

THE CATEGORY OF “GIRL” WITH RESPECT TO TECHNOLOGY

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The goal of this brief paper is to highlight both the reasons for attending to the status of girls in technology . . . and the dangers of attending to the special status of girl.

In the past decade, there has been a new attention to the category of people called *girls*. An imprecisely defined category, *girls* seems to include apparently biological females of elementary through junior high school, maybe high school age. This is not a natural category, but the outcome of focused attention, and when we act on behalf of this category, we must be aware that it attracts focus that can do both good and harm. For this reason, we need to consider where the category came from, why and how it's used, what work it does, and how our own actions affect it.

On the one hand, *girls* recognizes a social group deserving of attention because they may be deprived of the social advantages that US society conveys on *boys*. For instance, when certain behaviors and attitudes, such as facility with computers or interest in high-tech jobs, are considered high-status (another cultural category), it is often the case that *girls* are consistently less likely than *boys* to be involved or to be rewarded for their efforts. In countries – and periods in history -- where science and technology have been less high-status, or where girls are considered to hold higher status, girls are more likely to be involved in these fields. Many have called attention to this persistent trend and demanded that something be done about it.

On the other hand, dividing the population into categories effectively elevates certain differences to salience, erasing others, often with far-reaching implications. The “one-drop” rule that was once written into law in parts of the US and remains central to American racial ideology, for example, is a categorization scheme that endures in practice and effectively homogenizes a vastly diverse population into a single category: “colored”. The categories “Hispanic” and “Asian-American”, similarly, erase vast diversity, creating a

simple opposition between each of these and “white.” In this case, the bottom line is that each of these categories is, most saliently, “not white.”

So what are girls? Not women? Not boys? What do they have in common – and what diversity does the category erase?

Gender as an analytic category only emerged in the late twentieth-century. Earlier theorists referred to primary oppositions between men and women, or to the “woman question” but they did not employ gender as a way of talking about systems of sexual or social relations (Scott, 1986). Today, however, the binary opposition between the sexes carries much weight, and leads us to speculate about “masculine” and “feminine” qualities, likes and dislikes, and activities. We have become used to seeing “masculine” and “feminine” as natural dichotomies – as a classification system that mirrors the natural world. The binary opposition between masculine and feminine is a purely cultural construct however, and a construct that is conceived of differently in different cultures, historical periods, and contexts. Similarly, life stages like childhood and adolescence are neither universal nor a-historical; these life stages as they are understood today in our culture are a product of industrialization. Miyako Inoue (2003) has linked the sudden “noticing” of the category *girl* in late Meiji Japan to a more general mobilization of gender differences in nation-building. The category *girl*, in other words, does not come from nature, nor does it come from just nowhere – it is an ideological construct.

Girls in science and technology began to attract special attention in this country after World War II. Women had already been involved in tech jobs during World War II, when men were away at war. But, during the 1950s, girls, as well as boys, were encouraged to train in science and technology for the nation’s Cold War defense. Girls’ lagging participation in these fields became a source of concern, leading to various government programs to rouse their interest (Rossiter, 1995). Concern about the status of girls in this country increased with the work of Carol Gilligan and her colleagues (Gilligan et al 1990), as they focused on preadolescent girls’ crisis of confidence--a silencing or loss of voice—associated with diminished school performance and career aspirations. While this loss of voice is familiar to many women, it does not ring a bell with everyone. For example, while some African American girls may lose confidence in their ability to succeed in school at this age, African American girls in general do not experience the same loss of voice (AAUW 1992, p. 13) that white girls do. Indeed, it is frequently observed that African-American girls become more assertive in preadolescence. Yet on the basis of the overwhelming power of the Gilligan research, programs emerged to teach confidence and assertiveness to all girls, including African American girls who could have taught this skill to their

white sisters. The fact that the population of girls is diverse does not invalidate observations of patterns common among girls, nor does it invalidate efforts to remedy inequalities experienced by girls. But unfortunately, acting on behalf of girls can easily silence some while giving voice to others.

The categorization of girls, though it can be helpful, is not benign. The hegemonic American girl is white, English speaking, middle class, and nice. She likes her computer because it allows her to instant message with her friends and to design clothing. Tangling with this stereotype puts us into the dilemma of either erasing tremendous diversity among girls, or denying that instant messaging with one's friends and designing clothes are also worthy activities. And they're not worthy, presumably, because they're girl things.

For the most part, the recent focus on girls has been to highlight and fight their marginalization (a marginalization that is far more severe for some of them than for others). The reason we need to recognize this category is that other people recognize it, and it is as a category that girls are both encouraged and belittled. Emphasizing girls as a special category with regard to technology highlights that a large segment of the population is not participating (or not participating in standard ways) in this expanding part of our culture/society/economy. And needless to say, this is not the first expanding part of our culture/society/economy that girls have not participated in. But setting *girl* as a special category also risks ghettoizing girls. That is, in setting girls up as a target for help and consideration, we risk identifying them as a "special needs" group – as kids who need special help because they can't achieve without it. Jo Boaler (2002) talks eloquently about this in referring to math programs that target girls. She says something like: when we change math to be about cooking or about sewing, we are implicitly telling girls (and boys) that girls can't do regular or "real math" and need to have math watered down for them. Justine Cassell (2002) makes the same argument with respect to building video games that are meant to attract girls to computers: that designing games "specially for girls" risks highlighting girls as a population that needs 'special help' in their relation to technology.

Our goal should be to consider the diversity of boys as well as girls, of adults as well as kids. The users of technology must come to have many faces: men and women, young and old, American and Bangladeshi. Girls are central to technology when all users are central to technology, when all users are diverse. Girls are central when technology is designed for human needs. No longer will girls be conceived of as having special needs . . . any more than any other group.

AAUW. 1992. *Shortchanging Girls/Shortchanging America*. Washington DC: American Association of University Women.

Boaler, Jo. (2002). Paying the Price for "Sugar and Spice": Shifting the Analytical Lens in Equity Research. *Mathematical Thinking and Learning*, 4(2&3), 127-144.

Cassell, Justine. (2002). Genderizing HCI. In J. Jacko and A. Sears (eds.), *The Handbook of Human-Computer Interaction*. Mahwah, NJ: Lawrence Erlbaum, pp. 402-411.

Gilligan, C., Lyons, N.P. and Hanmer, T.J. (eds.) 1990. *Making connections: The relational worlds of adolescent girls at Emma Willard School*. Cambridge: Harvard University Press.

Inoue, Miyako. 2003. The Listening Subject of Japanese Modernity and His Auditory Double: Citing, Sighting, and Siting the Modern Japanese Woman. *Cultural Anthropology*, 18.156-93.

Rossiter, Margaret. 1995. Women scientists in American: Before affirmative action, 1940-1972. Baltimore, MD: Johns Hopkins University Press.