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Johndan Johnson-Eillola

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WEBBING CYBERFEMINIST PRACTICE

COMMUNITIES, PEDAGOGIES, AND SOCIAL ACTION

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In the Information Age, the ability to apply technologies, such as the Internet, constitutes an invaluable skill in the shaping of cultural spaces. As such, the Internet embodies a forum for public speech. The right to public speech is a privilege that has traditionally been men’s prerogative. Through the ages, this privilege has been contingent on literacy and the mastering of emerging language tools. From the printing press to the computer, men were first language- and then computer-literate. Gender imbalances in the acquisition of literacy are far from accidental. Literacy and the ability to perpetuate one’s interests and perspectives go hand in hand. Correspondingly, illiteracy, silence, and oppression are interconnected. In this chapter, I link the dominant male voice in online environments to the predominantly male-identified literacy in computer languages, code. In cyberspace, ownership of computer languages empowers men with authority over communication tools, as well as authority over the style and content of transactions.

BACKING UP WORDS

In the world of cyberspace and online communication we find a new form of literacy as the sustaining principle in the demonstration of power: Literacy in computer languages, code. We may not be aware of it, but when we interact with the Internet we invariably also interact with the code that
comprises its interactivity and connectivity. However, most computer users will never catch a glimpse of the technical languages at work behind their virtual desktops, behind browsers and windows. Code is placed out of sight for the same reason engines are not plopped into the driver seat of a car. Most individuals want to drive the car, not tinker with its engine on the way to the grocery store. Although it makes sense to put computer languages under the hood, so to speak, this has rendered them invisible to the common user and, to a degree, to critical inquiry.

Undetectably, code sustains information and communication technologies (ICTs). Without it, the Internet and communication online would not be possible. If technology's underlying languages would suddenly be erased, not a single Web page would exist, the flow of e-mail would suddenly come to a standstill, and social media, such as blogs and social networking sites, would not have been conceived. In short, in the absence of code, all virtual space would collapse like an imaginary stack of cards. Code, it has been noted, comprises the very architecture of information technologies such as the Internet (Lessig, 1999; Mitchell, 1996). Programmer and media theorist Peter J. Bentley (2003) elucidated that because computer technology is everywhere, the languages of computer technology are omnipresent (p. 33).

That code literacy is a predominantly male phenomenon is a well-documented fact; it is an issue of considerable concern in disciplines such as computer science (Margolis & Fisher, 2001). Interestingly, computing has become increasingly gendered over time: although women have contributed to the history of computing and were, in fact, among the pioneers in the development of computer languages, 30 years of effort to the contrary, the number of women entering related disciplines has been declining (McGrath, Cohoon & Aspray, 2006, p. 157). The percentage of bachelor's degrees in Computer Sciences awarded to women has declined from 37% in 1985, the peak year, to 28% in 2001 (National Science Foundation, 2004).

The history of the Internet is testimony to this gender imbalance; it was built and is maintained by mostly male programmers. From Tim Berners-Lee, who is credited with devising and implementing the World Wide Web protocol, to Larry Wall, who is credited with the development of Perl, a dynamic programming language descriptively referred to as the “duct tape of the Internet” (Schwartz, 2002), the foundation of the Internet is the product of the combination of male ingenuity and a new form of literacy. Atop this foundation, other programmers have built the tools we interact with online.

Larry Page and Sergey Brin are the co-founders and original programmers of the search engine Google; the name “Google” almost immediately became a verb, which is emblematic of its cultural presence. In recent years, the Google search engine was complemented by Google Maps, Google Earth, Google News; a Google Books project, which aims to digitize millions of books with the intent to make the text searchable online is currently underway. In short, Page and Brin’s vision, encapsulated in code, has defined information exchanges for the rest of us.

Also the product of young men who have a knack for the technical and lingual are the popular social networking sites such as Friendster, invented by Jonathan Abrams in 2003, and Facebook, conceived by Mark Zuckerberg in 2004. The inventions of these code-savvy individuals have redefined how Internet users stay socially connected. Additional examples of male-authored technologies online that have come to inform our lives include the wiki concept, which allows users to create, edit, and link Web pages. First developed by Ward Cunningham in 1994, wikis have become ubiquitous and count among the indispensable Internet technologies today; the online, multilingual, open concept encyclopedia Wikipedia is one of the most famous wiki incarnations. Consider also video and music sharing sites such as Napster, originally devised by Shawn Fanning in 1998, and YouTube, first implemented by Chad Hurley, Steve Chen, and Jawed Karim in 2005. Of equal significance in the shaping of the political and economic implications of the Internet is BitTorrent, a peer-to-peer file sharing communications protocol that was created by programmer Bram Cohen in 2001.

BitTorrent is an Open Source technology. The Open Source programming movement believes in free access to software's source code. Scholars estimated (Tapscott & Williams, 2006, p. 84) that almost a third of all Web pages use the Open Source programming language PHP, yet studies (Nafus, Leach, & Krieger, 2006) indicate that women represent a miniscule 1.5% of Open Source contributors, despite the fact that Open Source is among the most influential trends in technology and purportedly embraces a system of meritocracy, autonomy, and freedom. Although dominant Internet technologies and programming trends have far-reaching social, cultural, and political implications, not a single woman has been credited with an Internet technology that has entered the mainstream.

Programmers, those who write code, understand the Internet's functionality, how to make interactivity work, how to deliver content, and how to implement ideas. Online code literacy translates into authority and into the ability to back up words with action.

Given the identification of computer technology and programming as masculine, conflicts between men and women in online communication were, in a sense, preprogrammed. There is no pun intended; my proposition is that programming is a factor in the struggle for dominance in cybe-
space. More specifically, I submit that gender imbalances in programming translate into gender imbalances in the use of the Internet. Those who write code and create virtual spaces inadvertently have a different relationship to cyberspace than those who merely visit it after the construction has been completed. In *Language and the Internet*, David Crystal (2001) noted that the programmers and hackers who built the Internet naturally developed a sense of ownership (p. 70). Crystal's analysis confirmed that through authorship in technology's languages, the code-literate could claim the spaces they invented as well as the nature of discourse within. Arguably, nobody is better equipped to regulate speech in virtual forums such as chatrooms, message boards, and distribution lists as those who write the languages that sustain these forums in the first place. Crystal further noted that those early programmers "are plainly very aware of their identity as members of an Internet culture (more precisely, a collection of subcultures), dating from the earliest days, proud of their common backgrounds and values, conscious of their expertise" (p. 69). In other words, the code literati are cognizant of their power in technology, a power that is acquired and maintained by way of technology's languages, code.

In online communications such as distribution lists, newsgroups, chatrooms and multi-user dimensions (MUDs), men have reportedly adhered to an adversarial and combative, and sometimes violent and abusive, communication style. To have the last and decisive word grants the virtual speaker possession of the field. Instead of facilitating a gender-neutral environment, in terms of communication, cyberspace has magnified a devaluation of female-identified speech.

Feminist inquiry often adheres to, and frequently benefits from, an approach of inclusiveness. Yet we include code into our inquiries into technologically mediated exchanges, an important part of the kaleidoscope that colors our communications online is missing. Since the early days of the Internet, women have gained much ground in cyberspace. In the early 1990s, women's access to technology was a topic of urgent concern; it was succeeded by the concern to make women active participants in technology. Of late, gender imbalances on the Internet have reportedly dwindled.

**DOMINANT VOICES**

Although in 1997, boys and men made up to 75% of Internet users, less than 10 years later, girls and women represented nearly 52% of all online users in the United States ("More women online," 2005). That women are online in equal numbers does not necessarily translate into equality for women on the Internet. Although studies report that girls between the ages of 12 and 17 are considered to be the fastest-growing group of Internet users (Mazzarella, 2005), it has also been acknowledged that girls and women use the Internet differently than their male counterparts.

Investigating girls' presence on the Internet community gURL.com, Ashley Grisso and David Weiss (2005) commented, "messages of patriarchy, androcentrism, and heteronormativity girls receive—and send—in 'real life' inevitably intrude into the constructed world of gURL.com" (p. 45). When the question turns to screen identity, Grisso and Weiss asked:

> How much agency can a girl claim when she identifies herself as "Lovinjustin," "jenflyover4ikes," or "adamschick4ever"? Giving oneself a "screen name" may be a late 20th-century innovation, but women's practice of submitting their own identity under those of men is time-less. (p. 45)

Technology savvy males write the software we use in online communications and, not coincidentally, online communications have been identified as male-dominated, whether or not women are present. When the Internet first became a ubiquitous medium, Lori Kendall (1996) wrote, "Participation by women is probably increasing, but newly arriving women encounter a social environment and behavioral norms formed largely by men. In some cases, these norms may be disturbing enough to discourage further participation by women" (p. 211).

On the Internet, change occurs rapidly but for women much has remained the same. Johanna Dorger (2002) submitted that come-ons, sexual innuendo, and sexual harassment on the Internet are now being perceived as "natural" and 'inevitable' and often passed over without comment" (p. 82). Women's experiences online are not determined by the number of women present but by women's ability to use their voice and inject virtual spaces with women-identified interests and perspectives.

It is important to remember that, practically from the beginning, women's voices online have been oppressed with an oftentimes startling zeal. On the Internet, putting others down is commonly referred to as flaming. Susan Herring (1996) has investigated the different styles that men and women adopt in posting their messages on the Internet. flaming. Herring observed, which manifests itself as personal put-downs, and which is generally characterized by a challenging, adversarial, or superior stance vis-à-vis the addressee(s), is a recognizable style of posting that is found in
most, if not all, public forums on the Internet (p. 118). According to Herring, in forum after electronic forum the vast majority of individuals who flame are men (p. 118). The aspect of superiority is central to the act of flaming.

In the mid-1990s, Herring (1994) noted that a “daunting 68%” of the messages she analyzed that had been posted by men made use of an adversarial style in which the poster distanced himself from, criticized, and/or ridiculed participants, often while promoting his own importance. Moreover, Herring noted that on the rare occasions when she observed “women attempting to gain an equal hearing on male-dominated lists, they were ignored, trivialized, or criticized by men for their tone or the inappropriateness of their topic.”

The vast majority of women who have been entrenched in technology for some time have a “daunting” story of their own involving computer-mediated communication. Years ago, a student of mine forwarded an e-mail to a discussion list that contained a warning of a mass murderer contacting women over the Internet. For several reasons, one of which is that rapists, pedophiles, and murderers have used the Internet to prey on our species, my students and I did not question the authenticity of the e-mail. As it turned out, the “warning” she had posted was spam—a detail that did not escape male participants on the list. Some of the men who were online at the moment when the original message was posted immediately began to ridicule the female student whose objective had been to ensure the safety of other women. Within seconds, an ugly e-mail exchange ensued in which the men supported each other’s opinions and jokes. Any attempt that was made in defense of the student and the issue at hand—women’s safety—was met with dismissive ridicule.

In one of my subsequent conversations with the student, she confided that, in addition to the public replies that had been posted to the list, she had received over 60 messages telling her to “keep her shit to herself.” She also received other messages of support. There were many upsetting factors to this particular episode. As is so often the case when a woman’s rights are violated, she felt ashamed for what had happened to her. Perhaps no less troubling, this unpleasant exchange was witnessed by the community online and undoubtedly sent a clear message to the other women on the list. It was a formative experience for me and, I imagine, for all the women who were part of the list.

Harassment in virtual worlds leaves the harassed with few choices. Technical competence depends on participation in techno-culture and has become intricately intertwined with a host of economic factors. For many women withdrawal from the electronic frontier is neither a wise nor a viable option anymore. What it comes down to is this: Toughen up and, as Karen Coyle (1996) wrote, adopt and maintain some degree of macho to become part of it (p. 43). Women try to cope in different ways. Dorer (2002) wrote, “Some women have gotten used to male domination and discrimination, accepting them as the norm. Others have developed the assertiveness and authority of the lone fighter, while still others refuse to accept the status quo, demanding social change” (p. 83).

The effects of having one’s interests and comments online ignored, trivialized, or criticized—which often amounts to a very public event depending on how many individuals are logged on to follow the thread of conversation—can be an intimidating experience. Such experiences can wear on the fabric of any individual, not only those who do not consider themselves impervious to insult. Most women, especially those who traverse the world of high technology, in which a belligerent sense of competition is frequently the norm rather than the exception, are more than capable to stand their ground. Unfortunately, that is where and why the problem starts.

When it comes to examples of sexual harassment online, few have been cited as frequently as Stephanie Brail’s (1996) “harrowing” experience. As Brail recounted her experience, she noted that what happened to her did not occur because she was a female using the Internet. She was harassed, as she explicitly stated, because she had a “mouth” and “dared to speak out in the common space of the Internet, Usenet” (p. 144). Before she knew it, Brail, who had joined in on an exchange about the Riot Grrls, was engaged in a full-on flame war that involved obscene messages. Brail recalled, “Then my boyfriend, who had been one of the guys sticking up for women, received a few nasty ones, asking him why he supported Riot Grrls—fuck ‘em, their daddies did,’ one anonymous e-mail said. Another one said, ‘Heh heh—I’d love to see a porno with a father doing his Riot Grrl daughter—she has a bad haircut and is wearing boots with a pink mini. He says, this will give you something to rant about!’ as he sodomizes her little rosette” (p. 145).

Insults and threats ensued, lasting for weeks, targeting also those who spoke up in defense of Brail. Months later, the harasser identified another one of Brail’s e-mail addresses and sent her a message informing her that he knew where she lived and suggested he would stop by for a visit to fix her “plumbing” (p. 147). Brail also expressed surprise as to how much anti-female sentiment was running, seemingly unchecked, on many Usenet forums” (p. 144). Finally, Brail noted that the true fallout of her experience is that she has censored herself out of fear (p. 147). Brail’s story continued to be discussed for years (Adam, 2002), which is in part because her expe-
The concealment of female identity in virtual spaces has quantifiable implications. There could hardly exist a better example with which to compare the suppression of female names online than our patriarchal social structure in which a man’s name dominates. Dale Spender (1985) wrote:

One of the features of English language practices which is inherently sexist is the use of names. In our society “only men have real names” in that their names are permanent and they have “accepted the permanency of their names as one of the rights of being male.” (p. 24)

Spender further submitted, “This has both practical and psychological ramifications for the construction—and maintenance—of male supremacy” (p. 24). Today, for many women the use of a gender-neutral screen name has become standard, especially in mixed gender or male-dominated online spaces, such as many technology-related forums.

Feminist scholars have recurrently been optimistic about women’s presence online. For instance, Scarlett Pollock and Jo Stutton (1999) noted that:

Women and women’s groups who have not always been widely supported are effectively using the Internet as a place to be heard, to listen, to be included and to make alliances. The voices of lesbian women, women of colour, immigrant women, young women, and women with disabilities, are online, and talking to each other. (p. 34)

Although an optimistic and hopeful voice remains an imperative in women’s quest for equality on as well as offline, the suppression of female names is a sure indication that not all is well in cyberspace. As Grasso and Weiss inquired, how will they claim agency online when girls willingly dilute their female screen identity? Moreover, how will a woman recognize another woman if she feels compelled to conceal her gender? How will women effectively communicate across social and geographical boundaries if women have to remain anonymous creatures to each other? Anonymity has early on been identified as a contributing factor in the misogyny of computer culture (Taylor, 1999). As women are surrendering their female identities online, often in the name of safety, they are in essence wearing a digital cloak that renders them invisible. In the process, women yield the floor and abandon their topics of interest lest too much is revealed. The diluting, or outright denial, of female identity on the Internet suggests that women’s increased presence on the Internet by no means

Choosing a gender-neutral or male character may free a female participant from fears of direct harassment or overeager sexual interest, but regardless of the gender of her character, a female participant observing the types of conversations previously related is continually reminded of the male-dominated environment in which she moves. (p. 216)
ensures their free and audible expression; the surrendering of one's voice is the emblem of subordination.

On and offline, the dominance of male names is not without consequences to the gendering of the environment in which it occurs, nor should we presume it is accidental. In making sense of the complex correlations between gender, communication, and programming in cyberspace, we can gather valuable insights from feminist inquiry into natural languages.

Spender (1985) has critically investigated the gendered nature of public speech as well as how language becomes the vehicle through which dominance is demonstrated. Spender wrote:

So when men may argue for the authority for their meanings and insist on their right to "take the floor" and control, in mixed-sex conversation, many women have no choice but to agree. Many women must be seen to give consensus to this system in which males do dominate, despite the fact that they may find it odious. (p. 6)

Spender suggested that language is primarily the result of male effort and that men historically have held greater "rights" to language (p. 12). This right enables men to set the standards of communications and subsequently demonstrate authority by use of language. Spender's observation can—and should—be applied to technology's languages. As in the real world in the cultural spaces of the Internet the promotion of interests and perspectives is contingent on literacy.

THE CODE CONNECTION

The harassing of women on the Internet is a form of censorship through which female-identified content has been suppressed; it ensures the professionalization of male biases. In cyberspace one often gets the impression that men make the assumption that this is, and should be, their space. Men traverse technology's realms not with the cautious tread of a guest but with the self-assuredness of the master of the house.

The right to speak, in the virtual and real world alike, is imparted by way of language skill; the more advanced the skill the greater the chance to participate in, and exercise authority over, discursive practices. In the case of the Internet, language skill that lends the speaker absolute authority is programming. Quietly operating behind the screens and inter-}

faces we use in communication, code informs technologically mediated interactions. Mitchell (1996) is among those who have made evident the connection between the Internet, code, and the individuals who write code. Mitchell commented,

For citizens of cyberspace, computer code—arcane text in highly formalized language, typically accessible to only a few privileged highpriests—is a medium in which intentions are enacted and designs are realized, and it is becoming a crucial focus of political contest. Who shall write the software that increasingly structures our daily lives? What shall that software allow and prescribe? Who shall be privileged by it and who marginalized? How shall the writers of the rules be answerable? (p. 112)

Programmers have a form of control over computer technology that others simply do not have and that cannot be ascertained by any other means than through the writing of code. Women may be online by the droves but the numbers have surprisingly little to do with authority. Authority comes via authorship and women tend not to be the authors of technology.

Bentley (2003) commented on the difference between writing code and being a user of technology—in the form of programs, software, or the Internet, and noted, "Most of us are not up to our eyeballs in code every day... We are the users (a very derogatory term for a programmer) and we have to deal with all of the new opportunities that the software brings us" (pp. 33-34). What Bentley neatly put into parentheses is that to be a mere user of technology implies a kind of second-class citizen status, whereas programmers are the acclaimed masters of technology. The right to censor discourse online, oppress another person's speech, judge another's concerns as worthy or unworthy, is interconnected with the power of knowledge that is derived from code literacy.

I offer an example for how code literacy and authority over virtual spaces and the communications and exchanges that take place therein are interdependent. Every networked environment in which people communicate requires some type of maintenance. In this way, virtual online forums are no different from real spaces: someone needs to do the housekeeping for the space to remain inhabitable. Depending on the type of space, the maintenance is more or less involved. For instance, some virtual spaces such as chatrooms require the use of a password. In which case a structure needs to be in place that prompts the visitor to provide a password. If the password is correct, the person enters, otherwise the screen responds with an error message. The request for a password functions as a type of gate
and this gate, like all software and computer functionality, essentially consists of code: code facilitates the mechanism that provides or prohibits access. The person who writes the code is, in essence, the keeper of the gate, generally referred to as the system administrator, who can grant or revoke access. For every password, for every transaction online, there is a system administrator who holds the key, who has access to our secret passwords, who can observe our communications and transactions, and who can trace and follow our every move in virtual space.

Generally, access to an online community is based on established rules and regulations, hopefully agreed upon by consensus. Yet, consensus or not, the people who write the code that facilitates the system are undoubtedly in a more privileged position to determine what those rules are. After all, programmers are consulted as to what types of structures are technically feasible; they will have to put them in place as well as keep them operational. Similarly, we may consider Internet "cookies," which are used in the collection of data online and have important implications with respect to privacy and anonymity. Unlike the skilled programmer who has insight into the mechanisms of the Internet, many Internet users are unaware of how cookies function and when cookies are "constructed as a necessary characteristic" (Gustafson, 2002, p. 175), the common user has little choice but to accept the fact.

Because programmers, especially in the more advanced computer languages that are required to sustain the architecture of virtual environments, are predominantly men, the maintenance of virtual spaces—thus the question of access, or the censuring of speech—is subject to a male-perspective of behavioral norms. In reviewing the male-dominant sexualizing of computer culture, Carol Adams (1996) consulted The New Hacker's Dictionary (Raymond, 1999), a resource that inadvertently reveals that when code, power, and sex converge online, it is far from coincidental. Adams wrote:

You know those little bumps on the "f" and "j" keys to keep our fingers appropriately placed when typing? Well, hackers have given them a name: tits on a keyboard. . . . Given this, you can probably imagine what those labels are called that are designed to be placed on top of certain keys: pasties. These are not examples, as some might think, of hackers confusing their sex drive and their hard drive, or at least their hardware. (Though the emphasize on hard is telling.) This is an example of the way computers themselves are sexualized in a male sexual-dominant world. (p. 148)

Adams submitted two more examples from the hacker dictionary that lend themselves to an examination of code, power, and gender online. The first is the hacker term gang bang, which describes the "use of large numbers of loosely coupled programmers in an attempt to wedge a great many features into a product in a short time" (Raymond, 1999, p. 211). The second one is the term rape, which in hacker culture translates into, "to screw someone or something, violently; in particular to destroy a program or information irreconcilably. Often used in describing file-system damage. 2. To strip a piece of hardware of parts . . . 3. To mass copy files from an anonymous ftp site (p. 376).

Many hackers are likely to find such terminology offensive. Still, as a specialized form of programming, hacking lingo informs computer technology and the cultural spaces that spring from it. When terminology such as gang bang and rape are used to describe technical processes, it is perhaps unsurprising that the culture of online communication embodies a pronounced capacity for the perpetuation of related concepts, expressed in the form of verbal put-downs, sexualized, and other disturbing threats. Code is a salient constituent in the creation of women's reality online.

We may further view the proliferation of sexual content online in the context of the Internet's underlying gendered language practice. A UN Educational, Scientific and Cultural Organization (UNESCO) report has investigated women's participation and access to media such as the Internet. The report noted that "despite the vast amount of content available on the Web, little of it is of direct relevance or use to women . . . " and further stated:

. . . it is estimated that at least 10 per cent of sales via the Internet are of a sexual nature—much of it pornographic—whether in the form of books, videos, photographs, on-line interviews or other items. The aggressive manner in which such content is propagated and promoted on the Internet in particular assumes the dimensions of a major, hostile backlash against women and children. (UNESCO, 2002, p. 14)

As the UNESCO report illustrated, equal numbers and equality are not necessarily synonymous. Noting the importance of at what level women gain access to technology the report stated, "Men are more likely to be found in the high-paying, creative work of software development or Internet-based start-ups, whereas employees in single-tasked ICT work, such as cashiers or data-entry workers, are predominantly female and low paid" (UNESCO, 2002, p. 14). The report's findings, namely, that creativity
in the area of software development, high-paying jobs, and entrepreneurship are interconnected, confirm that women’s voices in technology, and on the Internet in particular, are contingent on code literacy.

LITERACY AND THE RIGHT TO SPEAK: A CALL FOR ACTION

In witnessing online exchanges one can easily get the impression that men perceive of themselves, sometimes by mere association with the cast of the code literate, as the rightful masters of virtual worlds and its permissible discursive practices. The special power language holds in cyberspace has not been lost on women. Women have recurrently commented on the importance of code. Marisa Belaustegui Gómez Pius (1999) submitted:

The master’s cybertool needs to be deconstructed and dismantled in order to be used not only by female cyborgs expert in technical languages, but also by subjects that are capable of interpreting multiple systems of mediation, translation, impersonation and representation of the voices of others. (p. 24)

Others have commented on specific languages that constitute a kind of gate to women’s presence and voice online, such as Virtual Reality Modeling Language (VRML). Susan Hawthorne and Renate Klein (1999) commented, “A knowledge of VRML would allow us to put our ideas, images, and representations into the virtual world. We could create the virtual worlds of our imaginations” (p. 13). Over the past decade, a host of new and sophisticated software engineering paradigms have emerged, knowledge of which, as Hawthorne and Klein surmised, would enable women to put their ideas, images and representations into the virtual world. To know and to practice code, based on women’s terms and vision, is what it takes for women to proclaim a presence of equal rights and equal voices. Income and age have frequently been cited as the two key criteria in enabling women to find their way into cyberspace. It is important we recognize code literacy as the bridge that needs to be crossed in order to grant women authority in the uses of technologies such as the Internet.

As a cultural space, the realm of the virtual does not operate all that differently from our real spaces. Online as well as offline, the question of literacy is a deciding factor in the distribution of privileges, including the ability to state one’s name without fear, speak uninterruptedly, and perpetuate one’s views and ideologies. That women have gained access to alphabet literacy and education later than men has had many dire consequences for women. The prolonged denial of women’s equal access to education, therefore women’s ability to participate in the making of culture, has put women at a lower social standing for centuries, a disadvantage from which women are recovering still. That, at present times, women are in the minority in gaining literacy in computer technology’s influential languages puts women at a comparable disadvantage, one that promises to likewise reverberate for centuries and that finds expression in the treatment of women online. The space in question may have changed from the real to the virtual, yet the mechanisms at work remain conspicuously similar.

In subverting and diversifying the mostly male authorities of cyberspace it is important to dispel the myth of equality. The news that “Women have overtaken men in surfing the Internet” created a false image of gender equality in cyberspace (“Women surpass men,” 2000). Similarly, news that the “Digital Divide is rapidly closing,” promoted an image of equality that is in disaccord with reality (“Digital divide,” 2000). By acknowledging persisting inequalities an important first step is taken: Recognition precedes change. Although initiatives have been undertaken in this direction much more remains to be done.

As we contemplate the importance of technology and the significance of the Internet anew, it is our obligation to ensure the presence of a strong female voice in cyberspace. The Global Media Mentoring Project found that in 1995 only 17% of news sources were women; in 2000 this number had increased to a mere 18% (UNESCO, 2002). Although these numbers encompass media content in the broader sense, they hint at the problem: women’s interests remain grossly underrepresented in the media, including the Internet. Literacy has consistently been the first and essential step in the acquisition of a cultural voice. In technology, where astronomical budgets are dedicated to research and development projects, funds can and must be made available to facilitate women’s code literacy. The UNESCO report addressed the inequalities women experience in regard to technologies such as the Internet. Challenges, according to UNESCO, arise based on financial problems as well as gaps in training and knowledge.

"These inequalities can be addressed only," the report stated, "through a combination of adequate financial investment and policy goals that are gender-sensitive" (p. 15).

We should not settle for the mere integration of women into the male-dominated world online; integration falls short of granting women full authority. Rather, women need to become authors of technology and there
by self-assured proprietors of virtual spaces. As what we refer to as natural language is a product of man’s making, as Spender so convincingly argued, so are the majority of computer languages. Where man can make language, so can woman—we should facilitate it on a grand scale.

REFERENCES


A GIRL’S BEST FRIEND

GENDER, COMPUTERS, AND COMPOSITION

Susan Kirtley

“Computers are man’s best friend.”
—Male student response

“Me being a woman I did not have too much interest in computers.”
—Female student response

While conducting a survey of undergraduate students taking their first-year writing class in a computer lab, I asked them to describe their feelings for computers; in response one young man wrote that computers are “man’s best friend.” This response indicates an evolution in thinking—whereas dogs used to be man’s friend of choice, this student has turned his interest and affection to computers. The old saying suggests that men look to the warm, loyal companionship of a canine, but this young man has moved on and now looks to the computer for friendship. Of course, this reply also makes me wonder, if diamonds were a girl’s best friend, where does this leave women today? If the adage holds true, women favor the sparkly status of a pricey fashion accessory for their boon companion. Yet, given the importance of technological literacy for success in today’s society, I would certainly hope that girls, and women, would take those baubles back to the shop and invest in a new best friend, a computer.