
Brand Choice as Gender Identity

Elizabeth F. Churchill

eBay Research Labs,
eBay Inc.
2065 East Hamilton Ave,
San Jose, CA 95125
churchill@acm.org

Hugo Liu

eBay Research Labs,
eBay Inc.
2065 East Hamilton Ave,
San Jose, CA 95125
hugo@hunch.com

Copyright is held by the author/owner(s).

CHI 2014 Workshop on Gender and Product Design

CHI 2014, April 2014, Toronto CA.

<https://sites.google.com/site/technologydesignperspectives/>

Abstract

In the world of consumer goods, brands are witting constructions, fraught with association, and imbued with personality characteristics, especially gender. Consumers create their own gender personality—which may align with or defy their biological gender—by adopting and appropriating brands with known masculine or feminine brand images. In this paper, we explore the relationship between gender and brand consumption in the eBay marketplace. Using 2013

purchase data and self-reported user gender, we adopt a simple heuristic to rank brands along a masculine-feminine continuum. We discuss the most feminine and most masculine brands found in three product verticals—shoes, watches, and small kitchen appliances. Considering how an individual user's pattern of brand consumption might constitute a kind of 'gender speech', we use statistical inference to derive the gender personalities of 608,000 eBay users, and map these to reported biological gender. Apparent differences emerge in how self-identified male and female users consume gendered products. We present our findings and reflect on consumption and male/female gender personalities. We conclude with issues concerning dataset assumptions.

Keywords

Commerce, brand, shopping, selling, advertising, identity, image, taste, affiliation, gender, masculine, feminine, affinity

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous. D.2.10. Design. K.4.m. Computers and society: Miscellaneous.

Brands and the construction of gender

Marlboro has long been synonymous with masculinity and Chanel with femininity. Far from coincidence, associations like these are the result of brand strategy and the result of effective, targeted and very deliberate marketing campaigns (Grohmann, 2009). Advertising imagery doesn't "express" or reveal latent masculinity and femininity; it is largely responsible for 'constructing, codified and contesting' our gender ideals (Schroeder & Zwick, 2004).

Yet all is not determined. Women are free to love Marlboro, and many men buy Chanel. Brands and their gender associations serve merely as "props" through which consumers "perform their gender identities" (Avery, 2012). By appropriating brands with known masculine or feminine brand associations, consumers can influence or create their own gender identity—which may agree with or defy their biological gender. Herein lies a tantalizing implication for HCI and for design more broadly. Rather than restricting our view of gender to biological sex and following the risky practice of projecting our assumptions about gender preference and gendered performance into gendered products (Churchill, 2010), by examining a user's patterns of brand consumption, we may infer when self-constructed gender identity contravenes biology.

Measuring brands' masculinity/femininity

To explore the relationship between gender and brand consumption, we analyze purchase data for calendar year 2013 in eBay's marketplace. On eBay, over half of all queries are for branded goods, and the site itself is arguably the world's largest marketplace for branded goods, ranging from handbags to cars to espresso machines. For a majority of eBay users, self-reported gender is also recorded, optionally given in user profiles.

To characterize the masculinity-femininity of a brand, we propose a simple heuristic, following the statistical approach to gender modeling taken by Liu & Mihalcea (2007). The intuition is that feminine group identity basically casts women as the ingroup and men as the outgroup:

$$Femininity(b) = \text{RANK} \left(\frac{FemaleBuyers(b)}{FemaleBuyers(b) + MaleBuyers(b)} \right)$$

Equation 1.

For each brand in a particular vertical, we calculate the percent of its buyers that are female. All brands are then rank ordered. The femininity of a particular brand b is defined as a percentile rank from 0.0 (most masculine) to 1.0 (most feminine). In this scheme, yoga brand Lululemon would be ranked as skewing feminine because its customers are predominantly women. Catering equally to men and women, Nike would be ranked as nearly androgynous (~ 0.5).

As an entrée to discussion, we compiled lists of top brands in three product verticals—shoes, watches, and small kitchen appliances – and ranked them according to their gender skew (Table 1).

A product's gender compatibility can be a dominant factor in a vertical like shoes. Some of the most feminine brands like Isabel Marant and Nine West don't sell men's shoes. Shoe brand Born sells men's shoes, but offers women a more extensive selection. Similarly, the most masculine shoe brands specialize solely in men's loafers, while others like Hugo Boss offer an

Shoes		Watches		Small Kitchen Appliances	
Feminine	Masculine	Feminine	Masculine	Feminine	Masculine
Isabel Marant	Mezlan	Marc by Marc Jacobs	Frank Muller	Keurig	Omega
Naturalizer	Allen Edmonds	Michael Kors	Vacheron Constantin	Mr. Coffee	Bosch
Nine West	Alden	Guess	Corum	Sunbeam	Nespresso
Born	John Varvatos	Michele	IWC	Hamilton Beach	Black & Decker
Jessica Simpson	Florsheim	Fossil	Perrelet	Presto	Brita
Vince Camuto	Stacy Adams	Chanel	Panerai	The Magic Bullet	GE
Soda	Mizuno	Geneva	Audemars Piguet	Jack LaLanne	DeLonghi
Top Moda	Red Wing	DKNY	Breguet	Cuisinart	Water Sentinel
Jeffrey Campbell	Hugo Boss	Bvlgari	Glashutte	Oster	Whirlpool
Sam Edelman	Brooks	Tiffany & Co.	Bell & Ross	Vitamix	Samsung

Table 1. Most feminine and most masculine skewed top brands in three eBay product verticals.

isolated women's collection that might fairly be considered a cross-gender brand extension (Frieden, 2013).

With watches and small kitchen appliances, products are not so strictly gendered. Top watch brands almost always offer products for both men and women. Small kitchen appliances don't pose any obvious gender restrictions. These brands distinguish themselves as masculine or feminine largely on the basis of personality. Top feminine watch brands reported in Table 1 are also established feminine fashion brands, while top masculine watches are hyperbolically masculine in aesthetic— Swiss, over-engineered prestige watches that fetishize functionalism.

A most interesting case is the way that small kitchen appliances like coffee makers and blenders are gendered. One interpretation is that feminine brands like Keurig, Mr. Coffee, Sunbeam, and Hamilton Beach offer products which connote ease-of-use, friendliness, nostalgia, and emphasize the experiential. Much like their watch counterparts, masculine kitchen brands like Omega, Bosch, Nespresso, Black & Decker, and Brita emphasize function, engineering, power, purity and integrity – arguably the desiderata of a stereotypical masculine image.

Enacting gender through brand consumption

Just as our individualized pattern of consumer preferences for music, films, and food constitutes a *taste speech act* (Liu, 2007) having item (word) choice and syntax, we might also conceptualize an individualized pattern of brand consumption as a kind of 'gender speech'. In this framework, brands are the words comprising a speech act. A brand-word's

meaning is its femininity, masculinity, or androgyny, as measured by Equation 1. The average gender skew of an individual's consumed brands represents an estimate of her/his brand-based gender personality. Thus, women who tend to buy gender-neutral brands are deemed as expressing androgyny, while men who tend to buy feminine brands are thought to practice gender bending.

Since the act of buying a brand is not usually performed for an audience, this type of speech must be considered a 'performativity' (Butler, 1990), to be distinguished from 'performance' by its discursive and perhaps unintentional nature. Performativity can still betray gender preference though. In Butler's thinking, there is no static gender, only a gender that is produced through the "stylized repetition of acts."

A full investigation of the framework is beyond the scope of this paper, but we begin the inquiry by examining potential differences in how self-reported male and female users enact their gender personality.

First we define a vocabulary of 1500 brand-words – comprised of the top 500 brands from shoes, from watches, and from small kitchen appliances. Each word is assigned a femininity score between 0.0 and 1.0 according to Equation 1. From an initial pool of all eBay users who have self-reported as Male or Female, we identified 608,000 users who purchased at least five distinct brands from the 1500 brand-word list, and at least one brand from each of the three verticals. Each user's gender personality is calculated as the average of the femininity scores of their distinct purchased brands. We plot histograms of the inferred gender personalities of male and female users separately to

illustrate a potential difference in gender norms (Figure 1).

Female users' gender personalities closely follow a normal distribution, with mean and mode of 0.54 and 0.56 respectively. Since 0.5 is neutral, the gender norm for women on eBay seems to be on the slight feminine side of androgyny.

The histogram of male users' gender personalities is not normally distributed, but positively skewed. The mode of 0.34 is more polarized than in the female users' distribution, but the right tail is fatter and longer. This suggests that the gender norm for men on eBay is more masculine, but there is a sizeable minority of men who deviate from this norm by gender bending as androgynous or feminine. That this deviation is not as pronounced for female users' might suggest that androgyny is more socially accepted of women.

Implications for HCI and Product Design

Much of the literature on gender and brands focuses on marketers' intended gender projections. This thinking begets products that obey traditional gender stereotypes, which we identified in a screen of the most masculine and feminine brands. In contrast, we are beginning to look at gender through the lens of consumption, gauging gender not as dichotomies but along a masculine-feminine continuum. Products may be fashioned for generic males and females, but consumers are full of 'identity ambivalences' (Davis, 1994), experimenting with and appropriating images to enact their own gender personalities. For HCI to progress to a deeper understanding of users, an attribute as basic as gender should be exploded and re-explored.

Some caveats

Although our analyses are intriguing, we face a challenge. Ultimately, our interpretation is complicated by potentially problematic assumptions that underscore the difficulty of making assumptions regarding gender from data. First, for current purposes we have assumed

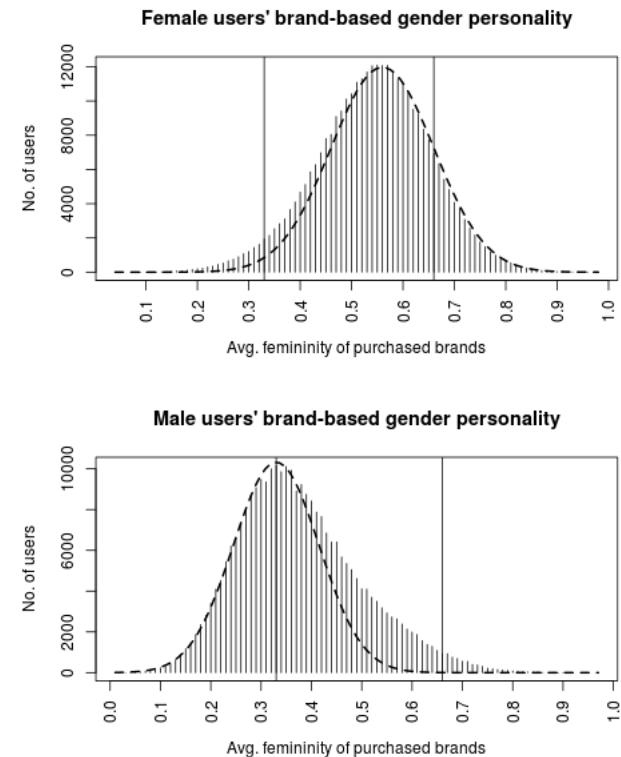


Figure 1. Histograms of the average femininity of users' purchased brands, plotted separately for self-reported male users and female users. Vertical lines create three equal sized regions of masculine, androgynous, and feminine.

reported gender to be the user's biological gender. However, the drop-down menu where users report their gender lists *Male* first as the first option. Female users who don't want to disclose their gender might select Male just to put something down. This order bias could contribute to the fat right tail in the male users' distribution. Second, we know from user studies that many accounts are created for others, so an initiated account may, ultimately, be used by someone of a different gender. Thirdly, we know that eBay accounts often do not correspond to a single person's spending behaviors: many eBay users make purchases for others (e.g., shopping for households, shopping for gifts). Female users have a mean closer to the neutral point but this might be because women are more likely to shop for others.

Therefore, we acknowledge some limitations in our analyses which we will address in future work.

References

- [1] Grohmann, B. (2009). Gender dimensions of brand personality. *Journal of Marketing Research*, 46(1), 105-119.
- [2] Shroeder, J. E. & Zwick, D. (2004). Mirrors of Masculinity: Representation and Identity in Advertising Images. *Consumption, Markets and Culture*, 7(1), 21-52.
- [3] Avery, J. (2012). Defending the markers of masculinity: Consumer resistance to brand gender-bending, *Int'l Journal of Research in Marketing*, 29(4), 322-336.
- [4] Frieden, L. R. (2013). The Role of Consumer Gender Identity and Brand Concept Consistency in Evaluating Cross-Gender Brand Extensions (Doctoral dissertation, University of South Florida).
- [5] Liu, H. (2007). Social network profiles as taste performances. *Journal of Computer-Mediated Communication*, 13(1), 252-275.
- [6] Butler, J. (1990). Gender trouble, feminist theory, and psychoanalytic discourse. *Feminism / postmodernism*, 324-340.
- [7] Davis, F. (1994). *Fashion, culture, and identity*. University of Chicago Press.
- [8] Churchill, E. F. (2010). Sugared puppy-dog tails: gender and design, *interactions*, 17(2).
- [9] Liu, H., & Mihalcea, R. (2007). Of Men, Women, and Computers: Data-Driven Gender Modeling for Improved User Interfaces. *ICWSM*, 7, 26-28.