

Skewering theories of 'hard-wired' gender differences

The Boston Globe

By Kate Tuttle, Globe Correspondent | September 5, 2010

"When I tell parents that I'm writing a book about gender," Cordelia Fine writes, "the most common response I get is an anecdote about how they tried gender-neutral parenting and it simply didn't work." Indeed, just as one sociologist whose research Fine describes discovers, many parents today feel certain that despite their best efforts to introduce trucks to their daughters and dolls to their sons, they come up against gender differences they see as "hard-wired," innate, immutable. But are they, really?

As Fine argues in this forceful, funny new book, the notion that gender accounts for differences in minds and behavior through some biological, brain-based process is an idea as popular as it is unproven. Promoted by popular science and pop psychology authors, nudged along by credulous newspaper and magazine editors looking for hot headlines, a cottage industry has emerged to convince us that men and women are, metaphorically at least, from other planets. These ideas — that boys and men are naturally better at understanding systems and things, while girls and women tend toward skills with people and emotions — are nothing novel. "As an empirical endeavor," Fine points out, "the neuroscience of sex differences began in earnest in the mid-nineteenth century," when their findings were used to oppose women's suffrage and equal rights in general. Still, it's notable how these ideas have been resurrected, after a period in which gender differences, and sexism itself, were mostly seen as having historical, societal, and cultural roots. Nowadays, when we find ourselves in a society in which women still can't quite have it all, it's no surprise that old notions are making a comeback, with an assist from advanced brain imaging — used, as Fine says, "to reinforce, with all the authority of science, old-fashioned stereotypes and roles."

All of which is a huge mistake, according to Fine, a research associate at the Centre for Agency, Values and Ethics at Australia's Macquarie University and an honorary research fellow at the University of Melbourne. She casts a critical eye on the use of neuroscience not only to describe gender differences in behavior, but, increasingly, to excuse longstanding sex-based inequality and even to push for new forms of gender segregation, such as separate schools for boys and girls. Such arguments, Fine warns, often rest on scientific studies that are half-baked, ill-conceived — and as for how they're presented to a general audience, she writes, "the sheer audacity of the overinterpretations and misinformation is startling." Fine describes an influential study in which boy and girl newborns are tested to see whether they preferred looking at faces or mobiles; although it's cited often as proof of inherent sex differences, the researchers almost certainly skewed the outcome by flawed methodology, including allowing themselves to see which babies were boys and which were girls when they offered their faces and the mobiles. It doesn't take a neuroscientist to see how easily researcher bias in such circumstances destroys the tiny differences found. Fine also mentions the "so-called file-drawer phenomenon, whereby studies that *do* find sex differences get published, but those that don't languish unpublished and unseen in a researcher's file drawer."

That there has been an abundance of bad science used to argue for female difference (and typically, inferiority) is amply illustrated by Fine's use of century-old statements by eminent scientists of their day, bemoaning the smaller brain size of women, or their doomed-to-fail efforts to reach political equality with men. They are hilarious, of course, but depressing as well — and even more so when compared with contemporary arguments about Mars and Venus. Today's neurosexism, as Fine tags it, may one day meet the same fate as yesterday's scientific explanations for sexism, racism, and other forms of bigotry, the vividly colored brain scans showing feminine multitasking or masculine focus joining the calipers that once measured facial verticality and the cephalic index in the dustbin of scientific history.

Fine is at her most effective when skewering those who make hay of alleged brain-based differences between men and women. After quoting an advocate of single-sex education, she addresses the reader directly, noting that "[b]y now, you will probably be uneasy about the idea that complex psychological skills like language, math, and geometry can be pinpointed to a single part of the brain." And she's right: Whether or not you believed in hard-wired gender differences before reading her book, it would be difficult to complete it without feeling at least a healthy skepticism about the role of biology in the way our lives play out. Fine wants you to think more deeply about whether women enter science and math less

frequently than men for reasons of brain wiring or because their lived experience (and hundreds of magazines articles) have told them they'd be unhappy there. She'd like you to wonder whether women truly step off the career treadmill more frequently than men because they care less about work than about family, or whether it's because our society is still arranged in such a way that women — even those who earn more than double what their husbands make — put in nearly twice as many hours of domestic work a week. As she puts it, "So when a female academic . . . jumps off the academic ladder and into a more flexible but dead-end second-tier research position, is it because she's intrinsically less interested in a demanding academic career or because there are only twenty-four hours in a day?"

These are the right questions to be asking. Not what planet one hails from, but what we do to ensure that gender isn't a trap that locks us into worn-out roles.

Kate Tuttle, a writer and editor, can be reached at kate.tuttle@gmail.com. ■

© [Copyright](#) 2010 The New York Times Company