Changes in Default Words and Images Engendered by Rising Consciousness

Douglas R. Hofstadter

A father and his son were driving to a ball game when their car stalled on the railroad tracks. In the distance a train whistle blew a warning. Frantically, the father tried to start the engine, but in his panic, he couldn’t turn the key, and the car was hit by the onrushing train. An ambulance sped to the scene and picked them up. On the way to the hospital, the father died. The son was still alive but his condition was very serious, and he needed immediate surgery. The moment they arrived at the hospital, he was wheeled into an emergency operating room, and the surgeon came in, expecting a routine case. However, on seeing the boy, the surgeon blanched and muttered, “I can’t operate on this boy—he’s my son.”

What do you make of this grim riddle? How could it be? Was the surgeon lying or mistaken? No. Did the dead father’s soul somehow get reincarnated in the surgeon’s body? No. Was the surgeon the boy’s true father and the dead man the boy’s adopted father? No. What, then, is the explanation? Think it through until you have figured it out on your own—I insist! You’ll know when you’ve got it, don’t worry.

When I was first asked this riddle, a few years ago, I got the answer within a minute or so. Still, it was ashamed of my performance. I was also disturbed by the average performance of the people in the group I was with—all educated, intelligent people, some men, some women. I was neither the quickest nor the slowest. A couple of them, even after five minutes of scratching their heads, still didn’t have the answer! And when they finally hit upon it, their heads hung low.

Whether we light upon the answer quickly or slowly, we all have something to learn from this ingenious riddle. It reveals something very deep about how so-called default assumptions permeate our mental representations and channel our thoughts. A default assumption is what holds true in what you might say is the “simplest” or “most natural” or “most likely” possible model of whatever situation is under discussion. In this case, the default assumption is to assign the sex of male to the surgeon. The way things are in our society today, that’s the most plausible assumption. But the critical thing about default assumptions—so well revealed by this story—is that they are made automatically, not as a result of consideration and elimination. You didn’t explicitly ponder the point and ask yourself, “What is the most plausible sex to assign to the surgeon?” Rather, you let your past experience merely assign a sex for you. Default assumptions are

by their nature implicit assumptions. You never were aware of having made any assumption about the surgeon’s sex, for if you had been, the riddle would have been easy!

Usually, relying on default assumptions is extremely useful. In fact, it is indispensable in enabling us—or any cognitive machine—to get around in this complex world. We simply can’t afford to be constantly distracted by all sorts of theoretically possible but unlikely exceptions to the general rules or models that we have built up by induction from many past experiences. We have to make what amount to shrewd guesses—and we do this with great skill all the time. Our every thought is permeated by myriad of such shrewd guesses—assumptions of normalcy. This strategy seems to work pretty well. For example, we tend to assume that the stores lining the main street of a town we pass through are not just cardboard facades, and for good reason. Probably you’re not worried about whether the chair you’re sitting on is about to break. Probably the last time you used a salt shaker you didn’t consider that it might be filled with sugar. Without much trouble, you could name dozens of assumptions you’re making at this very moment—all of which are simply probably true, rather than definitely true.

This ability to ignore what is very unlikely—without even considering whether or not to ignore it—is part of our evolutionary heritage, coming out of the need to be able to size up a situation quickly but accurately. It is a marvelous and subtle quality of our thought processes; however, once in a while, this marvelous ability leads us astray. And sexist default assumptions are a case in point.

I have continued to ponder these issues with great intensity. And I must say, the more I ponder, the more prickly and confusing the whole matter becomes. I have found appalling unawareness of the problem all around me—in friends, colleagues, students, on radio and television, in magazines, books, films, and so on. The New York Times is one of the worst offenders. You can pick it up any day and see prominent women referred to as “chairman” or “congressman.” Even more flagrantly obnoxious is when they refer to prominent feminists by titles that feminism repudiates. For example, a long article on Judy Goldsmith (head of NOW, the National Organization for Women [in 1985]) repeatedly referred to her as “Mrs. Goldsmith.”

The editors’ excuse is:

Publications vary in tone, and the titles they affix to names will differ accordingly. The Times clings to traditional ones (Mrs., Miss, and Dr., for example). As for Ms.—that useful business-letter coinage—we reconsider it from time to time; to our ear, it still sounds too contrived for news writing.

As long as they stick with the old terms, they will sound increasingly reactionary and increasingly silly.

Perhaps what bothers me the most is when I hear newscasters on the radio—especially public radio—using blatantly sexist terms when it would be so easy to avoid them. Female announcers are almost uniformly as sexist as male announcers. A typical example is the female newscaster on National Public Radio who spoke of “the employer who pays his employees on a weekly basis” and “the employee who is concerned about his tax return,” when both employer and employee were completely hypothetical personages, thus without either gender. Or the male newscaster who described the Pope in Warsaw as “surrounded by throngs of his countrymen.” Or the female newscaster who said, “Imagine I’m a worker and I’m on my deathbed and I have no money to support my wife and kids. . . .” Of all people, newscasters should know better.

I attended a lecture in which a famous psychologist uttered the following sentence, verbatim: “What the plain man would like, as he comes into an undergraduate psychology course, as a man or a woman, is that he would find out something about emotions.”
seem to feel a mild discomfort with generic “he” and generic “man,” and who therefore try to compensate, every once in a while, for their constant usage of such terms. After all, five uses of “he” in describing a hypothetical scientist, they will throw in a mock “he or she” (and perhaps give an embarrassed little chuckle); then, having pacified their guilty conscience, they will go back to “he” and other sexist usages for a while, until the guilt-juices have built up enough again to trigger one more token nonsexist usage.

This is not progress, in my opinion. In fact, in some ways, it is retrograde motion, and damages the cause of nonsexist language. The problem is that these people are simultaneously showing that they recognize that “he” is not truly generic and yet continuing to use it as if it were. They are thereby, at one and the same time, increasing other people’s recognition of the sham of considering “he” as a generic, and yet reinforcing the old convention of using it anyway. It’s a bad bind.

In case anybody needs to be convinced that supposed generics such as “he” and “man” are not neutral in people’s minds, they should reflect on the following findings. I quote from the chapter called “Who Is Man?” in Words and Women, an earlier book by Casey Miller and Kate Swift:

In 1972 two sociologists at Drake University, Joseph Schneider and Sally Hacker, decided to test the hypothesis that man is generally understood to embrace woman. Some three hundred college students were asked to select from magazines and newspapers a variety of pictures that would appropriately illustrate the different chapters of a sociology textbook being prepared for publication. Half the students were assigned chapter headings like “Social Man,” “Industrial Man,” and “Political Man.” The other half were given different but corresponding headings like “Society,” “Industrial Life,” and “Political Behavior.” Analysis of the pictures selected revealed that in the minds of students of both sexes use of the word man evoked, to a statistically significant degree, images of males only—filtering out recognition of women’s participation in these major areas of life—whereas the corresponding headings without man evoked images of both males and females. In some instances the differences reached magnitudes of 30 to 40 per cent. The authors concluded, “This is rather convincing evidence that when you use the word man generically, people do tend to think male, and tend not to think female.”

Subsequent experiments along the same lines but involving schoolchildren rather than college students are then described by Miller and Swift. The results are much the same. No matter how generic “man” is claimed to be, there is a residual trace, a subliminal connotation of higher probability of being male than female.

Shortly after this column came out, I hit upon a way of describing one of the problems of sexist language. I call it the slippery slope of sexism. The idea is very simple. When a generic term and a “marked” term (i.e., a sex-specific term) coincide, there is a possibility of mental blurring on the part of listeners and even on the part of the speaker. Some of the connotations of the generic will automatically rub off even when the specific is meant, and conversely. The example of “Industrial Man” illustrates one half of this statement, where a trace of male imagery rubs off even when no gender is intended. The reverse is an equally common phenomenon; an example would be when a newscaster speaks of “the four-man crew of next month’s space shuttle flight.” It may be that all four are actually males, in which case the usage would be precise. Or it may be that there is a woman among them, in which case “man” would be functioning generically (supposedly). But if you’re just listening to the news, and you don’t know whether a woman is among the four, what are you supposed to do?

Some listeners will automatically envision four males, but others, remembering the existence of female astronauts, will leave room in their minds for at least one woman potentially in the crew. Now, the newscaster may know full well that this flight consists of
males only. In fact, she may have chosen the phrase "four-man crew" quite deliberately, in order to let you know that no woman is included. For her, "man" may be marked. On the other, she may not have given it a second thought: for her, "man" may be unmarked. But how are you to know? The problem is right there: the slippery slope. Connotations slip back and forth very shiftily, and totally beneath our usual level of awareness—especially (though not exclusively) at the interface between two people whose usages differ.

Let me be a little more precise about the slippery slope. I have chosen a number of salient examples and put them in Figure 14.1. Each slippery slope involves a little triangle, at the apex of which is a supposed generic, and the bottom two corners of which consist of oppositely marked terms. Along one side of each triangle runs a diagonal line—the dreaded slippery slope itself. Along that line, connotations slosh back and forth freely in the minds of listeners and speakers and readers and writers. And it all

---

**Figure 14.1.** The "slippery slope of sexism," illustrated. In each case in (a), a supposed generic (i.e., gender-neutral term) is shown above its two marked particularizations (i.e., gender-specific terms). However, the masculine and generic coincide, which fact is symbolized by the thick heavy line joining them—the slippery slope, along which connotations slosh back and forth, unimpeded. The "most-favored sex" status is thereby accorded the masculine term. In (b), the slippery slopes are replaced by true gender fairness, in which generics are unambiguously generic and marked terms unambiguously marked. Still, it is surprising how often it is totally irrelevant which sex is involved. Do we need—or want—to be able to say such things as, "Her actions were heroic"? Who cares if a hero is male or female, as long as what they did is heroic? The same can be said about actors, sculptors, and a hostess of other terms. The best fix for that kind of slippery slope is simply to drop the marked term, making all three coincide in a felicitously ambisexual ménage à trois.
happens at a completely unconscious level, in exactly the same way as a poet’s choice of a word subliminally evokes dozens of subtle flavors without anyone’s quite understanding how it happens. This wonderful fluid magic of poetry is not quite so wonderful when it imbues one word with all sorts of properties that it should not have.

The essence of the typical slippery slope is this: it establishes a firm “handshake” between the generic and the masculine, in such a way that the feminine term is left out in the cold. The masculine inherits the abstract power of the generic, and the generic inherits the power that comes with specific imagery. Here is an example of the generic-benefits-from-specific effect: “Man forging his destiny.” Who can resist thinking of some kind of huge mythical brute of a guy hacking his way forward in a jungle or otherwise making progress? Does the image of a woman even come close to getting evoked? I seriously doubt it. And now for the converse, consider these gems: “Kennedy was a man for all seasons.” “Feynman is the world’s smartest man.” “Only a man with powerful esthetic intuition could have created the general theory of relativity.” “Few men have done more for science than Stephen Hawking.” “Leopold and Loeb wanted to test the idea that a perfect crime might be committed by men of sufficient intelligence.” Why “man” and “men,” here? The answer is: to take advantage of the specific-benefits-from-generic effect. The power of the word “man” emanates largely from its close connection with the mythical “ideal man”: Man the Thinker, Man the Mover, Man Whose Best Friend Is Dog.

Another way of looking at the slippery-slope effect is to focus on the single isolated corner of the triangle. At first it might seem as if it makes women somewhere more distinguished. How nice! But in fact what it does is mark them as odd. They are considered nonstandard; the standard case is presumed not to be a woman. In other words, women have to fight their way back into imagery as just-plain people. Here are some examples to make the point.

When I learned French in school, the idea that masculine pronouns covered groups of mixed sex seemed perfectly natural, logical, and unremarkable to me. Much later, that usage came to seem very biased and bizarre to me. However, very recently, I was a bit surprised to catch myself falling into the same trap in different guise. I was perusing a multilingual dictionary, and noticed that instead of the usual m. and f. to indicate noun genders, they had opted for “±” and “−” Which way, do you suspect? Right! And it seemed just right to me, too—until I realized how dumb I was being.

Heard on the radio news: “A woman motorist is being held after officials observed her to be driving erratically near the White House.” Why say “woman motorist”? Would you say “man motorist” if it had been a male? Why is gender, and gender alone, such a crucial variable?

Think of the street sign that shows a man in silhouette walking across the street, intended to tell you “Pedestrian Crossing” in sign language. What if it were recognizable a woman walking across the street? Since it violates the standard default assumption that people have for people, it would immediately arouse a kind of suspicion: “Hmmm... ‘Women Crossing?’ Is there a nursery around here?” This would be the reaction not merely of dyed-in-the-wool sexists, but of anyone who grew up in our society, where women are portrayed—not deliberately or consciously, but ubiquitously and subliminally—as “exceptions.”

If I write, “In the nineteenth century, the kings of nonsense were Edward Lear and Lewis Carroll,” people will with no trouble get the message that those two men were the best of all nonsense writers at that time. But now consider what happens if I write, “The queen of twentieth-century nonsense is Gertrude Stein.” The implication is unequivocal: Gertrude Stein is, among female
writers of nonsense, the best. It leaves completely open her ranking relative to males. She might be way down the list! Now isn't this preposterous? Why is our language so asymmetric? This is hardly chivalry—it is utter condescension.

A remarkable and insidious slippery-slope phenomenon is what has happened recently to formerly all-women's colleges that were paired with formerly all-men's colleges, such as Pembroke and Brown, Radcliffe and Harvard, and so on. As the two merged, the women's school gradually faded out of the picture. Do men now go to Radcliffe or Pembroke or Douglass? Good God, no! But women are proud to go to Harvard and Brown and Rutgers. Sometimes, the women's college keeps some status within the larger unit, but that larger unit is always named after the men's college. In a weird twist on this theme, Stanford University has no sororities at all—but guess what kinds of people it now allows in its fraternities!

Another pernicious slippery slope has arisen quite recently. That is the one involving "gay" as both masculine and generic, and "Lesbian" as feminine. What is problematic here is that some people are very conscious of the problem, and refuse to use "gay" as a generic, replacing it with "gay or Lesbian" or "homosexual." (Thus there are many "Gay and Lesbian Associations.") Other people, however, have eagerly latched onto "gay" as a generic and use it freely that way, referring to "gay people," "gay men," "gay women," "gay rights," and so on. As a consequence, the word "gay" has a much broader flavor to it than does "Lesbian." What does "the San Francisco gay community" conjure up? Now replace "gay" by "Lesbian" and try it again. The former image probably is capable of fitting between that of both sexes and that of men only, while the latter is certainly restricted to women. The point is simply that men are made to seem standard, ordinary, somehow proper; women as special, deviant, excep-


tional. That is the essence of the slippery slope.

Part of the problem in sexism is how deeply ingrained it is. I have noticed a disturbing fact about my observation of language and related phenomena: whenever I encounter a particularly blatant example, I write it down joyfully, and say to friends, "I just heard a great example of sexism!" Now, why is it good to find a glaring example of something bad? Actually, the answer is very simple. You need outrageously clear examples if you want to convince many people that there is a problem worth taking at all seriously.

I was very fortunate to meet the philosopher and feminist Joan Straumanis shortly after my column on sexism appeared. We had a lot to talk over, and particularly enjoyed swapping stories of the sort that make you groan and say, "Isn't that great?"—meaning, of course, "How sickening!" Here's one that happened to her. Her husband was in her university office one day, and wanted to make a long-distance phone call. He dialed "0," and a female operator answered. She asked if he was a faculty member. He said no, and she said, "Only faculty members can make calls on these phones." He replied, "My wife is a faculty member. She's in the next room—I'll get her." The operator snapped back, "Oh no—wives can't use these phones!"

Another true story that I got from Joan Straumanis, perhaps more provocative and fascinating, is this one. A group of parents arranged a tour of a hospital for a group of twenty children: ten boys and ten girls. At the end of the tour, hospital officials presented each child with a cap: doctors' caps for the boys, nurses' caps for the girls. The parents, outraged at this sexism, went to see the hospital administration. They were promised that in the future, this would be corrected. The next year, a similar tour was arranged, and at the end, the parents came by to pick up their children. What did they
find, but the exact same thing—all the boys had on doctors’ hats, all the girls had on nurses’ hats! Steaming, they stormed up to the director’s office and demanded an explanation. The director gently told them, “But it was totally different this year: we offered them all whichever hat they wanted.”

David Moser, ever an alert observer of the language around him, had tuned into a radio talk show one night, and heard an elderly woman voicing outrage at the mild sentence of two men who had murdered a three-year-old girl. The woman said, “Those two men should get the gas chamber for sure. I think it’s terrible what they did! Who knows what that little girl could have grown up to become? Why, she could have been the mother of the next great composer!” The idea that that little girl might have grown up to be the next great composer undoubtedly never entered the woman’s mind. Still, her remark was not consciously sexist and I find it strangely touching, reminiscent of a quieter era where gender roles were obvious and largely unquestioned, an era when many people felt safe and secure in their socially defined niches. But those times are gone, and we must now move ahead with consciousness raised high.

In one conversation I was in, a man connected with a publisher—let’s call it “Freeperson”—said to me, “Aldrich was the liaison between the Freeperson boys and we—er, I mean us.” What amused me so much was his instant detection and correction of a syntactic error, yet no awareness of his more serious semantic error. Isn’t that great?

I was provoked to write the following piece about a year after the column on sexism came out. It came about this way. One evening I had a very lively conversation at dinner with a group of people who thought of the problem of sexist language as no more than that: dinner-table conversation. Despite all the arguments I put forth, I just couldn’t convince them there was anything worth taking seriously there. The next morning I woke up and heard two most interesting pieces of news on the radio: a black Miss America had been picked, and a black man was going to run for president. Both of these violated default assumptions, and it set my mind going along two parallel tracks at once: What if people’s default assumptions were violated in all sorts of ways both sexually and racially? And then I started letting the default violations cross all sorts of lines, and pretty soon I was coming up with an image of a totally different society, one in which . . .

Well, I’ll just let you read it.