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October 31, 2005
Artifact Critique

The Gender of a College of Science Laboratory Bench

Oftentimes everyday objects in our environment have gendered implications that go unnoticed and unobserved. These objects may or may not have been designed with a specific gender statement in mind, however careful analysis can reveal a great deal about the gendered nature of a commonplace artifact. Such an object that I encounter in each day of my life at the Rochester Institute of Technology is a laboratory bench. This artifact, I feel, is a prime example of an everyday object that has unnoticed gender implications – about myself and my colleagues. This bench, located in the teaching laboratory room 1125 in the College of Science, is used to enable multiple students to simultaneously carry out a single experiment – individually or in groups – for educational purposes. As a result of my frequent encounters with this lab bench I have come to the conclusion that this artifact on the RIT campus is inherently gendered in both its design and its use. This gender, I have determined, is male, and the effects of the bench's gendered state need to be explored.

The lab bench in room 1125 was designed and manufactured by a biological supply company (whose name was not immediately available upon request). As the designer and manufacturer are unavailable to provide a direct insight into the process that went into the bench's design and creation, we must infer our own conclusions based on the contextual clues provided to us. We can do this by analyzing the daily use of the bench and the effects that the bench's use and existence have on those who use it – students of the RIT College of Science. The evident purpose of the lab bench is to provide a sturdy and safe surface on which multiple students can perform a given experiment in an educational context. How then, does this particular object impact the daily lives of the students, both women and men? Where does gender play into it?

The laboratory bench (or more directly, its designer and manufacturer) implies certain assumptions toward women and men. Standing at 37 inches the bench is best able to be maneuvered about by an individual whose waist would be taller than 37 inches, allowing the individual to bend into the bench without touching the surface (and potentially affecting an experiment) to reach other items on the bench, as well as the centrally located sinks and gas valves. The assumption, then, is either that men and women are the same height, that height being between 67 inches to 70 inches (placing the waist at about 37 inches according to proportions) (CDC), or that only that group whose height is between 67 inches and 70 inches would (and should) use this bench. That men and women are the same height is not the case, however. According to a study done by the Centers for Disease Control and Prevention in 2002, the average height of the American male is 69 inches – placing him well within the range for having a waist 37 inches from the ground. The average American woman, in contrast, is 64 inches tall according to the same study. The average woman is therefore not within the range to have a waist that is 37 inches tall. The average woman will have a more difficult time maneuvering about the lab bench to the centrally located sink and gas valves and more frequently encounters the risk of brushing up against an experiment and compromising it – placing women at a distinct disadvantage based on this assumption.

Discussion of the implications of these assumptions leads back to the question of how this object impacts the daily lives of the students - women and men. Based on the assumptions that men and women are the same height – that height being the average *male* height – women learn that this world was not designed for them and that women will have to struggle to get around these inherent presumptions. This world that I speak of is the world of science where women are historically unwelcome. After all, the “interplanetary theory of gender tells us

that…boys excel in science and math….girls, on the other hand…excel in French and literature" (Kimmel, 159). Indeed, the location of the lab bench implies certain significance in the context of these assumptions. It's location in RIT's College of Science reinforces the sentiment that women are unwelcome in this world of science, as the building and its teaching elements are not designed for women, and women are not taken into account when manufacturing scientific tools, including educational tools (such as this lab bench). This laboratory bench is neither exceptional nor singular in its gendered assumptions. The educational institutions have a long-standing history of a "hidden curriculum" in which our interactions and environments create a gendered context. Michael S. Kimmel in his book *The Gendered Society* even goes as far as to call our educational institutions "old-fashioned factories" that produce "gendered individuals" (159). This laboratory bench, with its assumptions that its users will be of the height of the average American male (and therefore, not likely female), is just one more tool of the old-fashioned, genderizing factory that is the RIT College of Science.

In contrast, this assumption that only men will be using this bench (and thus designing it at a height optimal for the average male) leads men to realize that this scientific world and its tools are designed and manufactured for their mold. They are customized to their needs, tailored to their forms. This teaches men that they have an advantage over their female colleagues, and why should they not – their everyday tools and environment tells them so. Men are learning through this hidden curriculum that "women and men are different and unequal, and that the inequality comes from those differences, and that, therefore, such inequality is justified" (Kimmel 159). Historically, and from the beginning of their educational experience, the notion that educational institutions are tailored to men is reinforced though various methods. Reinforcing this notion is a study released by the American Association of University Women,

who found that when “one is looking at preschool classrooms or university lecture halls…research spanning the past twenty years consistently reveals that males receive more teacher attention than do females” (qtd. in Kimmel, 163). From the preschool classroom to the university science lab, men are favored with more attention – be it more attention from teachers, or designing a working bench that is best suited to the height of a male.

We must be careful not to place too much emphasis on the facts of biology and their effects on women and men, however. After all, while biology and “biological studies can suggest to us the basic building blocks of experience and identity, it is within our cultures, our societies, and our families that those building blocks are assembled into the astonishingly diverse architecture that constitutes our lives” (Kimmel, 51). We can discuss how *biological* differences between men and women – such as average height – can have an effect on our personal and professional lives, but we also must explore the gender biases of the *social* environment in which we live and work, and how those gender biases lead us to assumptions about men and women. We must look past the biology behind our differences and seek to understand the gender conclusions that our differences lead us to make.

Image 1. Laboratory Bench room 08-1125

Works Cited

Kimmel, Michael S. *The Gendered Society.* Second Ed. Oxford U Press: New York, 2004.

Ogden, Cynthia L, et al. *Mean Body Weight, Height, and Body Mass Index, United States 1960-2002*. 27 Oct. 2004. Center for Disease Control and Prevention. 22 Oct. 2005. <http://cdc.gov/nchs/data/ad/ad347.pdf>.