CSLI Publications
Center for the Study of Language and Information
Leland Stanford Junior University
Printed in the United States
06 05 04 03 02 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data

Gendered practices in language / [edited by] Sarah Benor... [et al.].
p. cm.
Includes bibliographical references (p.) and index.

ISBN 1-57586-317-0 (cloth : alk. paper)
ISBN 1-57586-318-9 (paper : alk. paper)

1. Language and languages—Sex differences. I. Benor, Sarah, 1975–
P120.S48 G475 2001
306.44—dc21 2001043589
CIP

∞ The acid-free paper used in this book meets the minimum requirements of the American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

CSLI was founded early in 1983 by researchers from Stanford University, SRI International, and Xerox PARC to further research and development of integrated theories of language, information, and computation. CSLI headquarters and CSLI Publications are located on the campus of Stanford University.

CSLI Publications reports new developments in the study of language, information, and computation. In addition to lecture notes, our publications include monographs, working papers, revised dissertations, and conference proceedings. Our aim is to make new results, ideas, and approaches available as quickly as possible. Please visit our web site at
http://cslipublications.stanford.edu/
for comments on this and other titles, as well as for changes and corrections by the author and publisher.

Gendered Practices in Language

edited by
Sarah Benor
Mary Rose
Devyani Sharma
Julie Sweetland
Qing Zhang

PUBLICATIONS
Center for the Study of
Language and Information
Stanford, California

14

Geek Feminism

MARY BUCHOLTZ

1 Introduction

On April 1, 2000, the city of Boston hosted the first annual Geek Pride Festival, an event for computer specialists that was dubbed 'nerdapalooza' by the *Boston Herald*. The feature article on the festival opened predictably:

> A good 20 years after most of them took their sisters to the prom, 1,000 full-blooded American geeks gathered inside a Boston function hall yesterday to revel in their status as the jocks and studs of the digital millennium. ...
>
> But at the end of the day, one question still tugged at the heart of the vastly male gathering: Are geeks truly now the new jocks?
>
> 'I really don't think so', said Chris O'Brien, 34, of Albany. 'Just look around. We geeks are smart enough to face facts: women still don't want to go out with geeks'. (Mashberg 2000)

While the journalist, Tom Mashberg, does note the 'startlingly large smattering of geekettes' in attendance, the article makes clear that the technical revolution has not been accompanied by a social revolution: rhetoric of jocks and studs aside, geeks are still stigmatized, and they are still typically—and stereotypically—male.

This paper offers a different and less negative picture of geeks, one that recognizes that computer hackers may be female as well as male. This small act of recognition has implications for how researchers of language, gender, and technology understand both computer culture and feminism itself. Where the scholarly view of women's role in the world of computing has tended to be either highly negative or highly celebratory, at least some women understand their situation differently. And as a result, their discursive practices and ideologi-

Gendered Practices in Language.
Sarah Benor, Mary Rose, Devyani Sharma, Julie Sweetland and Qing Zhang (eds.).

cal positions are also rather different from the descriptions of women offered by previous technologically oriented research. After examining how feminist scholarship has approached the study of women's engagement with technology, I consider contrasting feminist perspectives on the issue and then introduce a little-discussed feminist position on technology, which I term *geek feminism*.[1] The remainder of the paper documents discursive manifestations of geek feminism in a large-scale online hacker community called Slashdot. The focus of my analysis is how female participants make their presence felt in a series of discussions concerning women in the field of computing. Demonstrating both that being female and being a geek are in fact compatible states, and that being a geek and being a feminist are likewise compatible, the discourse of geek feminists raises important issues for language and gender researchers. The goal of this paper is to bring such women into scholarly focus and to examine their relationship both to technology and to feminism as these are mediated through their use of language online.

2 Women and technology

While news journalists have been writing women out of the technological sphere, feminists of many stripes have been working to write them in. Yet one of the major obstacles to including women and girls in computing, according to both scholarly and popular accounts, is that the women and girls themselves don't want to be there. Sherry Turkle's (1988) early research with technically adept young women, for example, suggests that the association of computer hackers with social ineptness is inconsistent with these women's notion of their own femininity. Similarly, in a parents' guide to encouraging computer proficiency in girls, Roberta Furger, an editor at *PC World*, writes:

> Given the image that most of us have of hackers—a nerdy guy with poor personal hygiene habits and even worse social skills—few parents would lament their daughter not receiving such a dubious distinction. ... How can we expect our daughters to even consider exploring computers and related technologies if the only image they have of someone technical is that of a guy—and not a socially acceptable guy, at that? (Furger 1998: 26)

Geek feminism recognizes, however, that it is not simply a nerdy image that drives some girls (and boys) away from technology but more fundamentally the antinerd discourse of parents, teachers, and peers.

[1] While the referential range of *geek* (and of similar terms, such as *nerd*) is highly variable across speakers, in this paper I follow common practice among many computer professionals in restricting its reference to those with expertise in computer technology. Within this community, the term *hacker* is essentially synonymous with *geek* (in contrast to its usage outside the community, where it refers to one who illegally gains access to a computer system; the geek term for such an individual is *cracker*). In keeping with community usage, I use these terms interchangeably throughout the paper.

These researchers focus on women's and girls' rejection of nerdiness. Meanwhile, another body of feminist scholarship concerns itself instead with women's rejection of technology itself. The work of Margaret Morse (1997), for example, is summarized as offering

> the notion of *unwill* to describe the strange resistance to technology that women experience from a young age. ... Unwill is experienced in anxieties; its symptoms are faulty executions of instructions, phobias, a sense of technical ineptitude, forgetfulness, and sloth in relation to dizzying 'smart' machines. (Terry and Calvert 1997: 9)

The normalization of technophobia among women that occurs in this description of Morse's article is also found in Barbara Warnick's (1999) critique of computer guides aimed at women. Warnick, noting that technophobia is devalued and technophilia is celebrated in these guides, argues that such a discourse is 'masculinized' through the foregrounding of 'aggressiveness, resourcefulness, opportunism, and technical proficiency' as virtues (1999: 3).[2]

However, fear, anxiety, and similar responses to computers are not typical of all women. Nor is Warnick correct in her assumption that to reject these responses and to prize technical proficiency is necessarily a stance that privileges masculinity. As I discuss, such a stance is also evident in the discourse of many female geeks, and although, to be sure, these technically skilled women have little tolerance for the technological timidity of other women, they are equally impatient with the clueless and often male 'lusers' (that is, computer users) who waste their time and doubt their expertise.

As in other areas of feminist research on technology, so too within feminist linguistics, much of the work has focused on women's lesser access to and participation in computing culture. Both Cheris Kramarae and Dale Spender, for example, express doubts about the widely heralded Information Age, which, in their view, does not promise equal benefits for women and men. Kramarae notes the systematic exclusion of women from technological innovations such as the Internet; as she puts it, 'Cyberspace, like earthspace, is not developing as a viable place for women' (1995: 43). Spender (1995) also points to the dearth of women in technological positions, and she goes on to argue that such underrepresentation runs counter to the interests of contemporary high-tech society, for she considers women to have particular communicative strengths that are better suited to recent technological advances than men's communication style.

Where these studies emphasize the absence of women from technology, other research considers what happens when women do enter the computer realm, especially by going online. The work of Susan Herring (e.g., 1994, 1996; Herring et al. 1995) is the most notable example of this approach. The results of her sustained study of this question consistently show that women and men on aca-

[2] Zdenek (this volume) discusses how the feminization of technophobia is literally encoded into "verbots," software programs with ditzy and helpless female graphical user interfaces that interact with the computer user.

demic discussion lists tend to use different communicative styles online and that the men on such lists tend to exclude and silence women. On the basis of these findings, Herring concludes:

> Given that the stereotypes glorify men's role in and exclude women by definition from the 'Information Age,' it is not surprising that women are more reluctant to go on-line, less confident of their abilities when they do so, less participatory in on-line group discussions, and less represented among computer network policy makers and designers than men ... (1996: 105)

Herring's catalog of women's lesser place in computer culture succinctly and accurately captures the patterns she finds among academics, and the convergence of results from a wealth of studies in numerous disciplines confirms her findings for other groups of women and other kinds of Internet discourse (e.g., Cushing 1996; Kendall 1998; Savicki et al. 1996; Stewart et al. 1999).

It is evident, then, that feminist analyses of online interaction have done a great deal to call attention to male dominance in computer culture and to promote women's use of technology. But this approach, like any other, in telling one part of the story cannot tell the whole story. Many women are not reluctant to go online and are fully confident of their technical abilities. These women are generally not considered in studies that focus on comparisons between women and men and in those that emphasize the tendencies of women as a group, rather than the exceptions to these general trends. We need both kinds of studies if we are to understand the full range of positions that women take toward technology.

3 Cyberfeminisms

If feminist principles have motivated much of the research on women and technology, they have also figured centrally in women's practices in computer use, and particularly in computer-mediated communication. But given the diverse forms that feminism takes, no single feminist perspective can encompass the many different practices and ideologies associated with women's use of computer technology. As in other spheres, feminism online, or what Kira Hall (1996) terms 'cyberfeminism', contains multiple strands.[3] In an adaptation and expansion of Hall's rich and insightful analysis, I describe four different forms of cyberfeminism: postmodern, liberal, radical, and geek feminism.

Hall delineates two main strands of feminism on the Internet. The first, with its discourse of gender neutralization and subversion, she calls *liberal cyberfeminism*. Here, however, I refer to it as *postmodern cyberfeminism* in order to reserve the term *liberal cyberfeminism* for a feminist perspective focused primarily on increasing women's access to technology without substantially altering men's role in the technological domain (cf. Millar 1998). Postmodern cyberfeminism, by contrast, is heavily influenced by feminist theories that celebrate pastiche, flux, and self-invention. The cyborg of Donna Haraway's (1991) writings and the drag queen of Judith Butler's (1990) work serve as foundational images for the gender fluidity that postmodern cyberfeminists advocate. For such feminists, the advent of the computer has enabled the absence of the body, and thus computer users are liberated from the fetters of the embodied identity categories of gender, race, age, and so on.

The second version of cyberfeminism that Hall describes is what she terms *radical cyberfeminism*. Like the radical feminist scholars who work on gender and technology issues, radical cyberfeminists do not view computers as an unmitigated boon for women. With respect to the Internet, radical cyberfeminists seek to escape the pervasive online sexual harassment to which many women are subjected. The solution they offer is gender separatism: separate cyberspaces for women that are carefully monitored for incursions of oppressive male communicative practices. In light of this movement toward cyberseparatism, Hall, like many other feminist analysts of virtual language and culture (e.g., the authors in Cherny and Weise 1996), concludes that, contrary to the utopianism of those who view the Internet as a 'postgender' space, women do not leave masculine hegemonies behind when they enter the virtual world.

Building on Hall's work, I present another form of feminism on the Internet: *geek feminism*, a variety of cyberfeminism that acknowledges the concerns of feminism but preserves the commitment to a geek identity as resistant and oppositional to mainstream gender norms (cf. Bucholtz 1998, 1999). Rooted in the practices and issues of serious computer users who happen to be women, geek feminism presents an alternative to the three dominant discourses of cyberfeminism, an alternative that is manifested in both ideology and discursive practice. The cyberfeminism of female hackers advocates neither the erasure of gender espoused by postmodern cyberfeminists nor the gender separatism of radical cyberfeminists. Neither of these versions of feminism adequately captures the realities of female geek experience. On the one hand, as participants in the overwhelmingly male domain of hacking, most female geeks cannot afford and do not want to separate themselves entirely from their male colleagues as some radical cyberfeminists urge. On the other hand, the challenges they face as female hackers, as well as their pride in bucking the gender odds and succeeding in the world of computers and technology, have made them skeptical of the postmodern cyberfeminist ideal of gender fluidity, an ideal that in any case is not attainable for most female geeks in their professional lives. Yet geek feminism is not liberal feminism: female geeks may be highly critical of normative gender arrangements and male hegemony both on- and offline, and their goal is not

[3] This term originates in the writing of Sadie Plant (e.g., 1996) to refer to what under my own scheme would be classified as postmodern cyberfeminism (see below). In this paper I follow Hall in using *cyberfeminism* as a general rubric for any form of technologically based feminism, an approach that has the merit of recognizing the diversity of online feminisms. My own terminology for specific varieties of online feminism is somewhat different from Hall's, but the basic ideas derive from her work.

simply to fit into a male milieu.[4] In any case, women, including geeks, may espouse positions in line with more than one of these theoretical perspectives, for geek feminism, like all political affiliations and identities, is not a category with which to classify individuals but a stance that shapes and is shaped by social practice.[5]

Indeed, in some ways, geek feminism is akin to the forms of radical and postmodern cyberfeminism promoted by Webgrrls, Cybergrrlz, Old Boys Network, and similar websites. However, geek feminism differs from these perspectives in at least two ways. First, geek feminism is not primarily centered on gender difference, whether to reduce it, emphasize it, or subvert it, as these other forms of technology-oriented feminism are; instead, it emphasizes the shared project of geeks of both genders. Unlike some strands of liberal, radical, and postmodern cyberfeminism, geek feminism does not usually focus on the particular strengths and skills of women, and when this perspective is offered it is frequently challenged, as illustrated below. Second, whereas for most of the cyberfeminists described in studies of gender and technology, their feminism motivates their computer use, for geek feminists, their computer use motivates their feminism. That is, in other forms of cyberfeminism, computers provide a new medium in which to promote gender equality, feminist political activism, or gender fluidity, but for geek feminists computer use raises gender issues that they must address simply in order to assert their place in the technological domain. For this reason, although geek feminism may have its theorists, I am more interested in the on-the-ground practices whereby technically proficient women negotiate gender and digital technology.

Nina Wakeford's work has some points of intersection with the present study. She asks, 'How can we talk of women who do not recognize themselves in the portrayals of harassment' offered by traditional feminist research on cyberspace (1997: 53). Wakeford documents the practices of a group of women she calls *grrrls*, women who use the web as a tool for political activism and are not easily classified within the taxonomy outlined above. Although this group is not isomorphic with the female geeks of the present study, since web site development is often marginal to the primary technological activities of geeks, the two groups share a skepticism of modes of feminism that posit women as victims or outsiders in the world of computer technology. Wakeford says of the cyberfeminists she studies: 'Such grrrls ... appear to be ambivalent or even hostile to patterns of behavior which they associate with an "older style feminist rhetoric," and in particular the idea of a prescriptive or homogeneous women's movement' (1997: 60). As I discuss below, a similar hostility to earlier forms of feminism is also evident among female hackers. Nevertheless, it is clear that the women Wakeford studies, and the women discussed in this paper, have a concern with gender equality that marks their general outlook as feminist.

[4] It might therefore be supposed that geek feminism is a form of libertarian feminism, given the common assumption that the prevailing politics on the Internet is libertarian, but to reduce the one to the other would be a vast oversimplification. Geek feminism is a political position based in the specific practices associated with gender and computer technology, which may or may not intersect with broader political modalities.

[5] Admittedly, it is not easy to separate these different strands of feminism in practice, and sometimes political positions can become quite intricately interwoven. For example, in some of its guises postmodern cyberfeminism celebrates the connection between computing and the feminine (cf. Millar 1998), a remarkable position given that the notion of a feminine essence is more usually associated with cultural feminism, which, in linking women and nature, is often opposed to technology.

4 Do female geeks exist?: Geek feminism on Slashdot

I take up these issues in the context of a series of online discussions on Slashdot, a web-based news service for computer specialists that bills itself as 'News for Nerds'. In addition to headlines from the computer industry, the site provides editorial columns, reviews, and moderated discussion threads on a variety of topics. Slashdot's founders are vocal advocates of Linux, an increasingly popular computer operating system that is distributed free of charge and with the programming code freely available for alterations (open source), rather than as a proprietary and commercial product, like the operating system with the dominant market share, Microsoft Windows. Slashdot thus promotes the anticorporate ethos of many serious computer users, who proudly label themselves *hackers* or *geeks*. It is difficult to know the number and gender of Slashdot users, although it may be some indication of the scope of Slashdot's readership that the site receives between 600,000 and 800,000 hits a day and that the tendency of its enthusiastic readers to overwhelm and crash servers by following links posted on the site is so legendary that the phenomenon has come to be known as 'the Slashdot effect' or 'slashdotting'. As in other computer-related domains, it is likely that among Slashdot readers, men outnumber women, although there is no way to be certain. Most discussions on Slashdot are not concerned with gender, but every few months a Slashdot feature article on female geeks generates an animated discussion of the status of women in the computer industry. I consider two of these threads in detail.[6]

The first discussion thread that I analyze developed in response to a Slashdot column entitled 'Female Geeks: Do They Exist?' that appeared on the site in November 1998. The author of the column, Kirrily Robert, whose online nickname is Skud, is a self-identified female geek based in Australia. In a number of

[6] Although permitted by the site's owners, research on Slashdot is not uncontroversial: many users protested online the planned publication of a book by a regular Slashdot columnist that extensively reproduced material from site discussions. The official policy of the site is that all material posted on it is part of the public domain. However, in deference to the concerns of some users, I have changed or deleted the names and other identifying information of subscribers who contributed to the threads under analysis. I treat online columns as published material, and for these I therefore include full author attribution.

ways, Skud's column is overtly oppositional to traditional feminist discourse about women and technology. She begins her remarks by stating:[7]

(1) Everyone's heard that girls aren't encouraged to take technical subjects at school, that all the computer games around are violent and only appeal to boys, that somehow women's brains are built differently and just aren't cut out for logic and technical detail. Well, whether it's true or not, I'm not going to go into it. You can read it in the mainstream press if you want to; it's been done to death. I'm bored with it.

By contrast with these conventional concerns, the focus of Skud's own discussion is 'some random interesting facts about female geeks'. One of the 'facts' Skud goes on to enumerate extends her critique of traditional feminism: 'We're mostly apolitical', a statement that appears to mean that female hackers do not adhere to many of the tenets of earlier forms of feminism. She writes, 'Most hardcore geek girls are sick to death of hearing well-meaning "feminists" make statements like "Computers are inherently male and exclude women" when it's obviously grossly inaccurate'. She goes on to offer some reconstructed dialogue from a 'really awful' forum she attended on 'Women and the Web':

(2) Them: "Women find computers really hard to use."
Me: "I don't, and I think your statement marginalises and degrades women in technical fields."
Them: "Uh, duh..."

Them: "And there's, like, all this pornography and stuff..."
Me: "Yeah, it's great that the technology can be used for all forms of communication, isn't it?"
Them: "Uh, duh..."

Whereas the us/them dichotomy in radical cyberfeminism divides women from men, in Skud's discourse it divides female geeks from traditional feminists. The column thus locates tensions between many feminist discourses and the discourse of the technogeek; as Skud puts it, 'This is why feminist theories on technology are mostly the domain of humanities types, and us geeks just get on with our coding'. But despite such arguments for the apolitical nature of female hackers, the discourse of many female geeks, I maintain, participates not in antifeminism—which involves opposition to the goal of gender equity—but in geek feminism.

The thread that developed in response to Skud's Slashdot column comprised 407 messages, most of them written within forty-eight hours of the original posting (discussion threads are quickly archived due to the high e-mail volume at the site).[8] Discussion participants are of two types: registered users, whose name or nickname and e-mail address appear in the header at the beginning of their posts; and users who do not send postings under their own names or nicknames. Those in the latter category are known as 'Anonymous Cowards', and this name appears in the header of all unregistered postings. In the thread under analysis, almost half the messages—180—were sent by Anonymous Cowards. It is impossible to know how many messages were sent by the same person, since very few Anonymous Cowards sign their posts, and only occasionally does a user refer to a previous message that she or he sent.

The gender of users is even more difficult to determine. Even registered participants may have names or nicknames that do not clearly indicate gender. I classified users by gender based on either of two criteria: (a) a clearly gendered name or nickname (e.g., in an alias, signature, or e-mail address); (b) gender self-identification in the content of the message (through explicit statement or entailment). This method is overinclusive, in that it erroneously admits members of the other gender with cross-gendered names as well as those who may be intentionally representing themselves as of the other gender. It is also underinclusive, as it excludes many women (and men) who may have nongendered names or nicknames, an issue I discuss further below. I was conservative in my use of gender information from message content, even when gender was strongly implied but not entailed by the message. As a result, much information about sexual attraction and sexual activity was excluded as evidence for gender, even in such extreme examples as:

(3) a. Point me to a good looking female geek..... there are none!
b. mang i thought it said "greek girls"...i wuz getting hot for some posterior intimacy
c. I FUCKED YOUR WIFE BWAHAHAHAHA!

While such statements suggest male authorship, this is not strictly entailed by any of the examples in (3). (There is also a certain political pleasure in imagining that the author of, say, 3c is a woman.) My purpose, in any case, was not to provide an exhaustive gender classification of participants but to offer a rough indication of the degree to which gender is displayed in the thread. In the discussion that follows, *women* and *men* (and *female* and *male*) should therefore be read as shorthand for 'users who display a female (male) identity in their posts'. Among registered participants, women constituted 23 or almost 20% of the 117 different users who participated in the thread; men made up 44 or almost 38% of the total. Among messages from Anonymous Cowards, there were 10 from female participants, about 6% of the total 180 anonymous messages; and 19, or slightly over 10%, from men. These data indicate both that women are present as

[7] All data are presented with original formatting, punctuation, grammar, and spelling. Material in angled brackets (< >) is my addition.

[8] The message counts for the threads under analysis exclude duplicate or otherwise unusable posts.

participants on this Slashdot thread at about half the rate that men are, and that gender is not directly displayed in the majority of posts (although it is likely that most gender-ambiguous posts are from men). It is also clear that Anonymous Cowards tend overwhelmingly to preserve their anonymity, including their gender identity.

5 Hacking and harassment

Women's use of male or nongendered nicknames, or what I call *gender lurking*, is a widely recognized Internet phenomenon; the term derives from *lurking*, the practice of subscribing to an electronic list but not participating in discussions. Amy Bruckman (1993) and Turkle (1995) describe the related phenomenon of *gender swapping*, but this term (and others circulating in scholarly discourse, such as *gender switching*) refers specifically to the online practice of adopting a name and interactional style stereotypically associated with the other gender. Gender lurking is a more comprehensive set of strategies with a variety of underlying motivations. It encompasses a range of gender displays, from downplaying to obscuring to switching one's offline identity. Among radical cyberfeminists it is a strategy for coping with male reactions to female presence and participation in online forums, while for postmodern cyberfeminists it is a method for experimenting with a different gender identity online. (And of course, men may also lurk as women, though often without any feminist motivation.) As Skud notes in her column, however, gender lurking also occurs among geek feminists for reasons different from either of these. Many female hackers may use nongendered nicknames not to play with masculinity or to escape men's attention but to gain the respect of male hackers (see also example 8 below):

(4) the girls sometimes obfuscate their gender in order to be taken more seriously. God knows there's a lot of ditzy, clueless women out there, and to be honest most geek girls just don't want to be associated with them.

On the Slashdot thread, nicknames that facilitate such gender lurking may include numbers, initials, and words referring to nongendered objects or entities; the content of the message often, but not always, disambiguates the gender of the poster.[9] In the same way, the option of posting as an Anonymous Coward allows women to participate without highlighting, or even revealing, their identities as women. Such strategies are primarily aimed at setting aside information that in most cases is considered irrelevant to the technical discussions at hand, like race, ethnicity, or nationality.[10]

However, while gender may seem beside the point to many female geeks, it is of great concern to some male computer users. Although female hackers may

[9] In some cases, participants may investigate a poster's identity further, for example by visiting her or his web page, and this often yields information about gender.

[10] Many Linux users, and hence many Slashdot readers, are from outside of the United States.

lurk or post anonymously or under a male nickname, they may still be subjected to sexually harassing messages directed at women in general, and of course, they remain vulnerable to harassment in their real-life workplaces as well. From this perspective the choices for women in technology appear restricted: hide your identity or withdraw altogether. But geek feminism enables a third possibility in which female geeks speak out both as women and as hackers when gender becomes salient—as it does in online harassment.

The issue of gender-based harassment has been a focal point of both popular and scholarly writings on gender and computer-mediated communication (e.g., Brail 1996; Dibbell 1998; Herring 1999; MacKinnon 1997), and such work has been invaluable in documenting how widespread sexist discourse is on the Internet. Online harassment must be distinguished from flaming, a separate but often related phenomenon. Flaming is the online term for bald, on-record face-threatening acts (Brown and Levinson 1987) such as insulting, mocking, ridiculing, or belittling another user. Flames directed at women by men may include harassing elements that target a woman's gender.[11] But not all flames are perceived as harassment, even by women who receive them. It is therefore important to consider as well how women react to harassing messages. Regardless of their intent, do such messages have a harassing effect?[12] Online harassment becomes much less severe as technological advances make it more difficult for hostile messages to reach their target. In other words, it may be that the solution to bad behavior is good code. The structure of Slashdot and similar sites balances the prized Internet right to free speech with protection from harassment (or simply from irrelevant messages). Because discussions are moderated, with each posting assigned a priority score, offensive messages, which are usually assigned a low priority, may never appear on the screens of readers who set their threshold to read high-priority messages only. Harassing messages are thus effectively ignored; they are never read by many participants in the thread.[13]

But despite such measures, female hackers may still receive harassing messages. While Laurel Sutton (1994) and others have found that these messages may have a silencing effect on nongeek women, female geeks frequently respond directly to male harassment, and in ways that refuse the male terms of engagement.[14] Thus in the 1998 Slashdot thread, many female hackers responded to

[11] Other kinds of documented online harassment include sexual propositioning, flooding an individual's in-box with messages, posting messages under another person's name and/or e-mail address, and making threats.

[12] Naturally, the response of individual women to harassment does not mitigate the seriousness of the act. Just as harassment can occur if there is an effect of harassment without a harassing intent, so too can it occur if there is an intent of harassment without a harassing effect.

[13] In the data examples, moderation scores and user names are omitted from subject headings; where relevant, these details are provided in the main text.

[14] Research on public harassment of women in offline contexts documents a similar range of possible psychological and interactional responses, including confrontation (Alberts 1992; Gardner 1980; Kissling 1991; Kissling and Kramarae 1991; Kramarae 1986; Wise and Stanley 1987). How-

offensive messages by dismissing or trivializing them rather than by engaging with them seriously, as shown in the examples in (5). In (5a), a male Anonymous Coward flames a female user by targeting her gender:

(5) a. <Subject:> Maybe (he) checked

> < ... > Since you don't produce any evidence that proves otherwise you're just another fat and butt-ugly geek girl. Why don't you just quit school and start producing some fat, smelly kids instead. After all, that's what you chicks are best at. And leave the all the techie stuff to those who can understand it.

The response in (5b), by the female Anonymous Coward whose post precipitated the flame, explicitly rejects the possibility of engaging in debate with the author of (5a):

(5) b. <Subject:> Maybe I have a personality defect

> Sigh. I suppose I shouldn't rise to it, so I won't. I just wish to point out that no other geek males I've met are as offensive as this broken little man.

The author does not remove herself from the discourse in response to the flame but instead aligns herself with geekdom and marks the flamer as an anomaly among male geeks. She linguistically excludes the male Anonymous Coward as a participant in the discourse by referring to him with the trivializing description *this broken little man* rather than addressing him in the second person. Moreover, the heading is revised to humorous effect; 'Maybe (he) checked', meaning 'maybe a previous and presumably male participant in the thread checked the female participant's web page to confirm that she is indeed fat and ugly', to 'Maybe I have a personality defect'. The revision uses format tying (Goodwin 1990) to indirectly and cleverly attack the flamer: In this exchange, it is the male flamer, not the female target, who ultimately falls silent.[15]

But to focus solely on the inescapable sexism and even misogyny of some men's postings is to overlook women's own construction of their gender identities as both female and geek. A research emphasis on sexism also presupposes that the central obstacle that women face in engaging with technology is men. But female geeks experience misunderstanding, invisibility, and sometimes hostility from women as well as men, and most particularly from nongeeks, regardless of their gender.

ever, no studies have investigated how particular kinds of responses are related to individual women's identity positions.

[15] For broader patterns of participation, flaming, and interactional style, see the quantitative analyses in Tables 1–3 below.

6 Challenging normative femininity and feminism

Many female geeks who participated in the 1998 Slashdot thread in response to Skud's column mentioned gender-based assumptions from customers or clients as central frustrations:

(6) I work as a techie at an ISP and am the only female techie (the other female in the office does the front desk duties). I deal with customers all day who don't believe I know what I'm talking about and some will even go so far as to ask to speak to one of the 'guys'. This gets old.. There ARE women who know what we're doing.

Such customers may be female as well as male. However, complaints about the sexism of male geeks are not uncommon:

(7) I love Radio Shack's stuff, but I cannot ABIDE their staff—99% male and 100% sexist. As soon as they see you're a woman, they drop into "Mr. Rogers" mode: "Can I sell you a nice computer? Look—it does fun things like get on the Internet and send electronic mail. You can send some recipies to your Mom!" "No, I'm just looking for [insert piece of hardware here]..." "Oh, it's over there. Now are you sure you know what it's used for?"

(8) I use the name < ... > which can be male, save and except when I am no a site I 'need'to appear male so use < ... >. This is to avoid the 'aren't you cute' crap which still crops up, along with, 'who needs a WOMAN'S views' as if possessing a penis is mandatory for computer literacy.

The patronizing and denigrating attitudes described in these comments are predominantly, but not entirely, attributed to men: the author of (7), for example, implies that Radio Shack's female employees, despite their small numbers, share the sexist assumptions of their male counterparts.

For some female geeks, the recognition of male geek sexism has led to separatist initiatives, such as Grrl Net, an IRC (Internet Relay Chat) support group for female hackers:

(9) People always say that we (grrl net) have something to prove, and that is true. We are proving that we are just as good if not BETTER than all the guy geeks out there.

In this sense, geek feminism and radical cyberfeminism are overlapping enterprises.[16] It is worth noting, however, that members of such separatist groups

[16] In fact, one of the largest online separatist efforts, Systers, is a discussion group for women in computer science founded on radical feminist principles (see Camp 1996; Winter and Huff 1996).

often continue to participate in mixed-gender hacker groups like Slashdot and that many female geeks are critical of such separatist efforts (e.g., Anderson 1996).

More generally, many female hackers do not embrace traditional feminist positions on harassment, particularly those which may be viewed as casting women as victims or as lacking competence. While acknowledging the reality of sexual harassment, for example, one female user rejects the traditional definition of this concept:

(10) I'm perfectly capable of saying no. This has always been my position on sexual advances: I don't want anyone else telling me when I may or when I may not receive them (the old "unwanted sexual advances" being part of the litmus test for harassment). I'd like them all (at least the first time from any given person), thank you very much, so that I may pick and choose between them. :)

Although the author quickly moves from sexual harassment to the much narrower arena of sexual advances, thus effacing the wide range of overtly hostile acts that also fall under the rubric of harassment, the point she makes is not that harassment does not exist but that she does not want her agency in this (or any other) realm to be slighted. Likewise, following Skud's attack on traditional feminist perspectives on women and technology, female geeks on the thread offered their own criticisms of such views:

(11) I agree with <Skud's critique of> the whole tiresome gender blah-blah. Personally, I don't have time for it, and you'd have to drag me kicking and screaming to one of those women-in-technology seminars.

Similarly, another female user writes:

(12) and frankly, those women from that "women and the web" forum Kirily/you spoke of sound like they're making excuses for not getting out there and *trying.*

This position leads to a general critique of the helplessness of nongeek women around technology:

(13) I think a willingness to admit your lack of knowledge is a good thing ... some women, unfortunately, take it overboard :)

It may be tempting to read some of these critiques of nontechnically oriented women as antifeminist or even misogynistic; example (12) in particular tends to set off alarm bells for nongeek feminists. But it is important to remember that feminism has been enriched throughout its history by challenges issued by

women who were marginalized or excluded by mainstream feminism: lesbians, women of color, working-class women, and many others have made feminism more inclusive. Geek feminism contributes to this project by reminding feminists that not all women are uncomfortable in the male-dominated world of computers. Such a perspective should be seen less as an attack on women and more as an affirmation of the geek outlook, as indicated in the following posting:

(14) <...> I certainly don't begin to approach the two attitudes most seen by non-geeks, which are 1) computers are scary; I don't want accidentally destroy something! and 2) computers are just tools; show me what I need to know to get my job done.

Both of those points of view are almost incomprehensible to me.

However, and this may be why these examples are troubling to some feminists, rejecting traditional feminist principles may also mean rejecting traditional feminist practices, including traditional discourse practices. Thus some messages from female geeks are hardly "sisterly" in their form:

(15) As a female geek/nerd whatever the fuck, i find it annoying how whenever any nerd chick has anything to say, all the guys are all "good work! wicekd article" just because a female happened to write it.. when in actuality, the article was garbage. My 9 year old sister who plays mindsweeper and sets up hotmail accounts could write the same thing. Skud, that article sucked ass. maybe if i have the time one day i'll sit down and write a good article to post, until then, i hope all you male geeks have fun ranting and raving over shit articles written by code bitches. =)

While this position may not appear feminist by usual standards (to say the least), it does uphold two basic geek feminist principles: women and girls can be competent computer users; and female geeks should not be treated differently from male geeks. The author does not dispute the content of Skud's column but dismisses it as 'what everyone already knows'. Despite the fact that this flaming may be more akin to the stereotypical male than female online style, which I discuss further below, or indeed even because of this aggressive oppositional style, such women deserve a more central place in the study of language, gender, and technology. After all, the notion of 'cooperative' discourse as characteristic of female interactional style is itself a reified construct that has been challenged by numerous language and gender scholars from Goodwin (1980) on. Indeed, one important insight from Hall's study is that even in the separatist space of radical cyberfeminism, supportive interactions are not a natural outcome of women's different communicative style but rather are the result of a deliberately maintained political experiment. Conflict and hostility are still in evidence, though

negatively sanctioned, on the list she studied. Thus, we should not be surprised to find women as well as men engaged in oppositional discourse practices online. However, this example, which concludes its stream of personal invective with a mitigating smiley-face emoticon, is more accurately classified as manifesting a 'mixed' stance (i.e., one that includes elements of both opposition and alignment).[17] As I discuss below, in their online responses to a second column written by Skud, both women and men on Slashdot displayed a preference for such a style.

7 Feminism in practice: Skud's second thoughts

It should be clear from the foregoing discussion that female geeks are generally skeptical of the difference-based approaches to gender that have long been the foundation of much feminist analysis both within linguistics and in other fields. Thus, in February 2000, Skud received a good deal of criticism from both female and male hackers (as well as numerous expressions of support and agreement) when she posted a second essay tacitly revising her avowedly apolitical position in 'Female Geeks: Do They Exist?' to one that highlighted gender difference. In the second column, Skud argued that in order to bring more women into technical fields, it is necessary to expand what counts as hacker activity:

> Opening up our definition of hackerdom to include such traditionally female concepts as user interface and psychology, written and verbal communications, group interactions (both electronic and face to face), et cetera, may be a valid alternative to requiring women to fit the existing hacker mould. Additionally, it may result in communities and processes which are even more powerful than our current models.

Among the tasks that Skud proposed as especially suitable for female geeks (in addition to other roles) were project management, conflict resolution, documentation, website maintenance, training, and organization of conferences. While she was careful to note that such roles could also be filled by men and should be viewed as part of the repertoire of hacker skills, not separate from them, she anticipated (rightly) that she would be attacked for suggesting that women in computer culture should draw upon skills associated with traditional femininity.

The second essay was posted on Freshmeat, a website for the announcement of new Linux-based software which also encourages editorials from Linux users; it was announced to Slashdot users two days later. A Slashdot thread of 332 messages, with the original subject heading 'Want More Geek Chicks?', developed in response to the second essay. In order to investigate how the nontraditional feminist ideologies identified in the initial thread are put into practice in discourse, I analyzed the second thread both quantitatively and qualitatively, using Herring's (1996) research as a model.

[17] Emoticons are iconic typographic representations of human facial expressions which are used as online discourse markers; their left-to-right orientation maps to a top-to-bottom orientation of the human face.

I chose Herring's work as the basis for my own study because it represents some of the most careful, rigorous, extensive, and persuasive research on precisely this question of women's participation. Although our findings are rather different, this is due not to any inadequacies of the approach but to crucial differences in the communities of practice we studied. Much of Herring's work is based on online discourse among academics, for whom computers are simply a tool to support their scholarly work. By contrast, the work of hackers is computing itself, and given their different relationship to computers it is inevitable that their use of computers (including as a means of communication) will be different as well. After all, even in offline communication, the interactional norms of academia and the computer industry are rather divergent. Thus the following comments are intended in the spirit of adding another perspective rather than imposing a single point of view.

When I began my analysis of the second thread, my initial expectation was that although female users of Slashdot might reject claims of their own marginalization and exclusion, the details of discourse would show a disjunction between ideology and practice. That is, I expected to find that female geeks participated less and received less recognition on Slashdot, despite their own perception of themselves as full participants, and this was also suggested by the participation rates on the first thread, with half as many female as male contributors. However, the results of the analysis were not so straightforward.

I looked first at simple participation rates: how often did women post, how many women posted, and how long were their messages? The results of this first level of analysis are provided in Table 1.[18]

	Female Participants (34)	Male Participants (48)	Gender Unspecified	Total
Postings as Registered User	66 (27%)	74 (31%)	102 (42%)	242 (73%)
Postings as Anonymous Coward	9 (10%)	12 (13%)	69 (77%)	90 (27%)
Total postings	75 (23%)	86 (26%)	171 (52%)	332 (100%)
Total words	16,651 (34%)	14,042 (29%)	17,779 (37%)	48,472 (100%)

Table 1. Participation rates on 'Want More Geek Chicks?' thread, by displayed gender.

[18] The number of individuals posting as Anonymous Cowards cannot be determined; hence tests of statistical significance cannot be meaningfully performed on the data in Table 1. Percentages may not add to 100 due to rounding.

The table shows that, as in the 1998 thread, the number of female participants is much lower than the number of male participants (although higher than in the earlier thread). These lower numbers may suggest that female geeks on Slashdot are indeed marginalized in practice, if not in their own perception. Using Herring's other analytic categories, however, I uncovered other patterns that make such an interpretation problematic. First, despite the fact that there are fewer women than men participating in this thread, they participate at almost equal rates: messages by women constitute 23% of the total, while messages by men constitute 26%. Even more striking is the number of total words in posts by women versus men, where women actually surpass men, 34% to 29%. These data indicate that those few users who display a female gender identity on the thread create an impression of a much larger online female presence than is probably the case, by posting more and longer messages on average than do users with a displayed male identity.

While Table 1 may imply that female geeks can overcome small numbers with heavy posting, it does not give any indication of how women's messages function in the discourse as a whole, nor of their style or content. Women may be talking, but as we know, men may not be listening. Herring et al. (1995) found that on the lists they studied both women and men tended to respond more to men. As Table 2 shows, however, this pattern was not borne out in the Slashdot data. Women gave equal numbers of responses to women and men, and they received equal numbers of responses from both genders; neither gender of addresser nor gender of addressee has any statistically significant effect. And where Herring and her collaborators found the highest rates for male responses to male posts, this category was the lowest for the 2000 Slashdot data. Since this apparent evenhandedness might actually be the result of heavier flaming of women than men, I also considered the number of responses that were flames. As shown in Table 2, this figure is about 10%, regardless of gender of addresser or addressee (the low numbers make it difficult to interpret the lack of male-male flames; the zero value is not statistically significant).[19]

[19] It is possible, and in fact likely, that the topic of this thread encouraged women to participate at higher rates than on threads in which gender is not the focus. However, it is worth noting that Herring et al. (1995) found that women on academic lists participated less than men even when the topic was gender. Hence the difference between female geeks' and nongeeks' online participation rates is not simply the result of a difference in topic.

	Addresser			
Addressee	Female	Male	Gender Unspecified	Total
Female	19 (2)	20 (2)	26 (3)	65 (7)
Male	20 (3)	11 (0)	23 (3)	54 (6)
Gender Unspecified	21 (0)	19 (2)	61 (7)	101 (9)
Total	60 (5)	50 (4)	110 (13)	220 (22)

Table 2. Responses on 'Want More Geek Chicks?' thread, by displayed gender of addresser and addressee (number of flames appears in parentheses).

But women's contributions may still be doing something different in the discourse. I therefore also examined whether messages with a displayed gender identity manifested a clear gender-based style. Herring's (1996) work again provides a helpful guide. She found two distinctive styles in messages that responded to a previous post: an aligned style, in which the author displayed agreement or support, and an opposed style, in which the author challenged or critiqued a previous post.[20] The aligned style was associated with women in Herring's study and the opposed style with men. She also identified a mixed style that contained elements of both of these gendered styles. She found that in mixed-gender groups in which they are numerical minorities, each gender accommodates to the style of the other. This certainly seems to conform with the pattern for women on the 2000 Slashdot thread, as Table 3 indicates.

	Female	Male	Total
Opposed	11 (15%)	19 (22%)	30 (19%)
Aligned	17 (23%)	27 (31%)	44 (27%)
Mixed	43 (57%)	36 (42%)	79 (49%)
Unclassified	4 (5%)	4 (5%)	8 (5%)
Total	75	86	161

Table 3. Postings on "Want More Geek Chicks?" thread, by displayed gender and style.

However, to interpret women's linguistic behavior in this thread as exceptional or atypical as compared to their 'usual' style requires the assumption that language users have a basic style that emerges in homogeneous (e.g., same-sex) group settings. To be sure, the majority of women's postings (57%) are in a mixed style, and women favor an aligned style (23%) over an opposed one (15%). But men too adopt a mixed style at high rates, and women's and men's use of both the aligned and opposed styles is not radically different (cf. Bergvall 2000), although men use one or the other rather than a mixed style more often

[20] Herring excludes flames from her analysis of opposed style, but as Sutton (1994) points out, flaming is simply an extreme form of oppositional discourse. Table 3 therefore includes flames as evidence for an opposed style.

than women do. It cannot therefore be asserted with confidence that the women and men on this thread manifest different styles, or that these discursive patterns derive from the adaptation of a primary style to accommodate those who favor a different style.[21] This point is supported by the qualitative evidence discussed in the next section.

The rich stylistic resources of the women (and men) in this online discussion are also found in much more fully embodied contexts as well. Keli Yerian's study (this volume) of a women's self-defense class demonstrates that apparently gendered styles are in fact flexible strategic displays for women learning to protect themselves against male physical violence. Yerian argues that in this situation what might be seen as stereotypically gendered behavior, such as passively submitting to or even sympathizing with an attacker, is better viewed as a temporary and tactical act of agency and calculated self-defense. Her incisive analysis points up the importance of context in understanding the social and interactional meanings of style.

8 Flaming in context

Like the study of styles in the material world, the issue of online style also benefits from close attention to the details of interactional context. When context is considered, the 'Want More Geek Chicks?' thread reveals a distinctive pattern of flaming—the quintessential manifestation of the opposed style. The data indicate that flames are not simply acts of aggression that drive women to silence or to witty rejoinder. Where Herring found that in her research the use of the opposed style is usually designed to cut off interaction, in the discourse context of the Slashdot thread, flames often begin a dialogue rather than end it. And during this dialogue, the styles of both genders tend toward a more mixed or even aligned position. In fact, it appears that the conversation often ends not when the opposed style is used but when both interactants have moved toward the more aligned style.

Example (16) illustrates this phenomenon. In (16a) a male user posts an overtly sexist message:

(16) a. I like the Woman of the New Millenium.. Willing to sacrifice her career to take care and please her Husband, including household duties (.ie Cleaning the clothes, washing the dishes, Srubbing the toilet clean). Satisfying her husband sexually, and bearing many children for a properous future family....
<...>

[21] More precisely, the distribution of the styles of women's postings is statistically significant ($p < .025$), while the difference between women's and men's posting styles is not statistically significant.

I'm single, so ladies, dont be afraid to message me, I've got a credit card with a 50K limit, a brand new Lexus gs400 and a house payed for. The offer is still on to the highest bidder.

In (16b), a female user responds with a flame, explicitly labeling the message as 'sexist' and dismissing the author of (16a) as part of a larger male group, the 'type of guy' whose attitude is obsolete:

(16) b. <Subject:> Hey everyone! Let's see who can be more sexist!

Hello, welcome to the 20th/21st century. Please step to your right.

You are exactly the type of guy we broke from during the '70s. "Oh, chicks should be in the home, blah blah blah." Bullshit. You're the reason why there aren't more "geek chicks," because you're stuck in that mindset.

"Woman of the millenium" my ass. The woman of the millenium is whatever she wants to be, because now that the 1950s are over she CAN be whatever she wants to be, and step on guys like you to get there.

Get over yourself. We won. Things are different now, old man.

In (16c), this message is in turn flamed by another male user, who uses format tying in the subject line to mock the female user's post.

(16) c. <Subject:> Hey everyone! Let's see who can read!

I got the distinct impression that the 'old man' was a woman.

Read the story.

Soon afterward, however, the second male user realizes he has misunderstood the female user's message. In (16d), he uses a discourse marker borrowed from cartoon character Homer Simpson to mark his contrition, apologizes, and agrees with the content of her message.

(16) d. <Subject:> D'OH!

Sorry! The way it came up it looked like the post I replied to was in reply to the story. I then changed mode and I see that it wasn't. OOps.

My appologies.

You were quite right, the guy is fairly moronic.

The trajectory of this discourse does not move toward increased flaming or to female silence, but to an aligned style. Although in this example the shift toward alignment results from the fact that the male user has made a mistake,

nothing necessitates his strong agreement with the female user's attack on the previous male user (*you were quite right, the guy is fairly moronic*). Moreover, such shifts toward an aligned style occur even when neither participant acknowledges having made a factual error.

While in (16) the move toward alignment is carried out by one user, alignment is more commonly negotiated by both interactants. In (17a), a message which received a high moderation score (4 out of 5) for insightfulness, a female Anonymous Coward complains about previous posts by male users that focus on women's physical attractiveness. As additional evidence of men's objectification of women, she points to the fact that at a recent computer convention some women were enlisted to don latex costumes in order to promote BSD, a Unix operating system.

(17) a. <Subject:> My gawd!!

Read your comments, guys. And you honestly wonder why there aren't more of us "linuxchix"?

It's just like those offensive daemon babes *BSD saw fit to subject us to at LinuxWorld.

We're [female Linux hackers] not here in force because we get the (both implicit and explicit) message that we're not wanted.

In (17b), another female user, who in fact was one of the latex-clad women, replies:

(17) b. <Subject:> Oh, please. (by a daemonette)

Yeesh.

#1: You are subjected to only what you allow yourself to be subjected to. Get a backbone.

#2: I saw fit to "subject" myself? *laugh* No. I actually got to go to Linuxworld, and between the OS-related questions I was answering at the booth, the contacts I was making, and the posing with people with a sense of humor, I had a very productive time. Worth my effort (and sweat, ewww) in spades. What did you spend your week doing?

#3: You're only not wanted when you enter the door whining. I have had much support from geekers, in costume and out, because I have always approached things with the attitude of a student, and a respectful one at that. Try it sometime. You'd be surprised what good people there really are out in the opensource community, especially.

If you still find this offensive – you're not spending enough time hacking. :)

Save the moderation points for the people with a spine. And something to say. Or do.

Read your own comment. Angsty people like that may be why there aren't more "linuxchix" – unfortunately, the louder ones seem to have the bad attitudes.

<URL> Have at it. I'm the one in latex. And I'm 19. Thank you.

This response is largely oppositional in tone: *Oh please, Yeesh, Get a backbone, You're only not wanted when you enter the door whining*. The author also criticizes the moderator for assigning such a high priority score to the previous post (her own message also receives a high rating of 3 for informativeness). But this post is not entirely oppositional. The user appeals to a shared hacker identity: 'If you still find this offensive – you're not spending enough time hacking'. And she adds a smiley-face emoticon, which is generally typical of an aligned style.

In (17c), a male user attacks this post in similarly oppositional terms (it is worth noting that he seems to be supporting the traditional feminist position put forth in 17a):

(17) c. That's the most simplistic banal view of the human mind, soul, and experience I've ever seen.

Very few humans in this planet have been able to 'wish themselves' a new backbone, or anything else for that matter, and most who have it (or anything else in this world) did't get it _purely_ due to their own 'efforts'. I *doubt* you're responsible for your own backbone.
< ... >
Congrats on having the inner strength and confidence that you do have. My sympathies for your lack of depth elsewhere.

By calling the message simplistic and banal and accusing its author of lack of depth, the male user adopts a clearly opposed style. But like the author of (17b), he is not wholly oppositional: he offers her a (grudging) compliment on her 'inner strength and confidence' before continuing his attack.

In (17d), the second female poster concedes some of his points, although she by no means yields all her ground (italics indicate a quotation from the previous message):

(17) d. Okay. a couple of your points are granted.
< ... >
That's the most simplistic banal view of the human mind, soul, and experience I've ever seen.

wow, I love you too. Be honest – you have seen more simplistic ones, I'm sure. if not, I'm moving to where you live. and I don't care WHERE it is. *grin*
< ... >

The female poster challenges the male user's strongly oppositional evaluation of her post, criticizing both its form (*wow I love you too*) and its content (*Be honest – you have seen more simplistic ones, I'm sure*). However, she again moves toward an aligned style, this time using an emote (**grin**).[22] This mixed style elicits an aligned style in the male user's next post: he too concedes several points, apologizes for his tone, and includes a smiley emoticon at the point where he might be seen as disagreeing.

(17) e. *Not striving to make oneself stronger, more centered, and more stoic when necessary.... is a wasteful treatement of a life, imho.*

Heartily agreed.

Be honest – you have seen more simplistic ones, I'm sure.

Yeah, but I'm always unimpressed with them too :) < ... >

Appologies for the tone of my reply. I was reacting to what I perceived as the tone and attitude of your reply. And I guess you were probably reacting to the fact that someone was marginalizing who you were based upon what you were wearing... Understandable.
< ... >

Thus by the end of their encounter these two participants, who began with a highly opposed style, approach a much more aligned style. This 'shoot-first-and-ask-questions-later' strategy is not restricted to one gender but rather is an outcome of interactional negotiation in which both participants construct their styles in relation to the shifting discursive context.

The final example begins with an oppositional post from Warp, a woman, to tk, a man, in response to tk's comment 'A lot of software projects out there could really use that womans touch'. Appealing to a shared geek identity, the female poster uses sarcasm to criticize the earlier message.

(18) a. <Subject:> "A womans touch"

"A lot of software projects out there could really use that womans touch"

Geez. Could you be a little more patronising please?

[22] Emotes are online discourse markers that contextualize the interpretation of a message through a description of nonverbal actions attributed to the message's author.

We're just geeks too, trying to do what we're good at. We don't wanna be tokenised to "add a womans touch" to a project. We want to be involved to show off our skills, and get kudos for being –good–, not for being chicks.
< ... >

The male user is likewise oppositional, matching the sarcasm of the previous message while objecting to it as a flame.

(18) b. <Subject:> Re: "A womans touch"

Sorry, I'll try to be more patronising next time.

Heck, I thought it was pretty funny.

You don't want to be tokenised? There goes my woman compiler front-end, too. Darn.

Don't forget to turn down any of those annoying "women in engineering" scholarships, they only give you money because they want more chicks in their field—they must be competing for humanities in demographics.

And it's interesting that you're flaming me instead of Skud, since I basically just summed up the last half of her article in that one offensive line, for you. < ... >

Remember, one person's offensive stereotype is another person's rule of thumb. < ... >

The author addresses the previous message point for point, using sarcasm as well as defensiveness to challenge the female subscriber's statements. (His sarcastic remark about 'tokenising' is a geeky pun: the initial stage of the compile process breaks an input file into tokens.) In reply (18c) the female user implies that the post was not a flame, and while she continues to disagree she uses emoticons to mitigate her disagreement. She signs her post with her first name as well as her user nickname, which contributes to the aligned stance.

(18) c. It's interesting that you took it as a flame. =)
< ... >
I don't buy it, and I didn't find it offensive, I just found it patronising. There's a difference. Patronising means I think it demeans both men and women. =)

<Tina/Warp>

The reply from the male user converges dramatically with the aligned style of the previous post. He concedes that he himself may not agree with his origi-

nal message and that his interlocutor may have been right to object to it. Moreover, he uses five smiley emoticons in the post (two of which appear in the excerpt below), the most of any Slashdot post in the thread, and he signs off not only with a leave-taking marker, 'later', but also with his first name.

(18) d. Not a flame? On slashdot? Okay, fair enough. :)
< ... >
I don't know if I buy it, I thought it made a cute sound bite at the time, and maybe it was somewhat patronising. I'll survive, I don't have that much shame, and it's great to see some of the women who lurk on slashdot come out and post for once. :)
< ... >

later,

<Thomas>

Such negotiations toward alignment show that oppositional style, or even flaming, is not solely the province of men and does not necessarily have the silencing effect on women that it has been found to have in other online discourse contexts. They also suggest that both female and male geeks are doing more than simply replicating or appropriating gendered interactional styles, for the styles themselves are not so much markers of gender as of interactional stance in these interactions.[23] Thus, like the women in the self-defense class that Yerian (this volume) studied, the women and men in this thread should not be viewed as accommodating away from their 'typical', gendered styles but are interactively developing a shared, geeky, stylistic practice that contains elements of both opposition and alignment.[24] As the foregoing examples indicate, this geeky style includes an initial tendency to favor debate over more 'cooperative' discourse modes and a preference for agreement to be negotiated rather than assumed. Geek discourse style also often takes an oppositional stance toward the cultural hegemony of nongeek ideologies—including, especially among female hackers, those associated with gender.

[23] However, these two final examples may suggest that women more than men initiate a shift toward alignment, a possibility that cannot be confirmed without more data on flaming exchanges.

[24] The stylistic practice that emerges here may also be particular to Slashdot. There are strong pressures on users to be constructive contributors to the discourse due to the scoring system, which can penalize pointless or hostile posts and can reward those that are especially useful (although flames may be viewed as informative or insightful despite their strongly oppositional style). The greatest reward is in fact to become a moderator for several days: Slashdot's rotating moderators are registered users who have achieved a high cumulative moderation score. Thus those who are considered to be the best contributors to the discourse are the most able to shape it.

9 Conclusion

While comparative studies of language and gender, especially in emergent discourse domains such as the Internet, are crucial to our understanding of how gender politics are carried out in language, such studies may focus on gender inequities at the expense of understanding women's experiences on their own terms. Unlike the women who are the focus of radical feminist research on computing culture, the female hackers in this study do not seem to feel disempowered by their experience with technology, nor do their linguistic practices suggest that they are ill-equipped to participate in the sometimes combative discourse of online geek communities. But if radical cyberfeminism is inadequate to account for the experiences and practices of many female geeks, so too is postmodern cyberfeminism, which presupposes a bodiless, virtual, wholly textual social world. Geek feminism, by contrast, is a thoroughly embodied version of feminism. Female hackers do not restrict their participation in computing to virtual environments, as do the amateur or nongeek users who figure centrally in postmodern accounts of gender fluidity in cyberspace. Instead, much of their time is spent working with computers in real life, where their gender is literally visible, audible, and tangible. Thus the gender play that characterizes postmodern cyberfeminism is not a realistic option for most female geeks, and while gender lurking may be a temporary tactic for coping with sexism, many female hackers also speak out assertively and repeatedly to combat their marginalization both within computer culture and in the nongeek world.

There is no single form of geek feminism, of course, but taken together the discourse of female hackers is neither celebratory nor apocalyptic, neither postgender nor gender-dichotomous. In some ways, however, the cyberfeminisms that Hall documents have analogues in geek feminism. Female geeks subvert gender expectations, and thus are akin to postmodern cyberfeminists. They also challenge male dominance, and thus are akin to radical cyberfeminists. But unlike these cyberfeminisms, geek feminism both acknowledges and engages directly with male dominance on the Internet and elsewhere in the computing world. At the same time, geek feminists challenge other feminists' misperceptions of gender and computing culture, which tend to overlook or misconstrue female hackers' experiences.

Female hackers do want more geek chicks. But until that happens (and probably long afterward as well), they will continue to use untraditional discursive strategies to promote their ability and their visibility as female geeks. To study geek feminism, then, contributes not only to our understanding of feminist discourses in the still heavily masculine domain of the Internet, but also to a new vision of the geek feminist as a discursively constructed identity that reworks normative gender arrangements without erasing gender consciousness.

Acknowledgments

I am grateful to Slashdot and to Kirrily 'Skud' Robert for permission to use the material discussed in this paper. For their comments and suggestions, I would like to thank Martina Ladendorf, Sara Trechter, and audience members at the 1999 Feminism(s) and Rhetoric(s) Conference at the University of Minnesota and at the 2000 International Gender and Language Association Conference at Stanford University. Special thanks to Devyani Sharma and the other editors of this volume for their scrupulous care in the editing of this paper, and to Jon McCammond for sharing his geeky expertise. All remaining weaknesses are my own responsibility.

References

Alberts, J. K. 1992. Teasing and Sexual Harassment: Double-Bind Communication in the Workplace. *Constructing and Reconstructing Gender: The Links Among Communication, Language, and Gender*, ed. Linda A. M. Perry, Lynn H. Turner, and Helen M. Sterk, 185–196. Albany: SUNY Press.

Anderson, Judy. 1996. Not for the Faint of Heart: Contemplations on Usenet. *Wired Women: Gender and New Realities in Cyberspace*, ed. Lynn Cherny and Elizabeth Reba Weise, 126–138. Seattle: Seal Press.

Bergvall, Victoria. 2000. The Continuum of Gender Construction in On-Line Discourse. Paper presented at the First International Gender and Language Association Conference, Stanford University.

Brail, Stephanie. 1996. The Price of Admission: Harassment and Free Speech in the Wild, Wild West. *Wired Women: Gender and New Realities in Cyberspace*, ed. Lynn Cherny and Elizabeth Reba Weise, 141–157. Seattle: Seal Press.

Brown, Penelope, and Stephen C. Levinson. 1987. *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press.

Bruckman, Amy S. (1993). Gender Swapping on the Internet. Paper presented at the Internet Society, San Francisco, August. Available via FTP from the author at: <http://www.cc.gatech.edu/fac/Amy.Bruckman/papers/#INET>.

Bucholtz, Mary. 1998. Geek the Girl: Language, Femininity, and Female Nerds. *Gender and Belief Systems: Proceedings of the Fourth Berkeley Women and Language Conference*, ed. Natasha Warner et al., 119–131. Berkeley: Berkeley Women and Language Group.

Bucholtz, Mary. 1999. 'Why Be Normal?': Language and Identity Practices in a Community of Nerd Girls. *Language in Society* 28(2): 203–223.

Butler, Judith. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

Camp, L. Jean. 1996. We Are Geeks, and We Are Not Guys: The Systers Mailing List. *Wired Women: Gender and New Realities in Cyberspace*, ed. Lynn Cherny and Elizabeth Reba Weise, 114–125. Seattle: Seal Press.

Cherny, Lynn, and Elizabeth Reba Weise, eds. 1996. *Wired Women: Gender and New Realities in Cyberspace*. Seattle: Seal Press.

Cushing, Pamela J. 1996. Gendered Conversational Rituals on the Internet: An Effective Voice Is Based on More than Simply What One Is Saying. *Anthropologica* 38(1): 47–80.

Cybergrrlz <http://www.cybergrrlz.com>

Dibbell, Julian. 1998. *My Tiny Life: Crime and Passion in a Virtual World*. New York: Henry Holt. Freshmeat <http://freshmeat.net>

Furger, Roberta. 1998. *Does Jane Compute?: Preserving Our Daughters' Place in the Cyber Revolution*. New York: Time Warner.

Gardner, Carol Brooks. 1980. Passing By: Street Remarks, Address Rights, and the Urban Female. *Sociological Inquiry* 50(3-4):328–356.

Goodwin, Marjorie Harness. 1980. Directive-Response Speech Sequences in Girls' and Boys' Task Activities. *Women and Language in Literature and Society*, ed. Sally McConnell-Ginet, Ruth Borker, and Nelly Furman, 157–173. New York: Praeger.

Goodwin, Marjorie Harness. 1990. *He-Said-She-Said: Talk as Social Organization among Black Children*. Bloomington: Indiana University Press.

Hall, Kira. 1996. Cyberfeminism. *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*, ed. Susan C. Herring, 147-170. Amsterdam: John Benjamins.

Haraway, Donna. 1991. *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge.

Herring, Susan C. 1994. Politeness in Computer Culture: Why Women Thank and Men Flame. *Cultural Performances: Proceedings of the Third Berkeley Women and Language Conference*, ed. Mary Bucholtz et al., 278-294. Berkeley: Berkeley Women and Language Group.

Herring, Susan C. 1996. Two Variants of an Electronic Message Schema. *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*, ed. Susan C. Herring, 81-108. Amsterdam: John Benjamins.

Herring, Susan C. 1999. The Rhetorical Dynamics of Gender Harassment On-Line. *Information Society* 15(3): 151-167.

Herring, Susan C., Deborah A. Johnson, and Tamra DeBenedetto. 1995. 'This Discussion Is Going Too Far!': Male Resistance to Female Participation on the Internet. *Gender Articulated: Language and the Socially Constructed Self*, eds. Kira Hall and Mary Bucholtz, 67-96. New York: Routledge.

Kendall, Lori. 1998. 'Are You Male or Female?': Gender Performances on MUDs. *Everyday Inequalities: Critical Inquiries*, ed. Jody O'Brien and Judith A. Howard, 131-153. Malden, MA: Basil Blackwell.

Kissling, Elizabeth Arveda. 1991. Street Harassment: The Language of Sexual Terrorism. *Discourse and Society* 2(4): 451-460.

Kissling, Elizabeth A., and Cheris Kramarae. 1991. Stranger Compliments: The Interpretation of Street Remarks. *Women's Studies in Communication* 14(1): 75-93.

Kramarae, Cheris. 1986. Speech Crimes which the Law Cannot Reach; or, Compliments and Other Insulting Behavior. *Proceedings of the First Berkeley Women and Language Conference 1985*, ed. Sue Bremner, Noelle Caskey, and Birch Moonwomon, 84-95. Berkeley: Berkeley Women and Language Group.

Kramarae, Cheris. 1995. A Backstage Critique of Virtual Reality. *Cybersociety: Computer-Mediated Communication and Community*, ed. Steven G. Jones, 36-56. Thousand Oaks, CA: Sage.

MacKinnon, Richard. 1997. Virtual Rape. *Journal of Computer-Mediated Communication* 2(4). <http://www.ascusc.org/jcmc/vol2/issue4/mackinnon.html>

Mashberg, Tom. 2000. Bad Hair, Pocket Protector—and Proud! *Boston Herald*, April 2. <http://www.bostonherald.com/news/local_regional/geek04022000.htm>

Millar, Melanie Stewart. 1998. *Cracking the Gender Code: Who Rules the Wired World?* Toronto: Second Story Press.

Morse, Margaret. 1997. Virtually Female: Body and Code. *Processed Lives: Gender and Technology in Everyday Life*, ed. Jennifer Terry and Melodie Calvert, 23-36. London: Routledge.

Old Boys Network. <http://www.obn.org>

Plant, Sadie. 1996. On the Matrix: Cyberfeminist Simulations. *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, ed. Rob Shields, 170-183. London: Sage.

Robert, Kirrily 'Skud'. 1998. Female Geeks: Do They Exist? Slashdot, November 24. <http://slashdot.org/features/98/11/24/0941201.shtml> Also available at <http://infotrope.net/writing/>

Robert, Kirrily 'Skud'. 2000. Geek Chicks: Second Thoughts. Freshmeat, February 5. <http://freshmeat.net/articles/view/145/>. Also available at <http://infotrope.net/writing/>

Savicki, Victor, Dawn Lingenfelter, and Merle Kelley. 1996. Gender Language Style and Group Composition in Internet Discussion Groups. *Journal of Computer Mediated Communication* 2(3). URL:www.ascusc.org/jcmc/vol2/issue3/savicki.html.

Slashdot <http://www.slashdot.org>

Spender, Dale. 1995. *Nattering on the Net.* North Melbourne, Victoria: Spinifex Press.

Stewart, Concetta M., Stella F. Shields, Dominique Monolescu, and John Charles Taylor. 1999. Gender and Participation in Synchronous CMC: An IRC Case Study. *Interpersonal Computing and Technology* 7(1-2). <http://www.emoderators.com/ipct-j/1999/n1-2/stewart.html>

Sutton, Laurel A. 1994. Using USENET: Gender, Power, and Silence in Electronic Discourse. *Berkeley Linguistics Society* 20: 506-520.

Terry, Jennifer, and Melodie Calvert. 1997. Introduction: Machine/Lives. *Processed Lives: Gender and Technology in Everyday Life*, ed. Jennifer Terry and Melodie Calvert, 1-19. London: Routledge.

Turkle, Sherry. 1988. Computational Reticence: Why Women Fear the Intimate Machine. *Technology and Women's Voices: Keeping in Touch*, ed. Cheris Kramarae, 41-61. New York: Routledge and Kegan Paul.

Turkle, Sherry. 1995. *Life on the Screen: Identity in the Age of the Internet.* New York: Simon and Schuster.

Wakeford, Nina. 1997. Networking Women and Grrrls with Information/Communication Technology: Surfing Tales of the World Wide Web. *Processed Lives: Gender and Technology in Everyday Life*, ed. Jennifer Terry and Melodie Calvert, 51-66. London: Routledge.

Warnick, Barbara. 1999. Masculinizing the Feminine: Inviting Women on Line ca. 1997. *Critical Studies in Mass Communication* 16: 1-19.

Webgrrls. <http://webgrrls.com>

Winter, Debra, and Chuck Huff. 1996. Adapting the Internet: Comments from a Women-Only Electronic Forum. *American Sociologist* 27(1): 30-54.

Wise, Sue, and Liz Stanley. 1987. *Georgie Porgie: Sexual Harassment in Everyday Life.* London: Pandora Press.

Yerian, Keli. This volume. Strategic Constructivism: The Discursive Body as a Site for Identity Display in Women's Self-Defense Courses. *Gendered Practices in Language,* ed. Sarah Benor, Mary Rose, Devyani Sharma, Julie Sweetland, and Qing Zhang. Stanford: CSLI Publications.

Zdenek, Sean. This volume. Scripting Sylvie: Language, Gender, and Humanness in Public Discourse about Software Agents. *Gendered Practices in Language,* ed. Sarah Benor, Mary Rose, Devyani Sharma, Julie Sweetland, and Qing Zhang. Stanford: CSLI Publications.