Gender and social identity rank as high priorities for undergraduate students, putting significant weight on their choice of apparel and accessories. In a university, students must also navigate the pressures of academic disciplines, which have their own norms of appearance and gender. Credibility in a discipline often hinges on one's ability to conform to those disciplinary standards, but people whose social gender role does not match the gender of their discipline, such as women in the sciences or men in gender studies, will find these two forces at odds. This study leverages statistical observations of clothing and accessories to examine how the performances of undergraduate students are affected by the gender of their discipline of study. The results go beyond prior work and reveal a depth and complexity to the system of gender influence that challenges simplistic narratives about pressure to conform to disciplinary gender norms.

Gender is a substantial field of study within the social sciences (frequently, and gender studies' studies even have their own doll parts), and the field owes much to the theory of social construction and performativity. Central to theories of social construction is that norms of what is masculine or feminine are determined socially rather than biologically. Further, following Judith Butler (2009), performativity involves the idea that gender is a performance (a set of actions and choices people make) that either conforms with or breaks those social norms. A central feature of gender performances involves a person's choice of apparel; for example, dressing according to the masculine norm is a way to perform masculinity. The social norms of gender govern not only what appears as gender, but also who should appear in the first place, and people whose gender performances do not conform are said to transgress gender boundaries.

Many studies of gender issues have focused on students and schools, and it has been widely recognized that some disciplines are gendered feminine (e.g. language and humanities) and others masculine (e.g. mathematics and sciences). As such, there has been considerable work on the way a discipline's gender affects student participation and scores (Steele, 1999), however, there has been surprisingly little work on the way the gender of a discipline affects students' gender performance. This study leverages quantitative observations of clothing and accessories to examine how the classroom gender in the classrooms of gendered disciplines. The results reveal a depth and complexity to the gender influence of performance that challenges simplistic narratives about pressure to conform to disciplinary gender norms.

Doing Gender, Constructing Social Norms

As elementary teacher Gair Boldt (1996) points out, the theory of performativity shatters a great deal of light on the means by which gender is produced and reproduced. Even her eighth-grade students recognize that some behaviors (e.g. playing with girls, writing poetry) connote "girl" while others (e.g. sports, rough play, diarrhea) connote "boy". This notion that one can act out a specific gender relies upon an understanding of gender as socially constructed rather than innate or biologically determined. Butler's words, "gender is performative[,] a certain kind of enactment," but "the appearance of gender is often mistaken as a sign of its inherent truth" (2009, p. 1). Sociologist Michael Messner (2000) explains how structural segregation of sexes, social pressure to conform to peers and superiors, cultural messages in the media, and one's sense of self-identity interact to provide the contexts in which people make gendered choices throughout their lives.

As numerous authors note, clothing is a major locus for gender performance. Infant garments are gender segregated into pink and blue from birth. Even fantasy and role-playing costumes such as those worn on Halloween are gendered not only by character, but by wearer (Nelson, 2000). Moreover, clothing can be an important and conscious part of identity construction, as Mary Bucholtz (1999) work on high school nerd gil culture demonstrates. Raine Dourier (2005) provides a broader overview of the trends that gender in these case studies examine. For her, bodies are treated and interpreted as ongoing projects of gender performance; people are constantly “doing gender” by making choices about how to appear and what to wear, whether and how much to conform with or transgress against gender norms, and what such conformity or transgression could gain or cost them—in some cases gender transgression can be extremely costly to family, social, and professional goals (Mor, 2009). This concept of “doing gender” was first introduced in West and Zimmerman's paper by that title in 1987, where they argued that we cannot do gender, because all things do we risk being perceived in a gendered way.

Performing Gender on a College Campus

The university is a major social institution for U.S. students during their formative young adult years. Even during class, students rank social goals such as friendships and romantic relationships highest among their top concerns, and to that end they may put...
a great deal of thought into their appearances and gender performance (Holland, 1988; Mir, 2009). While academics have taken a backseat to social interests and “extracurricular” development, students, faculty, and parents still agree that without the classroom, there is no university (Moffatt, 1991). Students, then, must balance social pressures with goals of academic achievement. This tension can become acutely evident in the classroom when there is competition between the gender norm of one discipline and the broader norms for one gender. Borrowing West’s terminology, Dorte Marie Søndergaard (2005) coined the term “doing academic” to describe how academic disciplines produce norms for their members’ professional and gender performances. Professorial credibility often hinges on one’s ability to conform to disciplinary standards of speech and appearance. People whose social gender role does not correspond to the gender of their discipline, such as womyn in the sciences, will find these forces at odds.

To explore these competing pressures, this work compares profiles of gendered dress across different disciplines in Fordham University classrooms. Classroom spaces are intimately linked to academic disciplines not only by the subjects discussed in class, but also by those who occupy the spaces (i.e. people participating in the discipline). Students’ choice of apparel during attendance is a visible aspect of their gender performance at a time when they are directly engaged with both the topics and community of the discipline. As such, student apparel in classrooms is a prime position from which to study the effects of gender norms on students within gendered disciplines.

Many studies have examined the case of womyn in traditionally masculine disciplines of mathematics and sciences. National statistics from the National Science Foundation (England and Li, 2006) indicate that the sciences and engineering are overwhelmingly dominated by men. Being taken seriously as a student, part of a research order, or an entrepreneur in any of these fields is a difficult task. There are few sambo (gender) peers to make one’s gender expression seem normal. Further, research on women in mathematics and physics shows that womyn believe that, though gender is a critical component of their identity, they have a difficult time balancing the demands of femininity with disciplinary expectations of masculinity (Mobin and Khudai, 2004). Members of this malcolmortified community of students experience the need to conform to their primarily masculine norms of thinking, speaking, and dressing. But it can be off by womyn who break broader cultural gender norms in order to conform. In short, if womyn are too feminine, they do not meet the standards of scientists, but if they are too masculine, they do not meet the standards of womyn. In either case, they risk being outcast.

This investigation explores whether similar processes might be at work in traditionally feminine disciplines (here, womyn & gender studies), and how these tensions play out in more neutral environments. Although considerable work has been done with gender and college students, little attention has been paid to groups in gender in K-12 classrooms, the gender performances of undergraduates in classrooms and in feminine college disciplines are understudied. This work has been done connotating the performances of undergraduates across masculine, feminine and neutral classroom spaces.

### Methodology

To explore the influence of disciplinary gender norms in university classrooms, I observed the apparel choices of students in three types of classes. Masculine, feminine, and neutral classes are expected to represent the range of possible scenarios in which a discipline’s gender norm might impact the gender performance of students. Because the masculine and feminine spaces are chosen from upper level courses, self-selection is assumed to be at play. That is, students taking upper level womyn’s studies courses are assumed to take part in that feminine discipline either by major or elective choice. The effects of the discipline’s gender are expected to be strong here because the students and those around them are actively engaged in it. For these reasons, classes which focused on multiple issues (e.g. gender and race) or which were required for another program (e.g. a diversity requirement) were excluded. Additionally, only coed classes were considered so that the impact of and on gender minorities could be evaluated.

The following spaces were chosen for evaluation:

- **Masculine spaces**: upper-level classes in the Computer and Information Science department. Nationally, computer science is overwhelmingly populated by male students (England and Li, 2006), and only 12.7% of students observed here were female. On behalf of the department’s full time professors are all male, and all classes in this group had male instructors. Additionally, the discipline’s culture is very masculine, even compared with other sciences (Mobin and Khudai, 2004).

- **Feminine spaces**: upper-level classes in the Women’s Studies department. These classes contain overwhelmingly majority of female students, though the ratio of female to male students is less extreme than in the masculine spaces. All observed professors were female. These classes focus on the traditionally feminine disciplines of gender and women, and are within the generally feminine disciplines of humanism and social sciences (Engeland and Li, 2006).

- **Gender neutral spaces**: lower-level classes in core courses which are required of all Rose Hill undergraduate students. These classes have a nearly even sex distribution (54% female). No major sex selection is assumed to be at play, because these courses are required of all students. Further, because they are considered general knowledge for those who go to the university, there is no assumed institutional or structural bias.

Data was collected by observing the apparel of students who attended at least a majority of classes in each of these groups. Each student’s clothing was evaluated using several categories and then tallied into that class’s totals. Tops, bottoms, and accessories were all classified separately. Each article was classified first by its fit (tight/fitted, medium, loose/baggy, torn, dressy), then by its color/pattern (bright/medium, accented bright/feminine, bright/silvery/organizational, dark/medium, skin showing). Articles were tallied for each criterion that they met. Students were not aware of this study while it was being conducted. In the end, we are left with the total number of garments matching each description (e.g. 8 baggy bottoms on males, 11 bright tops on females) for each class.

The coding scheme was based on the following assumptions:

- **Tight and fitted clothing is coded feminine, while loose and baggy clothing is coded masculine** (Dovier, 2005; Nelson, 2010, Mir, 2009).

- **Men’s and women’s tops which expose the midriff, as well as low rise bottoms or shorts and skirts which are well above the knee** is coded feminine (Dovier, 2005; Mir, 2009).

- **Dark and drab colors and patterns are coded masculine, while bright and light colors and patterns are coded feminine** (Nelson, 2010; Messner, 2000).

- **Primarily colors and patterns or colors which represent an organization (such as a university shirt) are gender neutral, because they are marketed that way** (Nelson, 2010).

In total, we observed 405 articles of clothing from 180 outfits in 9 classes. Because some students attended multiple classes or days, the 180 outfits are drawn from fewer than 180 students.

### Results

#### Gender neutral space

The data from the gender neutral space can be seen in Table 1. Womyn’s bottoms (skirts, dresses, pants, shorts, etc.) were tight 80% of the time, with less than 7% of garments classified as baggy. Both men’s and womyn’s bottoms were both overwhelmingly dark/dark, but 10% of womyn’s bottoms were bright/feminine. Womyn’s tops were split between dark, bright, and medium. Thighs of men’s tops were most often black in both gender and neutral spaces, whereas there were more instances of bright tops worn by womyn than by men. In feminine spaces, most of the garments worn were either bright or had bright accents, whereas most of male garments were dark. In general, we see students of both genders in every category of color and fit for every garment, and the most popular styles are the “gender appropriate” styles (e.g. tight for womyn, and baggy for men).

#### Masculine space

The masculine spaces exhibited interesting apparel patterns as well. For the male students, who make up the majority and define the norm, the trend toward clothing of medium tightness held. However, it should be noted that when clothing was tight, it was often not fitted (as the category “tight/fitted” did encompass pass), but rather it was simply small for the wearer. Like in the neutral space, dark/drab colors and patterns dominated, but male students found more room to wear bright/feminine clothing and clothing with bright accents here than anywhere else in the study. There were even a few instances of male students wearing bottoms classified as bright/feminine, breaking the hegemonic social trend of only dressing dark.

Womyn in masculine spaces tend to conform to masculine apparel in several ways. They show no unnecessary skin and wear even more baggy tops than the men. Their bottoms are all dark and bright. While men exhibit slightly lower rates of “dressy” clothing here in neutral space, womyn are invariably casual in the masculine spaces. With a cursory glance, they seem to be meeting the spaces norm of masculinity better than some of the male students. A closer examination tells a different story; however. Womyn’s bottoms are invariably tight/fitted, and they all have decided feminine accents and top colors. For instance, although a female student may walk into one of these classes with a loose black sweatshirt, she will invariably wear tight jeans and will likely be wearing an accessory like a fuchsia scarf.

#### Feminine space

The feminine space demonstrates several interesting differences from the other spaces. First, not only were womyn’s tops looser than in any other space, they were also dramatically looser on average than the attending men’s tops. Additionally, the portion of drab/masculine accessories on female students is substantially higher here than elsewhere (double the neutral space). In this way, womyn seem to be rejecting their traditional gendered clothing
norms. This trend does not extend to the male students, however, who seem to represent an elevated masculinity. Indeed, they do not wear the highest portion of baggy bottoms (double the other spaces) and have no bright/feminine colors or patterns on any article of clothing. They also represent the only consistent showing of sissy/organizational bottoms for men (specifically, university sweat pants and camoouflage print pants). That said, women’s bodies are not exclusively centers of rejection. In fact, they have the average quantity of exposed skin and the normal distribution of mainly dark/dark bottoms. While neither women nor men display any dressy clothing in the feminine space, women’s trend toward looser clothing that shows more skin is indicative of a fashion that is absent from women observed in masculine spaces; women in the latter tend toward medium/light, fully covered, boys’ clothing, which differs from the fashion of the more traditional femininity of tight fitting articles and feminine patterns.

Discussion

Gender Neutral Spaces

The gender neutral spaces are not free from tacit gender pressures. It can be said that the broader variation of personal style in these spaces, especially the freedom for male students to wear comparably more fitted/feminine articles of clothing (which results in a very narrow gap between the two identified genders), is a product of the reduced gender pressure in these spaces. Similarly, though women exhibit more traditional displays of femininity, they also have a broader range of styles open to them. When no one style prevails, the strength of gender norms is weaker, and transgressive spaces are easier.

Masculine Space

Evaluation of the masculine spaces seems to confirm the findings of other studies. In these spaces, woman’s apparel seems almost schizophrenic. Maria Ong’s (2005) work with physics students explains that women working to be accepted as legitimate academics must contend with the conflicting pulls of broad self-femininity and local community masculinity. This tension is evident in our study as well: women work to blend in by generally comporting themselves like sissy/boy; casual, and drab clothing, while also attempting to assert their femininity with subtle but firm signifiers like fuchsia scarves and tight jeans. Male students in masculine classroom spaces seem to partake in both gender extremes. Male students here do not have tension between social and disciplinary gender influences and can comfortably partake in masculine apparel norms. This comfort also affords them the space to break those norms and wear overtly bright/feminine articles which the women are not generally observed wearing. That is, while women’s femininity seeks an assertive but subtle balance, men’s masculinity is unchallenged and free to openly transgress boundaries.

Feminine Space

The feminine space, however, does not demonstrate the reverse. Female students appear to break some norms of femininity in fall of masculine garments such as loose tops and draw accessible. Unlike in the masculine spaces where men seem comfortable with, but not inclined toward, breaking norms, women’s gender-bending in feminine spaces is widespread. Women’s fashion ad

s its claim to these masculine traits in feminine spaces more than in neutral spaces. Still, women participate in other feminine student norms by showing the average amount of skin and keeping hair long and haircuts short. Men, however, appear to take a reactionary stance, exhibiting a distinctive hypermasculinity. While the patterns and fits of men’s tops tend to remain normal relative to the gender-neutral spaces, no bright/feminine tops were observed and men tend to wear extremely loose and masculine bottoms. Rather than being torn between, or trying to blend in to, the feminine norm, men uphold more masculine dress styles.

Interestingly, women’s adoption of some masculine and some feminine traits could indicate that women are still in tension both between conflicting feminine and masculine influences. It is possible that this conflict is a product of the discipline, which forces students to consciously engage with these very norms. Women, then, may be conflicted by social pressures toward femininity and disciplinary pressures critical of those social pressures. If this effect of self-consciousness is happening for women, it does not seem to be happening for men, who may instead feel challenged by a discipline which rejects patriarchy. In fact, it is precisely this critical examination which makes women’s studies different from computer science. In the former, gendered norms are openly cussed and evaluated; pressures are direct and overt. In the latter, pressure to conform isacknowledged by the technical subject, as if the discipline were somehow genderless. This line of thought, that masculine disciplines are without gender, has also been found in other studies and interviews (Ong, 2005).

Implications

With this study, we have provided corroborative previous work’s conclusions that masculine disciplines place conflicting pressures on female their peers. Women here are left trying to fit in with the discipline’s norm of masculinity in order to be accepted as credible members, but they must at the same time try to conform to their social expectations of femininity. Women’s apparel choices in masculine classrooms demonstrate a dominant trend toward generally matching the feminine norm and a simultaneous mixing in clothing such as baggy, casual, and drab clothing, while also attempting to assert their femininity with subtle but firm signifiers like fuchsia scarves and tight jeans. Male students in masculine classroom spaces seem to partake in both gender extremes. Male students here do not have tension between social and disciplinary gender influences and can comfortably partake in masculine apparel norms. This comfort also affords them the space to break those norms and wear overtly bright/feminine articles which the women are not generally observed wearing. That is, while women’s femininity seeks an assertive but subtle balance, men’s masculinity is unchallenged and free to openly transgress boundaries.

Finally, the analysis in this work is largely quantitative. Because of the inherent dichotomy between qualitative and quantitative evidence, the statistics generated about relative distributions of caching egos and attitudes should be understood not only as a guide to further qualitative and theoretical work. Precise measurements of clothing dimensions and hair are not used, nor could the data be used to fully encompass the personal and social meanings of gender and clothing. Instead, it is hoped that this course of thought methodology provides a statistical basis for insight that otherwise might have been overlooked.