

Bridging Discursive Chasms in Debates About Sex/Gender: Beyond Nature and Nurture

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This paper considers the central role of discourse in constructing and interpreting current social and scientific disputes. Theorists have long debated the relative contributions of nature (e.g., DNA, hormones) and nurture (education, environment) to how humans are sexed/gendered. For example, evolutionary psychologists and neuroscientists (e.g., Pinker (2002), Baron-Cohen (2003), and Kimura (2000)) argue that essential sex-based differences shape the human brain. In contrast, feminist researchers from science, philosophy, and linguistics (e.g., Fausto-Sterling (2000), Butler (1990, 1993), and Eckert & McConnell-Ginet (2003)) argue that, whatever the genetic or hormonal substrate, our genderedness arises primarily from relentless social forces of differentiation and discrimination, which may vary across diverse cultural settings. This debated flamed recently when Harvard University president Lawrence Summers presented a speech highlighting innate explanations, as well as discrimination and social differences, as contributing to the under-representation of women as scientists (2005).

Summers has been praised by conservatives laud him as boldly speaking difficult truth, while liberals argue that he has "shoved his foot in his mouth." Nancy Hopkins, the biologist who found pervasive sex bias in lab-space allocation at MIT (1999), walked out of Summers' talk, because she "felt ill" that this top educational administrator seemed so unaware of current research on bias in science. Conservative commentators have reinterpreted her agency in leaving as instead "falling into a Victorian swoon." Note the contrast in the semantic roles: Summers is an agent and subject of speech acts (whether lauded or derided), whereas Hopkins is an experiencer under the sway of emotion: he acts, she is acted upon.

This discursive construction of women as less agentive and able is furthered by the selective deployment of negation in references to women. For example, the subsequent cover headline from a news summary magazine *The Week* asks "Why No Female Einsteins?" (eliding counterexamples such as Marie Skłodowska Curie's two Nobel Prizes). This discursive strategy of portraying

women's abilities in negative terms thus frames the debate as an opposition that places women in an inferior position syntactically as well as socially.

Using a corpus drawn from scientific reports, popular press books, news media, and web blogs, I examine the discursive construction of this debate of nature, nurture, sex, gender, and science. I employ Critical Discourse Analysis to focus on five linguistic strategies (the presence and positions of qualifiers, comparatives, negation, semantic roles of agency, and subject/objects; reinforced by graphic analysis). Pervasive patterns in discourse and graphic images both reveal and shape public (mis-)understanding of the complex issues of gender/sex variation, whereby overlaps in human neurology are construed as categorical and confrontational oppositions. I show that the scientific data instead display significant common ground in human neurological and genetic make-up. Drawing on diverse discourse theories (e.g., Foucault (1972), Bourdieu (1991), Bakhtin (1981)), I consider how some voices are policed and silenced, yet how resistance may arise through heteroglossic, centrifugal forces (such as the internet blogs). I propose discursive and theoretical bridges to span this seemingly incommensurable Kuhnian (1996) chasm between theories of nature and nurture.

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