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# FROM "GEEK" TO "CHIC:" WEARABLE TECHNOLOGY AND THE WOMAN QUESTION

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#### Introduction

Internet enabled and sensor equipped clothing, jewelry, and e-textiles are coming to a market slated to experience a 39% growth by 2017 (Lamkin: 2016). Despite fierce hype, the "killer app" for fashionable wearables has been elusive. This failure to catch on is informative, arguably stemming from problematic cultural attitudes about women and technology revealed by device designs. Unlike clunky "geek" medical or fitness devices, "chic" tech aims at the fashion consumer, presumably female, healthy, and living within current feminine norms. The transition from "geek" to "chic" tech raises important questions regarding how the technologically enmeshed and gendered body is imagined.

Communication and STS scholars critically examining wearables' impact on subjectivity, embodiment, and power, have focused primarily on fitness and health applications, especially as deployed in the "Quantified Self" movement (Neff: 2016, Nafus: 2016, and Lupton: 2016). Fashion scholarship has leaned toward uncritically cataloguing predictions and possibilities for new technologies (Seymour: 2012; Quinn: 2010, McCann and Bryson: 2009). Both approaches have tended to sideline questions of gender and fashion.

This project examines the design philosophies of products aimed specifically at fashionable women, by analyzing ethnographic data, media images, field observations,

<sup>&</sup>lt;sup>1</sup> The term "women" is used for stylistic purposes. Although I am discussing the marketing of "women's" fashion, I seek to question the gender normative assumption affecting a variety of bodies, queer and heterosexual, trans and cis, which thus far have not fit into the established markets

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and the products themselves, to uncover how negative attitudes about women are being smuggled into wearables, in the name of what the market 'wants.' Will fashionable wearable technology fall prey to the same problems feminist researchers identified in the Internet's emergence? Despite the possibilities -- after all, "on the internet, nobody knows you're a dog" (Steiner:1993) -- it nonetheless became a site that expressed "myths about identity, nature, and body" (Balsamo: 1996) and extended "the social construction of two asymmetrical genders" (Rakow: 1988) in the course of its adoption. I argue that wearable tech for women exhibits signs of deep seated cultural ambivalence about women, and explains a lot about the way they are seen by the fashion and tech worlds, views that need highlighting and discussion, as cultural assumptions about gender are crucial to examining the emergence of new technologies and social practices they prohibit or allow.

#### Methods

This article draws on 12 formal interviews with fashion and tech designers collected via both snow ball sample and participant observation at fashion tech expos and meet ups. Interviews were transcribed and hand coded. Themes emerging from data review were used to organize 50 articles gathered by monitoring fashion and wearable tech news coverage over the course of the last year. These analyses were triangulated through content analysis of kickstarter and ad campaigns describing wearable tech aimed at women.

# **Summary of Findings**

#### Women as victims

An apparent culture of fear permeates many of the devices on the market, which feature body sensors and alarms for personal protection. The Siren ring offers help for the "independent woman." Billed as a "new brand of jewelry that offers women immediate protection when their personal safety is at risk," it emits a "shockingly loud alarm" that might "change the dynamic between attacker and target" (sirenring.com). Another device boasts a button that, once pushed, sound alarms, flashes lights, and dials 911, all while texting the wearer's friends to geo-locate her so that they might come to her rescue (roarforgood.com).

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When I asked about their design philosophy and intended customer, fashion tech entrepreneurs described the information overloaded, hyper-connected "busy mom," or "millennial fashionista." Viawear, a bracelet that filters incoming calls, speaks to the structural impossibilities these stereotypes gloss over, with ad copy explaining how to stay "connected and available when we need to be," but also "fully present and in the moment" (viawear.com). Similarly, a ring helps networked fashionistas avoid "being rude" by letting them "keep the phone away without missing anything" (ringly.com). Presumably she can navigate the demands of a connected world, while satisfying cultural mandates to be polite, attentive, and available.

# Women and Tech Don't Mix

According to the female tech/fashion designers I spoke with, the well-worn issue of the masculinity of technology seems alive and well. One up and coming designer observed, "the tech field is dominated by "brogrammers," or, as another pointed out, "Silicon valley is a 'boy culture.'" One technologically accomplished jewelry designer noted, "People have 'questioned my ability' with regard to the "technological aspects of my smart jewelry." A young fashion designer who'd won a competition to be a fellow at Eyebeam, a foundation dedicated to fostering experimentation in wearable tech mused, "the programmers seemed to be wondering what this 'pretty little fashion girl' might want to do with these complex programming languages." Many articles cited the problem of the male end user, where the "look, size, and choice of materials seem to first consider men, and then get cosmetically tweaked for the ladies" (Taraska: 2015). To counter these attitudes, a male tech designer said design teams need more women, because "sometimes they see things differently."

## Conclusion

Is the male dominated "geek" aspect of the tech design field solely to blame for these skewed views of women as end users of fashionable tech? Is the desire to return to face-to-face contact and emotional connection a gendered value or a human one? Is the desire to feel safe in the street gendered as well? Straddling the divide between wearable tech and fashion, designers have tapped broad cultural expectations of gender to shape usefulness and value. The results tellingly reveal persistent attitudes about women that are anything but new. New ideas are needed however. Just like the internet before it, wearable tech has the potential to radically enhance many lives. It would be a shame to squander this potential on short sighted devices extending existing anxieties that limit or control human potential, gendered or otherwise.

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