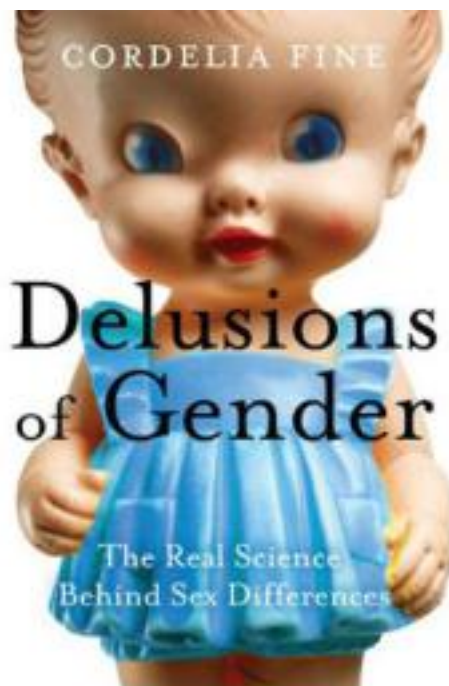


REVIEWS

Deluded

BY DEBORAH RUDACILLE

29 DECEMBER 2010



delusions_cov_small.jpeg

Cordelia Fine mentions hundreds of studies in her new book, *Delusions of Gender*. But in 239 pages of text, 42 pages of notes and a 38-page bibliography, Fine studiously avoids mentioning the

name of the researcher who first asserted the claim that she advocates in her book — that society, not biology, creates sex differences in the brain, driving gender-specific interests and behavior.

It's an understandable lapse, given that **John Money**, who coined the terms 'gender identity' and 'gender role,' perpetrated a scientific fraud by concealing evidence that invalidated his hypothesis. No wonder Fine chose to omit him.

More to the point, she — like Money — omits data that suggest a biological basis for sexually dimorphic behavior in humans.

Delusions of Gender is a polemic against the ways in which science has been and continues to be used to reinforce traditional assumptions about gender. This is old news, but Fine presents it with wit and charm as she picks apart recent popular science books and scientific studies touting the hardwired 'maleness' or 'femaleness' of the brain.

It's certainly true that this idea has been overemphasized in recent years. Fine is right to point out that environment and learning play a huge role in the way that gender is perceived and expressed. She does an excellent job of pointing out the weaknesses of various studies — brain lateralization and imaging studies in particular — that purport to provide evidence that the brains of men and women are functionally distinct.

The way that Fine tells the story, though, you'd never know that for most of the past half century, precisely the opposite view held sway. Money's provocative hypothesis — that until age 2, the human brain is plastic and can be masculinized or feminized by social interactions — had hardened into scientific dogma by the 1970s.

It underlay the medical practice (still promoted by many pediatric urologists) of assigning a sex to infants with ambiguous genitalia at birth and surgically and hormonally 'normalizing' their bodies in harmony with that decision.

Money's most famous patient, **David Reimer**, was to have been the crowning proof of this hypothesis. Born male, with a completely normal chromosomal, gonadal and genital profile, Reimer became Money's patient after his penis was burned off in a circumcision accident. Money told his parents to raise him as a girl and all would be well. **It wasn't.**

I thought of David Reimer often while I was reading Fine's book. He was a living refutation of the seductive notion that brains are neither male nor female but simply human. So are the hundreds of thousands of **intersexed people** who began speaking out in the 1990s. I heard some of their stories while researching my book, *The Riddle of Gender*. To a man (and woman), they cursed Money, blaming him for their woes.

David Reimer committed suicide in 2004. John Money died in disgrace in 2006, accused of

scientific fraud for concealing the evidence that Reimer had never adjusted to life as a female. But Fine is still pushing the discredited theory that ruined both men's lives.

"Our minds, neurosexism and society create difference," she says on the final page of her book. To me, that sounds less like science than like ideology. A brain that knows itself to be male or female is indisputably sexed.

Cultural factors may play an enormous role in interpreting what it means to be male or female — just as they influence how people with autism are perceived and treated by others — but it can't change fundamental biological facts. Our reproductive anatomy doesn't end at the neck. We may not yet know the precise mechanisms or manifestations of sexual dimorphism in the brain, but denying that they exist is the real delusion.



Deborah Rudacille

Deborah Rudacille earned an M.A. in science writing from Johns Hopkins University in 1998. She worked as a research writer at the Johns Hopkins Bloomberg School of Public Health and as senior science writer at the Johns Hopkins School of Medicine. Deborah is the author of three books: *The Scalpel and the Butterfly* (2000), *The Riddle of Gender* (2004) and *Roots of Steel* (2010). She joined SFARI.org's team as news editor in 2010.

[Virginia Hughes' review of *Delusions of Gender* >>](#)