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## VIII. Reconsidering ‘Sex’ and ‘Gender’: Two Steps Forward, One Step Back

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Rhoda Kesler Unger’s ground-breaking paper, ‘Toward a Redefinition of Sex and Gender’ (1979), is still a compelling read almost 30 years later. It is fascinating to see how far we have come and how much the dialogue concerning sex and gender has changed in the ensuing years. At the same time, it is discouraging to note the myriad ways in which the debate is eerily similar, even after several decades of supposed progress.

### HOW PSYCHOLOGY IS DIFFERENT: UNGER’S IMPACT ON THE FIELD

Unger’s paper had a huge impact on the way individual psychologists, and the field as a whole, think about sex and gender. Although individual feminist psychologists were beginning to formulate some of these arguments, and make distinctions between sex and gender in their teaching (K. Quina, personal communication, 3 April 2007) and writing (e.g. Tobach, 1971), Unger’s paper, published in the flagship American Psychological Association (APA) journal, blew the lid off an uncontested understanding of the concept ‘sex differences’. Unger’s brilliant analysis of the difference between biological precursors (‘sex’) and socialization experiences (‘gender’) was an important impetus for a sea change in our thinking about these concepts.

The effect of this paper can be assessed in several ways. Using the traditional measure of impact (citation counts), we note that it has been cited an impressive number of times (127 as of 3 April 2007). What is especially remarkable is that it has been cited steadily through the years, continues to be cited now (in 2007), and is cited in a breathtakingly diverse set of journals, including *Sex Roles*,

*Cognition and Emotion, Monographs of SRCD, Clinical Journal of Pain, Journal of Personality and Social Psychology, Journal of Youth and Adolescence, Feminism & Psychology, Brain Research Bulletin, Journal of Social Issues, and the Journal of Business Ethics, to name just a few.*

However, citation counts might not be the best way to measure the impact of this type of paper. Because its stated goal was to redefine our thinking about, and use of, the terms sex and gender, a better measure of impact would be to assess whether this redefinition occurred in practice. We believe that Unger was wildly successful in reaching this goal. Haig (2004) provided statistics about the increased use of the word gender in the titles of academic journal articles. He found that, in contrast to the use of the word sex, which remained flat or increased only modestly over time, the word gender showed a steep increase in usage in humanities, social science, and science journals. In social science journals, that increase began roughly in 1980; in the other two types of journals, a few years later. The fact that the timing of this increase coincided with the publication of Unger's article suggests that it had a major impact on the terminology used by researchers.

This impact is seen not only in the individual choices of researchers, but also more institutionally. Unger's careful articulation of why, in many cases, 'sex differences' is the wrong term to use, led eventually to the codification of this argument in the APA manual. The 4th and 5th editions of the *APA Publication Manual* include guidelines for avoiding bias in scientific reporting. The first guideline is: 'Describe at the appropriate level of specificity' (American Psychological Association, 2001: 62). This guideline explicitly states that sex refers to biological entities while gender 'is cultural' (p. 62) and that writers in psychology should be clear about using the terms appropriately. This is exactly the point Unger made throughout her paper, but she is not cited in the *APA Publication Manual*, nor in many other publications that continue to make this same point.

Ironically, however, Unger's success in convincing researchers that gender is often the preferred and more accurate term may have contributed to a blurring of the distinction between the two concepts. Currently, there are numerous researchers who do not make a clear distinction between sex and gender. Unger herself recently noted: 'Despite 25 years of dialogue, psychologists are still unable to distinguish between *sex* and *gender*, and most researchers in this volume and in the field as a whole use these terms interchangeably' (Unger, 2005: 'Naming, Ideology, and Conceptualization' section, para. 6). Haig (2004) also noted a lack of specificity in the use of the two terms. Researchers use the term gender to encompass both sex and gender, either as a deliberate choice (marking an assumption that even the biological is partly socially constructed) or because of a lack of familiarity with the fine points of feminist arguments about sex vs. gender. 'Gender' as a synonym for 'sex' is even common in natural sciences journal articles that report on non-human animals (Haig, 2004). Here, the distinction between the terms proposed by Unger is wholly lost. Haig reported that scientists studying non-human animals gave varied reasons for their use of the term gender, including 'desire to signal sympathy with feminist goals, to use a more

academic term, or to avoid the connotation of copulation' (Haig, 2004: 94–5).

Despite the continued confusion in some quarters about sex vs. gender, it seems clear that psychologists, as well as sociologists, anthropologists, business ethicists, and many others, do not use the term 'sex differences' in the way they did 30 years ago. We believe these changes are due in large part to Unger's careful thinking and writing about these concepts. The value of continuing to question assumptions about the way language is used, particularly around terms that have such far-reaching individual and collective impact as sex and gender, is a lasting legacy of her paper.

#### STILL THE SAME: OUR INFATUATION WITH DIFFERENCE

One of the insightful points that Unger made is that 'men and women are especially alike in their beliefs about their own differences' (1979: 1086) – both believe that sex/gender differences are numerous and large in magnitude. Seemingly, this shared belief is as true now as in 1979. Dominant US culture (and the media that support and shape it) is infatuated with sex/gender differences and with naturalized, biological explanations for those differences. This is the implicit assumption of books such as *Men are From Mars, Women are From Venus* (Gray, 1992). In books and other accounts of this type, the differences between men and women are seen as large, immutable, and present from birth. Understanding the other sex is akin to understanding a foreigner or a member of another species.

There is evidence that the general public overestimates both the size and extent of gender differences. Both Martin (1987) and Allen (1995) found that, when participants were asked to estimate the extent of differences between men and women on a variety of characteristics, the size of the estimated differences was greater than differences in self-reports on the same characteristics. Thus, people tend to hold stereotypes about differences between men and women, but these do not correspond with reality. Moreover, Martin and Parker (1995) found that both men and women thought it was important to test for and report sex/gender differences. Participants perceived relatively few negative consequences for 'Type 1' errors (reporting a sex/gender difference when it actually doesn't exist) and relatively more negative consequence for 'Type 2' errors (erroneously saying that a sex/gender difference doesn't exist).

A recent review provided strong evidence that our shared beliefs about large gender differences are inaccurate. Hyde's (2005) comprehensive review of all meta-analyses concerning gender differences from 1985 to 2004 concluded that there are so few differences, and that they are so small, that a Gender Similarities Hypothesis makes much more sense than a Gender Differences Hypothesis. That Hyde saw the need to write (and APA to publish) this article speaks, we think, to the fact that the media and the lay population are not aware of the vast body of research showing how small most differences are. Hyde's article was an effort to disseminate that message.

## STILL THE SAME: OUR INFATUATION WITH BIOLOGICAL DETERMINISM

In addition to the fact that we seem obsessed (as a culture) with finding sex differences everywhere, such differences (when found) are often naturalized and assumed to have a biological foundation or cause. This application of presumed biological cause, however, is not applied at random. Brescoll and LaFrance (2004) conducted a content analysis of newspaper reports and predicted the use of biological explanations for differences between men and women from the level of political conservatism evidenced in other sections of the paper. They concluded that 'political ideology influenced the translation of scientific research findings' (p. 517) and showed that the proportion of biologically based explanations for reported differences was higher for newspapers also showing more conservative political writings in other areas of the paper. Conversely, papers with more liberal political leanings gave fewer biological explanations for reported differences in their science sections. The need to explain difference via biology seems linked with political ideology.

Even though a focus on biological determinism remains common, the specific mechanisms being researched are different now from those researched in 1979 – just as Unger predicted when she said: 'When an assumed sex difference is investigated and found to be nonexistent, the argument simply shifts to another ground' (1979: 1087). Whereas in 1979, cerebral laterality was heavily researched, the current trend is to use a variety of brain imaging techniques including positron emission tomography (PET) and functional magnetic resonance imagery (fMRI) scans.

And now, as then, women's 'differences' are often constructed as inferiorities and used to justify social inequities. For example, Lawrence Summers, former president of Harvard University, caused a major stir that ultimately ended with his resignation when he implied in remarks in early 2005 that there are biological and/or personal preference underpinnings for women's under-representation in engineering and the physical sciences. Summers also referred to men's greater variability in mathematics, at both high and low ends, as explanation for differences in career success, despite analyses that show such variability can account for only a tiny fraction of career success for men and women (Angier and Chang, 2005).

Prominent critics (e.g. Angier and Chang, 2005) of Summers echoed Unger when they pointed out that we still don't know what many observable sex differences actually mean in terms of behavioral outcomes, a point Unger made:

There is no denying that males and females may be different in some ways, just as tall people differ from short, fat people from thin, and even people with Type O blood from those with Type A. The major problem seems to be the use of sex differences as an explanatory rather than as a descriptive term. (1979: 1087)

Unger goes on to ask: 'What does finding a given sex difference in behavior tell us?' (p. 1087) – a question we should always keep in mind.

## POLITICAL IMPLICATIONS OF SEX VS GENDER

There are some intriguing studies that suggest that being exposed to biological (sex) vs. sociocultural (gender) explanations for sex/gender differences may have important psychological, social, and political consequences. Several studies have demonstrated a connection between exposure to one or the other type of explanation and important beliefs and attitudes. For example, Eccles and Jacobs (1986) compared mothers who had read media accounts of a study (Benbow and Stanley, 1980) in which the authors argued that boys were superior to girls in mathematical ability. Media headlines concerning Benbow and Stanley's study included 'Do Males Have a Math Gene' (*Newsweek*), 'Are Boys Better At Math?' (*New York Times*) and 'Male Superiority' (*Chronicle of Higher Education*). Mothers exposed to these media accounts (as compared to mothers who had no such exposure) 'felt their daughters had less mathematical ability, would have less success in future math courses, would find mathematics more difficult, and would have to work harder in order to do well in math courses' (Eccles and Jacobs, 1986: 378). This is especially disturbing because other data reported in Eccles and Jacobs (1986) showed that a mother's perceptions of the difficulty of math for her child predicted the child's performance and interest in mathematics.

Several recent experiments lead to similar conclusions. Brescoll and LaFrance (2004) exposed participants to a newspaper article reporting either biological or non-biological explanations for sex differences in the ability to identify plants; in a control condition, no newspaper article was read. Exposure to biological explanations increased participants' endorsement of gender stereotypes. In contrast, exposure to non-biological explanations increased their belief that people can change. In two experiments, Dar-Nimrod and Heine (2006) found that presenting women with genetic explanations for math-related sex differences caused a decrement in performance, as compared to providing experiential explanations, or as compared to providing information that there are no sex differences. As Unger pointed out, 'it is difficult to avoid confounding sex and gender' (1979: 1089), but continued tolerance for, and lack of understanding regarding, the entanglement of the two dimensions in the lives of all of us can do a real disservice to many.

Thus, we now know more definitively than we did in 1979 that the stakes in this debate are high. It is not simply an academic debate, or a matter merely of scientific accuracy. A biased or lazy reliance on the explanatory primacy of sex over gender can actually create difference and inequity that wouldn't otherwise exist. It is thus essential that we continue to heed the ground-breaking recommendations of Unger to think carefully and deliberately about both biological and sociocultural factors, as well as the complex interplay between the two.

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