

Is The Computer Field Sexist?

Simson L. Garfinkel

Jill Mesirov doesn't bother keeping track of the number of times she's been mistaken for a secretary. But she gets upset, sometimes, when she meets with her company's customers and discussions get technical.

"They always direct their questions to the male in the room, even if he is a salesman [with no technical background,]" she says.

Dr. Mesirov is the director of mathematical scientific research at Thinking Machines, a company that makes a one-of-a-kind supercomputer for solving massively parallel problems. Although she's been on the faculty of the University of California at Berkeley and been a research scientist at the Institute for Defense Analysis at Princeton, she finds that she continually has to "prove myself in a way that a man in my situation might not have to."

In the very early days of computers, when programming was largely regarded as a clerical task, there were many women programmers. But as programming became a sought-after skill, women were pushed out—much in the way that girls are often pushed out of high school computer rooms by young boys.

In 1983, a group of female graduate students and research staff at the MIT Department of Electrical Engineering and Computer Science published a report detailing problems they had been having in the department.

The report said that there were different expectations for women in their department than there were for men. Their academic seriousness was questioned: "Jane came to MIT only to get a husband." Often, when a woman asked a man how to do something on the computer, the man would simply sit down at her terminal and do it for her, rather than telling her how to do it herself.

Even more upsetting, the technology itself was often used to harass women in a way that might not be possible in a biology or chemistry lab. Some men convinced their computers to deliver anonymous, harassing, electronic mail messages to women who had rebuffed them. Photographs of nude women were used occasionally to demonstrate the graphics capabilities of the system.

I recently obtained a copy of the women's report. "Things have gotten a lot better," said the woman professor who gave it to me.

Have they? Certainly, sexism is a lot less overt than it used to be. But gender remains a key dividing line

for many who use computers.

While a few of the early computer pioneers were women, their work is often overlooked or ignored. In the last century, Ada Lovelace (after whom the Ada language has been named) worked with Charles Babbage on the early concept of thinking machines. In our century, Rear Admiral Grace Murray Hopper (USMC-Ret.), who conceived of, designed, and supervised the development of COBOL, was one of the early computer pioneers.

But the fact that these women are greatly overwhelmed by the number of male pioneers goes to prove the contention that, while there have been some outstanding women in computer science, their numbers have always been few when compared to the men.

In his book *Hackers*, author Steven Levy wrote about the lack of women in the early 1960s' computer culture at MIT:

The sad fact was that there never was a star-quality female hacker. No one knows why. There were women programmers, and some of them were good, but none seemed to take hacking as a holy calling the way [Richard] Greenblatt, [Bill] Gosper, and the others did. Even the substantial cultural bias against women getting into serious computing does not explain the utter lack of female hackers. 'Cultural things are strong, but not that strong,' Gosper would later conclude, attributing the phenomenon to genetic, or 'hardware,' differences.

The irony is that it seems that "cultural things" are that strong. Parents, teachers, and society at large often push girls away from careers in the sciences. Boys get the message, on the other hand, that science and engineering are important, and often get an early introduction into the world of mechanical things.

The problem isn't just that there are half as many computer hackers as there might otherwise be (although just imagine how much further along the computer industry would be if there were double the number of hackers!). The problem is that the same persuasive social attitudes that are keeping women from becoming hackers often keep them from using computers as effectively as they might otherwise do—solely because they're women.

On a broader scale, women are taught to pursue an education and career in business or the arts—not in technical fields. This problem is all the more pressing because of the steady decline in the number of students in high schools and colleges around the country. If our nation ever was in a position where it could

afford to ignore more than half the potential work force for scientific and technical careers, those days are long gone.

Last year, a congressionally mandated task force on Women, Minorities, and the Handicapped in Science and Technology issued a report saying that the nation's ability to maintain its role as a leader in technology is being seriously jeopardized by the systematic exclusion of women and minorities from a scientific education.

"Until now, the role of minorities, women, and people with disabilities in science and engineering has been widely seen only as an equity issue, rather than as the key to future national strength in science and technology," said the report.

To get more women and minorities into technical fields, the national task force concluded, is going to take a concerted effort on the part of government, schools, universities, and even the media and entertainment industries. For example, industry should

provide more summer work and research opportunities for students from under-represented groups.

In the home, "parents need to make sure that their girls are getting the chance to do science and math activities," says Dr. Marsha Lakes Matyas, who runs the women and science program for the American Association for the Advancement of Science. "Girl Scout troops now have science, math, engineering, and computer badges, but troops don't often do them."

Businesses should place greater emphasis on training their own employees in the technical fields and promoting people through their ranks.

And all of us should be on the lookout for the times when people are limited not because of what they can achieve, but for what kind of package they come in. ☐

Simson L. Garfinkel is a freelance journalist and computer consultant living in Cambridge, Mass. Copyright 1989 by Simson L. Garfinkel.

SEPTEMBER FORUM

SEPTEMBER 1989

Sex Discrimination

Tell us what you think!

You have two ways to respond:

1. Call the special Member Forum Hotline at (617) BCS-6666 and register your opinions. The Hotline follows the same format of questions as shown below; simply follow the voice instructions when you call. (You will need a push-button phone.) The Hotline will be accepting your comments from August 23 through September 10. Call now, before you forget! (Our Hotline is made possible by equipment from Natural Microsystems, makers of the Watson Voice Mail System. The Hotline is programmed and recorded by BCS activist Ken Ford.)

2. Register your comments on the clip-out coupon below. To make sure it reaches us in time, please return it by September 10 to Member Forum, The Boston Computer Society, One Center Plaza, Boston, MA 02108.

To verify your BCS membership, please indicate the four-digit "Forum" code found in the upper left-hand corner of your mailing label this issue: _____ (All responses are anonymous unless you wish to indicate your name.)

1. Are you a:
- Man
 - Woman
2. Do you think that sexist attitudes and sexual discrimination happen:
- More often in environments where there are a lot of computers.
 - About the same in computer environments.
 - Less often in technical environments.

3. If you're a woman, have you ever directly experienced such discrimination?

- No
- Once, but there were extenuating circumstances
- A few times
- Often

4. If you're a man, have you personally carried out such discriminatory actions?

- No
- Once, but there were extenuating circumstances
- A few times
- Often

5. If you're a man, have you seen others carry out such actions?

- Yes
- No

6. Do you think that more women are going into technical fields?

- Yes
- There were more women entering for a time, but the percentage has stayed relatively flat in recent years.

There were more women entering for a time, but there are fewer today than in recent years.

7. Describe your working environment:

- Student
- University
- Health-care establishment
- Corporate/business
- Government

Please feel free to leave additional comments. (Hotline callers will be given 15 seconds to respond.)

Thanks for responding! Stay tuned for results of this and other Member Forum surveys.