigne (2009) argues that those projects that think about roles beyond software coding "will be both richer for the experience and pleasantly surprised to see how many women pop out of the woodwork". In terms of discourse, in the "HOWTO Encourage Women in Linux" document, Valerie Aurora (2002) notes that a reason why "women avoid Linux specifically" is that it "is more competitive and fierce than most areas of programming". In turn, the only (or major) reward is status and approval but "far more often, the 'reward' is a scathing flame, or worse yet, no response at all. Since women are socialized to not be competitive and avoid conflict, and since they have low self–confidence to begin with, Linux and open source in general are even more difficult than most areas of computing for women to get and stay involved in".

Similarly, much of the discussion about the 2009 study reporting on the gender gap at Wikipedia (*i.e.*, 13 percent female) touched on the seemingly obsessive (and argumentative) character of Wikipedia contributors. On the *Reaching Women Daily* blog, Delia Passi (2009), responded to the gender gap among Wikipedians by highlighting competitiveness: on Wikipedia one is "declaring one's expertise over and above the others". "Women are not less knowledgeable. They are just less interested in sparring with other anonymous experts to prove themselves". On the question of confidence, Sady Doyle, writing for *Salon*, wrote that the motivation of Wikipedians to contribute suggests that "people who are ambivalent about sharing their own knowledge or unsure of their right to contribute are less likely to take part". Furthermore:

> These traits — the ability to show off one's knowledge, to argue over fine (and possibly trivial) points, to correct others publicly — aren't inherently male or female. Still, they're often beneficial for men and socially detrimental for women. On the Internet, this shouldn't matter. No one can see you, and with the right screen name, gender is all but impossible to detect. And, of course, there are tons of women on the Web. But after a lifetime of hearing that they should be polite, non–confrontational and self–deprecating, many women may feel uncomfortable shedding that training to engage in a toad classification debate on Wikipedia ... . (Doyle, 2009)

After the prolific discussion about Wikipedia's gender gap, Sue Gardner (2011), Wikimedia Foundation's Executive Director, presented "Nine Reasons Women Don't Edit Wikipedia (in Their Own Words)". This included

many comments from women noting the aggression required to make headway or stand one's ground, including "Wikipedia can be a fighty place ... which a lot of women, myself included, find difficult". Too many Wikipedia editors are bullies: "Women tend to take their marbles and go home instead of putting a lot of effort into something where they get slapped around". Participation is exhausting and "I do not have the time or emotional energy to fight this fight, over and over". On this point, participants often stress that virtues like friendliness and patience are useful for everyone in that it is less likely to alienate some, and otherwise makes the environment more productive. Yet, obviously, there are challenges to realizing this insight in the context of an open community.

Openness

At first, the claim that community openness can contribute to a gender gap seems nonsensical as there are no formal restrictions on participation. However, as Freeman (1996) argued, implicit structures and dynamics still exist in the absence of formal ones. For example, a computer science department may not have an exclusionary policy towards female students, but privileging a narrow and obsessive focus might miss female candidates. Similarly, while some might argue any effort to block problematic users is a step away from openness, a chaotic culture of undisciplined vandals would equally disenfranchise those who wish to make a positive contribution [12]. Hence, following Freeman, one might distinguish between *formal* and *informal* forms of discrimination. While an open community does not formally discriminate, alienating behavior can still manifest from difficult people and sexist behavior.

Bad apples, poison people, and anonymous cowards

In Herring's 1993 analysis of two e–mail lists she found that a minority of the participants (all but one of them male) were responsible for the majority of adversarial rhetoric. "This same 4% and 6% [on each list] also posted the most words (33% and 53% of the total, respectively, or more than eight times the participant average), and thus dominated in AMOUNT as well as in MANNER of participation." [13] Open communities seem particularly susceptible to a vocal minority of people who are not kind, patient, or moderate in their participation.

Open communities seem particularly susceptible to a vocal minority of people who are not kind, patient, or moderate in their participation.

In the past 10 years the notions of the "bad apple" and "poisonous person" have become common within free culture discourse, especially following a widely noted 2007 Google Tech Talk on the subject (Collins–Sussman and Fitzpatrick, 2007). However, five years before that, Valerie Aurora in "HOWTO Encourage Women in Linux" wrote that a few "bad apples" were enough to drive women away: "If your group has nine helpful and polite members, and one rude, sexist, loud member, most women are going to continue to stay away because of that one member. I realize that this isn't fair to the other people in the group, but that's reality" (Aurora, 2002). Similarly, Carla Schroder (2009a), writing in response to the Google talk, notes that "one 'brilliant' but obnoxious person will chase any number of good people away ... [And] some never even show up in the first place because they see ToxicPerson and go looking for a healthier project to support". And while bad apples and poisonous people might at least be well intended, open communities are especially susceptible to trolls. Terri Oda (2011), *Geek Feminism* blogger commenting in the *New York Times*, noted that "many discussion sites suffer from the tyranny of trolls who actively hinder women's participation by trying to derail discussions, make contributions significantly more time–consuming, or send inappropriate or even violent private messages to contributors". What can a community do in response? Aurora (2002) highlights the importance of speaking up: "Reply to his e–mail, disagree with what he says — establish that you don't share his opinions. Just knowing that there is one other person in the group who is willing to publicly disagree with the 'bad apple' will help immensely, and will make women more willing to stay".

And while this dynamic of the bad apple is true regardless of the form of antisocial behavior, such behavior often

(seemingly inevitably) takes a sexist tone. The WikiChix FAQ notes that low female participation is likely the result of an “unwillingness to become a target of sexist criticisms” (WikiChix, 2006). Women report receiving unwanted attention as sexual or mother–like beings [14]. For example, a female Ubuntu community member noted that “On my first day in #ubuntu [chat channel], I accidentally mentioned I was female. Instantly, some guy in the channel asked if I was blonde, another PM’d me asking if I would be his girlfriend” (melissa, 2007). As Schroder (2009a) notes: “Women get targeted in special and icky ways just for being women”.

In 2007 a female Wikipedian was interviewed about her online experiences. When asked for her opinion on the main reason for low female participation, she noted it is the “very aggressive, male, adolescent atmosphere, and lots of women — as well as more mature men — may find it tiresome to negotiate”. When asked how her gender affects her participation, she responded: “Being a woman does make you more of a target for troublemakers, and for certain types of men — largely very young men, who seem to feel threatened by assertive women, and who respond by becoming contemptuous — and then of course we have the out–and–out misogynists, of which we’ve had a few, unfortunately”. Had she ever been personally attacked on a gender/sexual basis? “By Wikipedia trolls and stalkers off–wiki, yes. It has happened a lot. They’ve discussed my appearance, what clothes they think I wear, what kind of bras I wear, whether I fear being raped, whether I’m a whore, whether I’ve had to sleep with men in real life to get jobs” (millosh and SlimVirgin, 2007).

Some of these comments were, no doubt, anonymous. Online anonymity is an enduring practice; it can be positive in allowing those who are otherwise silent to speak, but negative in inhibiting civility and good sense (Nunamaker, *et al.*, 1997; Friedman and Currall, 2003). (“Anonymous coward” is the popular moniker for those who post scurrilous content anonymously.) Anonymity, then, is a mixed bag, but it seems particularly salient in the context of sexism, as can be seen in an incident in the Ubuntu community. (Ubuntu is a free software distribution named for the African ethic of interdependence.) The incident began with a joke to an e–mail list that implied women were inscrutable because God could more easily build a road to Hawaii than give a man the power to comprehend women. The sole female contributor to the list noted she felt this was a breach of the community’s code of conduct. Unrelatedly, she posted a complaint on her blog about someone interfering with her postal mail: “who the fuck is opening my post?” This posting was picked up by the Ubuntu–UK “planet” (a site that aggregates/syndicates blog postings) and an anonymous commentator wrote the post was offensive, rude, and hypocritical given her complaint on list and asked her to remove herself. She responded “I’ll happily leave the planet. If you cannot see the difference between blog posts and sexist jokes on public mailing lists then more fool you”. Subsequent comments included “Grow a sense of humor for christs sake” and “You are what is wrong with today’s society”. While she did receive support from community members, when she posted about her decision to leave the list and planet, anonymous posters responded with “Look at me! I’m an attention whore! Sympathise with me! WAH” and “What a tantrum! Time of the month?” (secretlondon, 2007a; 2007b).

Hence, openness renders a community susceptible to problematic participants (be it “anonymous cowards”, sincere misogynists, insincere trolls, or even well–meaning but clueless participants), and problematic behavior often takes a sexist tone from which few women are spared.

Ideology

The challenges of stereotypical geek identities and the dynamics of open content communities are exacerbated in the context of the free culture ideology. An anarchistic–libertarian ethic permits speech which can be alienating to many, especially women. Furthermore, this ideology can be used to dismiss concerns since the communities are claimed to be open and free.

The anarchist–libertarian ethic

Sixteen years ago scholar Bryan Pfaffenberger (1996) considered how the culture of radical free speech developed on the Usenet, an early (massive) collection of discussion groups. He wrote that “free–speech–minded users saw Usenet as a right, not a privilege, and deeply resented any attempt by system administrators to impose order on the network’s growing anarchy”. This sentiment widely circulated in pithy maxims such as “the Internet sees censorship as damage and routes around it” (Reagle, 1999). Susan Herring (1994) also identified this feature of early online discussion and characterized it as an “an ethic of anarchic self–determination and vigorous debate” that reflects the civil–libertarian ideals and fringe social status of early hackers. And, as with any ideology, “these value systems also serve to rationalize less noble behaviors. Thus, adversarial participants justify intimidation of others and excessive use of bandwidth with rhetoric about freedom, openness, and intellectual vigor” [15]. This then benefits “the most aggressive participants, who happen (not coincidentally) to be male” [16]. Hence, women’s negative characterization of (“harmful”) behaviors and men’s (“dismayed”) response reveals “the extent to which some women are alienated by behaviors that are positively valued by men” [17].

This personal-freedom ethic is not only intact in the free culture movement, the movement is now its most vital and popular manifestation. For example, Richard Stallman, geek exemplar, has “campaigned for freedom since 1983” (Stallman, 2010). Eric Raymond, famous for a number of technical and cultural contributions (*e.g.*, fetchmail and as a progenitor of “open source”), is a self–described anarchist and libertarian (Raymond, 2003; 1999). Ayn Rand’s philosophy of objectivism, which lauds the autonomy of self–interested behavior and laissez–faire capitalism, had a significant influence on American libertarianism and early Internet culture. At Wikipedia, Jimmy Wales is reported to have named his daughter after a character in one of Rand’s fictions; Larry Sanger, too, was fond of Rand’s *The Fountainhead* and is a self–described libertarian (Deutschman, 2007; Schneider and Sanger, 2011). Mark Shuttleworth (millionaire entrepreneur, self–funded astronaut, and Ubuntu founder) was a “fan of Adam Smith’s invisible hand, and great admirer of Ayn Rand’s vision” though he now identifies as a more tempered “fan of regulated capitalism” (Shuttleworth, 2008). In short, while there are significant differences in the political philosophies of these men — and each would be adept articulating their differences — they are creatures of the Internet’s ethos of freedom.

Freedom and sexism

Yet, the anarchic–libertarian ethic requires a significant tolerance for adversariality that may be alienating to some participants. Such participants may actually feel freer to participate under a more structured form of community governance, including community leadership or conduct guidelines. As Herring (2003) writes: “While this result may appear initially puzzling — how can women be ‘freer’ to participate when they are ‘controlled’ by a group leader? — it makes sense if the leader’s role is seen as one of ensuring a civil environment, free from threats of disruption and harassment”. (And a preference for a friendly and civil environment is not limited to women.) Similarly, in the second part of her *Linux Today* editorial “Sexism and Other–isms Hold Back FOSS” Carla Shroder (2009c) wrote that “For all of the talk about ‘community’ and ‘freedom’ there is an awful lot of cliquish and exclusionary behavior. A good step would be re–defining ‘freedom’ as ‘the freedom to be welcoming and supportive’, rather than the freedom to be the most unpleasant person”.

Additionally, the libertarian–anarchic ethic is susceptible to hypocrisy and sexism. (By sexism I mean an attitude of inherent superiority and exclusive privilege towards one gender, perhaps with demeaning or derogatory displays towards the other.) For example, Herring found that women were labeled as “censors” when they expressed concerns on views about date rape though they did not attempt to exclude others’ views; “Meanwhile, males hypocritically represented themselves as heroic defenders of freedom of expression, even as their behavior showed them to be intolerant of even partial disagreement with their views”. She also found hypocrisy on chat channels and in conversations in which women’s protests were claimed to be censorious and “going too far” in silencing men though “the men can hardly be said to be silent in the discussion, because they contributed 70% of the words overall” (Herring, 1999; Herring, *et al.*, 1995).

Such reactionary responses also occur in the free culture movement. Bruce Byfield (2009b), writing for *Linux Magazine*, noted that balanced responses to incidences of sexism — from either side — are rare, “But the real flood of emotion comes from the anti–feminists and the average men who would like to deny the importance of feminist issues in FOSS. Raise the subject of sexism, and you are met with illogic that I can only compare to that of the tobacco companies trying to deny the link between their products and cancer”. Matt Zimmerman (2009), an Ubuntu contributor, noted that raising the issue of sexism frequently leads to a (sexist) backlash. For example, Richard Stallman sparked controversy when he spoke of “EMACS virgins” (someone not yet using the famous text editor that he created) in a gendered/sexualized way as “women who had never used EMACS” and for whom being “relieved” of this “virginity” was a “holy duty” (Schlesinger, 2009). (While I believe what was reported about these incidents, there was much debate about what was said and I was not able to verify recordings.) When FLOSS advocate David Schlesinger (2009) challenged Stallman on his “EMACS virgin” comment, Schlesinger’s blog received many comments, including dismissals and misogynistic insults — women are not the only target. An anonymous commenter wrote “Blah blah blah. This kind of whiny bullshit about unimportant details is exactly why women should be left out in the cold”.

The veil of anonymity and freedom

The belief that openness and freedom necessarily rule out discriminatory behavior may be a consequence of androcentrism in the free culture movement. By androcentrism I mean an assumption that the male perspective is the natural one. This can manifest in assumptions that a predominantly male space is accidentally so (*i.e.*, women simply choose not to participate) or exclusively so (*i.e.*, that there are never any women present). In their 2006 study, Nafus, *et al.* (2006) reported significant discrepancies between men and women including that while around 20 percent of men reported seeing discrimination against women, 75 percent of women reported the same. An example of this occurs in the “HOWTO Encourage Women in Linux” document in which Aurora recalls a discussion of those things that often lessen women’s interest in Linux user groups. When a man raised his hand and said his group never did those things a woman from the same group raised her hand in response and said “Yes, they do”. Aurora recalls that “I have over and over again heard a man say that he doesn’t do any of these things, and then observed him hours or minutes later doing exactly what he claimed he doesn’t do. I don’t think any of those men were lying, just completely unaware” (Aurora, 2002). When Mark Shuttleworth, leader of the Ubuntu project, repeatedly spoke of community members as “guys”, and that they need to improve their work

such that it was explainable to “girls”, this prompted much debate about his intention and the statement’s effect on those at the conference (Skud, 2009). Carla Shroder wrote: “Everyone keeps saying what a nice guy Mark is. Well, maybe so, but even nice guys have their blind spots” (Schroder, 2009b).

Furthermore, the presumption of equality, meritocracy, and freedom are especially salient in the free culture movement wherein the identification or protest of bias is sometimes responded to with claims of gender blindness (resulting from a supposed meritocracy or from anonymous participation) and non–discrimination (since these communities are open and free). However, as discussed, anonymity does not preclude gendered (or sexist) behavior. As a commenter on a discussion about Wikipedia’s gender gap wrote:

> It doesn’t require that someone explicitly state a gender in order for a negative environment based on gender discrimination to result — gender discrimination is formed by actions, not categorizations per se. Even if I don’t explicitly identify as female in my Wikipedia handle (and I don’t), I still find myself facing attitudes of sexism and gender discrimination ... . And just because there is no explicit statement of who is male and who is female when performing this engagement, does not make it any more appealing to strap on my helmet and march back into the trenches for another day of non–specific gender warfare (katydid, 2011).

Yet, this informal discrimination might go largely unseen in that the “deeply voluntarist ethos which values notions of individual autonomy” leads many to focus on purposeful individual actions rather than systemic bias (Nafus, *et al.*, 2006; Nafus, 2012). For example, John J. Ray (2011), of the *Political Correctness Watch* blog, writes “The fact that Wikipedia is voluntary and open to all DEMONSTRATES that men and women have inherently different interests. There is no oppressive patriarchy refusing to hire them”. Similarly, Heather Mac Donald (2011), writing for *Slate*, noted that the implication of there being no “gatekeepers” is that “Wikipedia’s gender imbalance is a non–problem in search of a misguided solution”. This sentiment is not limited to political commentators as it can be found in FLOSS communities themselves. Journalist Bruce Byfield (2009a) wrote that the recent recognition that “sexism is systemic” in FLOSS is counter to the official mythology that gender doesn’t matter because everyone is judged only on their merits. Indeed, Byfield cites an old essay by Eric Raymond as claiming that while FLOSS is still predominantly male “the percentage of women is clearly higher” than the norm for technical professions. Raymond (1991) explains this (questionable) claim in an optimistically geeky way, that hackers “ascribe their culture’s gender– and color–blindness to a positive effect of text–only network channels” and that associations with AI research and science fiction predisposes them inclusiveness, “after all, if one’s imagination readily grants full human rights to future AI programs, robots, dolphins, and extraterrestrial aliens, mere color and gender can’t seem very important any more”. However, if this sentiment was ever true, it no longer seems so in the twenty–first century. Simply, it is naïve to claim that a project is immune from bias or discrimination because it is open, meritocratic, virtual, or part of the free culture movement.

Conclusion

While I’ve noted issues at Wikipedia and Ubuntu — two communities I follow most closely — these communities are cognizant of the need to be welcoming and supportive. Within the free culture movement each is relatively progressive: Wikipedia has numerous good–faith norms and Ubuntu has a code of conduct; both communities have fora and activities for discussing concerns and furthering diverse participation. Yet some argue that to focus on gender is beside the point. Kat Walsh, longtime Wikipedian and Wikimedia Foundation board member, wrote that we should be careful of generalizations and instead focus on behavior and culture:

> I think the disproportionate lack of women in the community isn’t about gender so much as it is about a culture that rewards certain traits and discourages others. And we’re not getting people who don’t have those other traits, male or female; more of the people who do fit the current culture are male. But the focus should be on becoming more open and diverse in general — becoming more inclusive to everyone, which will naturally bring in more women (Walsh, 2011).

However, while Walsh’s goal is laudable, the language of being “more open and diverse in general” is problematic. Seemingly, there is no “in general” yet when it comes to notions such as “geekiness”, “openness” and “freedom”. These are notions with historical associations and structural dynamics that informally but significantly alienate some participants, especially women. The geek identity, as traditionally constructed, and discursive style can be unappealing, open communities are especially susceptible to difficult people (which can

be especially alienating to women), and the ideas of freedom and openness can be used to dismiss concerns and rationalize the gender gap as a matter of preference and choice. Hence, I believe gender needs to be an explicit part of any intervention. The notion of what it means to be a geek should continue to be challenged and experimented with and the community must be cognizant of the challenges of openness and not permit "freedom" to be used as a means to excuse problematic behavior. While the present work is limited in its reliance upon public discourse to identify these informal problems, further research on the experiences, failures, and successes of related interventions is merited.

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Notes

1. McArthur, 2009, p. 62.

2. Ghosh, *et al.*, 2002, p. 4.

3. Karanović, 2008, p. 17.

4. Glaser and Strauss, 1967, p. 72; Lincoln and Guba, 1985, p. 209.

5. Weizenbaum, 1976, pp. 116–118.

6. Turkle, 1988, p. 41.

7. Rasmussen and Håpnes, 1991, p. 1,109.

8. Margolis and Fisher, 2002, pp. 67–70.

9. Bury, 2011, p. 48.

10. Herring, 2003, pp. 202, 206.

11. Nafus, 2012, p. 679.

12. Reagle, 2010, p. 4.

13. Herring, 1993, p. 13.

14. Nafus, *et al.*, 2006, pp. 28, 30.

15. Herring, 1996, p. 261.

16. Herring, 1999, p. 163.

17. Herring, 1996, p. 254.

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