

Opening the Curtain on Playwright Gender:  
An Integrated Economic Analysis of Discrimination in American Theater

BY

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I dedicate this thesis to my dear grandma Sunny,  
whose deep appreciation of education has long inspired my own,  
whose endless generosity has opened countless doors throughout my life journey,  
and whose unwavering love and friendship will always mean the world to me.

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## CHAPTER 1

### INTRODUCTION: HYPOTHESES FOR THE PAUCITY OF FEMALE-WRITTEN PLAYS

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The vast majority of theater productions are written by men. In the 2008/2009 New York Broadway season as it has been put forth, the percentage of plays written by women will amount to only 12.6% according to theaters' announcements. This same figure one century ago, for the 1908/1909 New York season, was 12.8% according to the Internet Broadway Database. Of productions in non-profit subscription houses with more than 99 seats in New York this year, moreover, only 17.8% were female-written.<sup>1</sup> Through discussions with playwrights, artistic directors, and producers in New York, I have collected a range of possible explanations for the consistently low number of female-written scripts chosen for production.<sup>2</sup>

In labor economics terms, these explanations can be separated into human capital explanations and discrimination explanations. Human capital theory emphasizes the contributions of differences in ability, education, experience, and training to differences in labor market outcomes between the genders.<sup>3</sup> Perhaps there are inherent differences in the abilities of men and women to write plays; some claim that female works lack the “artistic exceptionalism” found in many male works. Or it could be that men choose to

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<sup>1</sup> Data on the playwrights of productions in non-profit subscription houses in New York with more than 99 seats over the past year were compiled by Julia Jordan.

<sup>2</sup> Throughout this thesis, I will make the following distinction, widely accepted in the theater community:

- “Script” refers to a written theatrical work.
- “Play” refers to a written theatrical work that has reached production.

<sup>3</sup> In this thesis, a theater “employs” a playwright if it contracts with that playwright to produce one of his / her scripts. While playwrights are, in practice, self-employed, I nonetheless use the term “employment” to refer to this contracting process in order to facilitate smooth comparisons between this thesis and the preceding literature on employment discrimination.

invest more in playwriting education and training than do women. Although men and women appear to graduate from the top playwriting institutions in approximately equal proportions, this sample size is small and excludes the majority of American playwrights.<sup>4</sup> Alternatively, women may be more likely to put playwriting on pause in order to, for example, bear and raise children; this may partially explain why many artistic directors note that the quantity of female-written submissions is lower than the quantity of male-written submissions.

Human capital differences aside, discrimination may partially account for the limited number of female-written plays. According to Heckman (1998), “Discrimination is a causal effect defined by a hypothetical *ceteris paribus* conceptual experiment – varying [gender] but keeping all else constant.” Discrimination in playwriting would exist if a female playwright is treated differently than an otherwise identical male playwright.

The literature distinguishes between statistical discrimination and taste-based discrimination. Statistical discrimination occurs when, in the presence of imperfect information about the actual productivity of workers, employers are forced to rely on visible features such as gender in judging each worker’s productivity. Since there is near perfect information about the quality of the script as written, statistical discrimination hypotheses in playwriting focus on imperfect information about key characteristics of the playwright that may influence the success of the script in production; such characteristics include the playwright’s ability to perform re-writes and to work effectively with the artistic director.

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<sup>4</sup> According to both the Yale School of Drama and the Juilliard School’s Drama Division, the numbers of men and women enrolled in the programs have been approximately equal over the past decade.

Taste-based discrimination, in contrast, occurs when customers, workers, or employers have a preference for interacting with one group of workers over another, despite equal productivity between the two groups of workers (Becker, 1971). In theater, customer discrimination would entail audience members choosing to buy tickets or pay higher ticket prices for a male-written play of the exact same type and quality as a female-written play purely because the former was written by a man; this would, in turn, drive down the revenues garnered by female-written plays. Worker discrimination, meanwhile, would entail a preference by cast and crew for working with male playwrights; by demanding higher wages as compensation for working on a female-written play, discriminatory workers would drive up the variable costs of producing the female-written work. Finally, employer discrimination would entail artistic directors preferring to work with male playwrights; given employer discrimination, artistic directors would select male-written scripts for production over female-written scripts, even amid equal profit potential for the two works in production.

In this thesis, I first further develop and contextualize the human capital and discrimination hypotheses for the small number of female-written plays. To that end, in the next chapter I explore the theoretical literature on human capital theory and discrimination theory before developing a theoretical framework with which to examine potential taste-based discrimination in theater. This framework incorporates the possibility of all three sources of prejudice: discrimination by (1) audience members, (2) cast and crew, and (3) artistic directors.

Building on this theoretical discussion, I present the three empirical methods employed throughout the remainder of this thesis in Chapter 3. On aggregate, the three

methods serve to disentangle the possible human capital and discrimination explanations for the small number of female-written plays. Each method is grounded in the empirical literature on discrimination; each is also adapted in specific ways for applicability in the script-selection process.

In Chapter 4, I use data on over 20,000 playwrights and 80,000 scripts, both produced and not yet produced, to separate the gap in the number of female-written and male-written plays into an explained gap and an unexplained gap. The explained gap arises from differences in script characteristics, such as the number of parts, or roles, and the percentage of those parts that are female, as well as from differences in playwright characteristics, such as whether or not the playwright is represented by a literary agent. The unexplained gap, in turn, is partially attributable to the gender of the playwright. This method provides valuable insights into which script and playwright characteristics are most highly correlated with a script reaching production. However, since some key characteristics of both the scripts and the playwrights are not observable, the results are likely subject to omitted variable bias.

The second method, modeled after the classic audit study and presented in Chapter 5, overcomes any omitted variable bias by controlling fully for all characteristics of the script, thereby isolating playwright gender. I conducted an experiment that entailed sending four different scripts to artistic directors around the country, varying only the gender of the pen-name on each; I then collected information on artistic directors' assessments of the scripts. I use these data to measure both statistical discrimination and taste-based discrimination in the script-selection process. By asking artistic directors to rate the scripts along a variety of metrics, including play quality, economic prospects,

audience appeal, ease of casting, and fit with theater, results of this study illuminate not only any gender differences in whether or not scripts are selected for production, but also the motivations behind any gender differences.

Since the experimental approach of the second method may give rise to hypothetical bias, I also examine potential discrimination in the script-selection process by comparing the observed profits of male-written and female-written plays on Broadway over the past decade. This method, presented in Chapter 6, is loosely analogous to comparing the marginal revenue products (MRP) of workers to their wages; here, a play's profits are substituted for the worker's MRP and whether or not a script reaches production is substituted for the worker's wage. By examining profitability, as opposed to other potential measures of play quality, this approach precisely targets employer discrimination.

## CHAPTER 2

### THEORY: THE ECONOMICS OF LABOR MARKET DIFFERENCES IN PLAYWRITING

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The theoretical literature relevant to occupational and employment differences between the genders can be separated into two categories: human capital theory and discrimination theory. Human capital theory emphasizes the contribution of differences in ability, education, experience, and training to differences in labor market outcomes between men and women. Discrimination theory, in contrast, considers how statistical discrimination or pure prejudice may explain any differences between the genders. These two theories are not mutually exclusive; much of discrimination theory examines whether prejudice can explain the residual difference in labor market outcomes of men and women once human capital characteristics are held constant.

In what follows, I review aspects of human capital theory and discrimination theory relevant to the playwriting industry. A discussion of the literature on these two theories, and a range of sub-theories within them, will contextualize most of the feasible explanations for the small number of female-written plays. Grounded in the theoretical literature, I conclude this chapter by presenting a theoretical model of taste-based discrimination in theater.

#### 2.1 HUMAN CAPITAL THEORY

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The small number of female-written plays is likely explained in part by human capital differences between the genders. These human capital differences may arise from differences in endowments and/or investments. In the latter case, either female

playwrights may choose to invest less in playwriting human capital, and therefore be less successful in their playwriting careers, or women may choose not to invest in playwriting human capital at all, thereby driving down the proportion of all playwrights who are female. Any differences in investment choices between the genders may be driven by differences in ability, in costs and benefits of investments, or in preferences.

A difference in human capital endowments between the genders such that men are more naturally adept than women at playwriting could account for the small number of female-written works in production. The link between differences in human capital endowments and differences in labor market outcomes was perhaps first approached by Moore (1911) in his examination of the relationship between ability and earnings. Upon testing the hypothesis that wage differences are attributable to ability differences, Moore concludes that “[t]he natural difference in ability between individual laborers does find its expression in the apportionment of earnings among laborers in the present industrial state” (Moore, 1911). Since Moore, numerous economists have sought to model the precise relationship between ability and wages (see, for example, Staehle, 1943); despite variations in their models, all agree that a relationship between ability and labor market outcomes exists.

With or without differences in endowments, investment differences between the genders may explain part of the small number of female-written works in production. In general, human capital investments include education, work experience, and job training. In playwriting, investments also include attendance at festivals, conferences, and other forums for discussing and developing scripts. Even if men and women have identical innate playwriting abilities, they may still differ in the amount of human capital they

accumulate; gender differences in human capital investment would then be a matter of choice based on differential costs and benefits of investment, or on preferences, each of which is discussed below (Mincer, 1958).<sup>5</sup>

Female playwrights may choose to invest less than male playwrights in light of an expectation of spending less time playwriting over the course of their lives. Altonji and Blank (1999) note that investment in market skills will be lower among those who plan to spend less time in the labor market. Since many women expect to spend years bearing and raising children, women may choose to invest in less human capital than their male counterparts and, therefore, achieve poorer labor market outcomes.

In light of differential benefits of investments, women may also be less likely to invest in playwriting human capital at all, instead selecting other professions. As Polachek (1975) notes, since women's employment may be sporadic due to domestic responsibilities, women's job skills may depreciate more than men's; therefore, women may choose jobs that have low penalties for sporadic employment. This would, Polachek concludes, result in segregation even in the absence of any discrimination by employers. To the extent that success in playwriting demands a relatively consistent reputation and maintained connections with artistic directors, some women may believe that sporadic work is not conducive to becoming a successful playwright.<sup>6</sup>

Women may also be less likely than men to invest in playwriting human capital due to a difference in preferences between the genders. Noting that differences in the

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<sup>5</sup> If the assumption of identical endowments is relaxed, differences in ability could account for additional differences in investment.

<sup>6</sup> Although this remains a feasible hypothesis, from discussions with female playwrights I gather that the playwriting profession is rather amenable to breaks for family and other commitments, especially as compared to, for example, a corporate profession.

preferences of men and women may lead to gender differences in wages, employment, and occupations, Altonji and Blank (1999) cite evidence that women are more likely than men to prefer professions with lower levels of personal risk. If so, women may choose not to enter the playwriting profession as success in this occupation is highly variable and difficult to predict *ex ante*.

## 2.2 DISCRIMINATION THEORY

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Human capital differences aside, discrimination may explain the small number of female-written plays. Aigner and Cain (1976) divide discrimination into pre-market discrimination and labor market discrimination. Pre-market discrimination refers to unequal opportunity to develop talents and abilities prior to employment; this includes inferior access to education and training. In the case of playwriting, few have hypothesized that women face pre-market discrimination; as mentioned, men and women appear to graduate from at least the top playwriting institutions in approximately equal numbers. Most discrimination-based explanations for the small number of female-written plays focus on labor market discrimination, which occurs upon entering the work force (Aigner and Cain, 1976). Labor market discrimination can be separated into wage, employment, and occupational discrimination.

Wage discrimination would occur in playwriting if female playwrights were paid less than male playwrights for otherwise identical scripts.<sup>7</sup> Wage discrimination in playwriting has, however, received little attention, likely due to the standardization of

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<sup>7</sup> Just as the term “employment” is used throughout this thesis to refer to the contracting between theaters and self-employed playwrights, the term “wage” is used to refer to the fee paid by theaters to playwrights in exchange for the rights to produce their scripts. The common terms of “employment” and “wages” are substituted in for more precise theater terminology to facilitate parallels between this thesis and the preceding literature on discrimination.

playwriting contracts endorsed by the Dramatist Guild (DG).<sup>8</sup> All Guild members are strongly urged to use DG contracts, which specify, among other things, how much the writer is to be paid.<sup>9</sup> According to Ralph Sevush, the DG's Executive Director of Business Affairs, who is responsible for setting up the contracts and their fee payment schemes, the payment levels vary only with where the show is being produced and with how many audience members can be seated at the producing theater. These fixed fee schedules leave little room for wage discrimination.<sup>10</sup>

Employment and occupational discrimination are the focus of most discussions on discrimination in playwriting. Amid employment discrimination, female playwrights would be less likely to attain production, holding the quality of scripts constant between the genders. Amid occupational discrimination, moreover, women would be restricted from entering the playwriting occupation and/or would be crowded into other occupations despite equal playwriting capabilities between the genders. Regardless of its type, labor market discrimination may take the form of statistical discrimination or taste-based discrimination. In the latter case, a taste for male-written works could come from any combination of audience members, cast and crew, and artistic directors.

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<sup>8</sup> According to its website, the DG is “a community of playwrights, composers and lyricists dedicated to protecting, informing, and promoting the interests of dramatists everywhere.” The DG includes, among others, nearly every American playwright who has produced on a First-Class/Broadway, Off-Broadway, or mainstage of a regional theater (LORT) contract.

<sup>9</sup> Not all playwrights are compensated for their work exactly in line with the contracts. At times, a playwright's agent (if he/she has one) negotiates a fee. Other times, playwrights are very eager to get their work produced and will accept a lower fee – or even no money at all – for the opportunity to have a script reach production. However, the DG strongly discourages its members from accepting substandard fees by removing membership privileges from any playwright who accepts any contract not approved by the Guild. Therefore, despite some non-compliance, the contracts remain largely effective in standardizing fees.

<sup>10</sup> Although contracts hold playwright fees fixed for theaters of a given size in a given location, if female-written works are relegated to smaller theaters than otherwise-equivalent male-written works, indirect wage discrimination may occur.

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### 2.2.1 STATISTICAL DISCRIMINATION

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The theory of statistical discrimination provides an explanation of why rational employers might discriminate. Phelps (1972) and Arrow (1973) assume that firms have limited information about the skills of applicants, and that easily observable characteristics like gender are correlated with performance, even after controlling for all the additional information firms have on potential workers. After experiencing a correlation between the easily observable characteristics and productivity, employers use the easily observable characteristic as a proxy for the unobservable characteristics that would result in productivity differences (Arrow, 1973).

In playwriting, there is perhaps less imperfect information than in other professions; after all, the script itself is immediately, directly, and fully observable to artistic directors through the submission process. According to artistic directors, moreover, the best predictor of the success of a play in production is “what is on the page.” However, given the large number of script submissions artistic directors receive daily, they often do not have time to read each script in its entirety; this implies that imperfect information and, thus, statistical discrimination by artistic directors may arise even with regards to the written script.

In addition, potential for imperfect information arises with regards to certain characteristics of the playwright. According to artistic directors, the “human component,” although less influential than what is on the page, can influence the success of a play in production. In the script-selection process, artistic directors often consider the following: Will the playwright be capable of re-writes? Will he/she be easy to work with? Will he/she have a successful future career, thereby reflecting well on this theater in the years

to come? To the extent that such characteristics vary – or are perceived to vary – between the genders, or to the extent that such characteristics are harder to predict accurately in female playwrights than in male playwrights, statistical discrimination may arise.

The literature on statistical discrimination identifies two routes through which it may operate. In the first route, beliefs about the average skill of female playwrights as compared to the average skill of male playwrights may influence hiring decisions. If prior beliefs about the productivity of female playwrights as compared to male playwrights are used in the decision making process, stereotypes may become self confirming and, therefore, self-perpetuating. Coate and Loury (1993) demonstrate that prior beliefs can lead to equilibria in which groups with the same ability end up with different levels of skill. In the case of playwriting, if theaters think that a smaller proportion of female playwrights are qualified, this will affect the human capital investment decisions of women and may thus confirm theaters' prior beliefs.

In the second route, the actual productivity of female playwrights could be more difficult for theaters to predict than the actual productivity of male playwrights. The resulting differences in “riskiness” between female and male playwrights may then lead risk-averse theaters to discriminate statistically against female playwrights (see, for example, Aigner and Cain, 1977; Lundberg, 1991). As before, this type of statistical discrimination could affect the investment decisions of female playwrights and result in differences in productivity levels between the genders even in the face of previously equal average abilities.

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## 2.2.2 TASTE-BASED DISCRIMINATION

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The theory of taste-based discrimination developed by Becker (1971) explains another potential cause of differences in labor market outcomes between male and female playwrights. Although it is challenging to distinguish empirically from statistical discrimination, taste-based discrimination operates quite differently. As Becker defines it, “if an individual has a 'taste for discrimination,' he must act *as if* he were willing to pay something, either directly or in the form of a reduced income, to be associated with some persons instead of others. When actual discrimination occurs, he must, in fact, either pay or forfeit income for this privilege” (Becker, 1971). Becker discusses three sources of prejudice: customers, workers, and employers.

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### 2.2.2.1 CUSTOMER DISCRIMINATION

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Customer discrimination occurs when customers prefer to be served by one group of workers as opposed to by another. In Becker’s model, firms that hire more of the disliked group cannot charge their customers as much and, therefore, pay lower wages. Assume customers have tastes for discrimination against members of a particular group. If  $p$  is the money price of a unit of output produced by this group, a discriminatory customer would act as if  $p(1+d)$  were the net price, where  $d$  is the discrimination coefficient of this customer. In the absence of discrimination, two groups that are perfect substitutes in production would receive the same competitive equilibrium wage rate; customer discrimination against a particular group, however, reduces members of that group’s wages relative to the wages of others (Becker, 1971).

Explanations for the small number of female-written plays rarely cite customer discrimination. Customer discrimination would occur in theater only if audience

members chose to buy a ticket or pay a higher ticket price for a male-written play of the exact same type and quality as a female-written play purely on the basis of playwright gender. With few exceptions, however, audience members are largely oblivious to a play's playwright – and thus to his or her gender. As they used to say on Broadway, “Only Mamet sells tickets,” implying that no other playwright's name drove sales.<sup>11</sup> Playwright identity and, thus, playwright gender are seemingly unlikely to have a large impact on the utility audience members derive from seeing a given show. Customer discrimination against female playwrights is therefore rarely discussed.

#### 2.2.2.2 WORKER DISCRIMINATION

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Worker discrimination occurs when fellow workers prefer to work with workers of one group over those of another. A discriminatory worker's utility function is a function not only of goods and leisure, but also of the level of employment of workers in the disliked group. Discriminatory workers therefore require higher wages to compensate for higher levels of employment of the disliked group within the firm; the discrimination coefficient  $d$ , which measures the magnitude of the worker's taste for discrimination, converts a money wage rate  $w$  into a unit net wage rate  $w(1-d)$ .

In theater, worker discrimination may arise if cast and crew members prefer to work on male-written productions. In a recent email one artistic director writes, “Star actors have A LOT of say. I don't think it is going out on a limb to suggest that they want to associate with the dominant force of theater to better their careers.” If this dominant

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<sup>11</sup> This year, even Mamet didn't sell tickets. He had two plays on Broadway. One flopped with bad reviews. The other soared with good reviews until its TV star left; then it, too, plummeted. Perhaps the new adage should be, “Only Shakespeare sells tickets – and that's with a star and good reviews, and not so much without.”

force is male, star actors may demand higher pay as compensation for working on female-written works. Similarly, if set designers, costume designers, and other members of the crew are more eager to work on male-written productions, they may demand higher wages for working on female-written productions.

Theoretically, an income-maximizing employer faced with worker discrimination would never hire a mixed work force, as he/she would have to pay discriminatory workers working with workers belonging to the disliked group a higher wage rate than discriminatory workers working solely with other workers of the same group. Rather, amid equal marginal revenue products (MRP) between the two groups of workers, the employer hires only the discriminatory group if their wage is less than that of the disliked group and only the disliked group if their wage is less than that of the discriminatory group. Worker discrimination can therefore lead to segregation (Becker, 1971).

In the theater industry, partial segregation does occur. The website of the Fund for Women Artists lists over thirty exclusively female theaters. One of the most prominent is New George's in New York City. As a self-described "play and artist development organization, providing essential resources to a community of venturesome artists (who are women)," New George's is about "sparkling opportunities and relationships that push adventurous artists (who are women) and their work forward into the world." Although New George's hires the occasional male actor when a script demands it, the vast majority of New George's workers are female. Numerous other theaters mirror New George's model of hiring predominately female workers and cultivating only female playwrights. While I am not aware of any exclusively male theaters, worker discrimination could be one driver behind this partial segregation in the theater industry.

### 2.2.2.3 EMPLOYER DISCRIMINATION

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Employer discrimination occurs when the employer prefers to work with workers of one group over workers of another, despite equal productivities between the two groups. The employer's utility function, then, is a function not only of profits, but also of the percentage of workers who are in the disliked group. In the market place, "objective" employer behavior is based on considerations of productivity alone. An employer discriminates by refusing to hire someone with a marginal value product greater than marginal cost; his/her behavior then lacks "objectivity." In Becker's analysis, when faced with the money wage rate  $w$  a discriminatory employer acts as if  $w(1+d)$  were the net wage rate, with  $d$  being a discrimination coefficient measuring the intensity of the employer's taste for discrimination.

Employer discrimination in theater would entail discrimination by the artistic directors deciding which scripts to select for production. From my discussions with artistic directors, I gather that many of them factor how well they will be able to relate to the playwright into the decision of whether to produce any given work. An effective working relationship between the artistic director and the playwright are especially important in light of the re-write process, which necessitates close interaction between the two. If artistic directors believe they can better relate to a male playwright than to an equally qualified female playwright, employer discrimination may arise.

### 2.3 A MODEL OF TASTE-BASED DISCRIMINATION IN THEATER

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Building on the previously discussed theoretical literature, I conclude this chapter by presenting a model detailing the effects of each of the three potential sources of taste-based discrimination on the selection of scripts for production.

At the most basic level, the total profits accrued by a theater for producing a script equal the total revenues minus the total costs. Total revenues are equal to the price of a ticket times the number of seats sold per week times the number of weeks in production, where the price of a ticket is an increasing function of the quality of the play and a decreasing function of number of tickets.<sup>12</sup> Total costs can be separated into variable costs and fixed costs. Variable costs equal the number of weeks the play remains in production times the weekly costs of variable inputs such as labor and capital. Fixed costs are equal to the fee paid to the playwright for the script plus the sum of all additional fixed costs such as set construction. That is:

*Equation 2.1:*

$$\pi = p(q, ns)ns - c(w, r, X)n - (f + Z)$$

where  $\pi$  indicates profits. Within revenues,  $p$  is the price of each ticket,  $q$  is quality of the production,  $n$  is the number of weeks in production, and  $s$  is the number of tickets sold each week. Within costs, variable costs are a function of the wage rate,  $w$ , the cost of capital,  $r$ , and all other variable costs,  $X$ , multiplied by the number of weeks in production,  $n$ ; of fixed costs,  $f$  represents the fee paid to the playwright and  $Z$  represents the sum of all additional fixed costs.

Let artistic directors be presented with two scripts, one written by a man and the other written by a woman. In deciding which script to produce, profit-maximizing artistic directors compare pure profits. If  $\pi_M - \pi_F > 0$ , they select the male-written play for production; if  $\pi_M - \pi_F < 0$ , they select the female-written play for production.

Playwright gender aside, assume that the two scripts are identical. Therefore, they are of precisely the same quality ( $q_M = q_F = q$ ). For simplicity, assume also that,

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<sup>12</sup> i.e. the demand function slopes downward.

because they are otherwise identical, the scripts would show in the same size theater for the same number of weeks ( $n_M s_M = n_F s_F = ns$ ). Grounded in these assumptions, I examine the implications of each of the three sources of taste-based discrimination discussed by Becker (1971) and adapted to the theater industry in this chapter.

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### 2.3.1 DISCRIMINATION BY AUDIENCE MEMBERS

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First, assume cast and crew are indifferent between working on the male-written script or on the female-written script ( $w_M = w_F$ ) and that artistic directors derive utility only from profits – not from the gender of the playwright; however, audience members prefer to see the male-written play. Specifically, audience members act as if they are paying  $p'_M = p_M$  to see the male-written play and  $p'_F = p_F(1 + d_c)$  to see the female-written play, where  $d_c$  is, as in Becker's model, the discrimination coefficient, with the subscript  $c$  denoting that the discrimination arises from customer tastes.

Since the scripts are otherwise identical, audience members are otherwise indifferent between the two plays and therefore set  $p'_M = p'_F$  such that  $p_F = \frac{p_M}{1+d_c}$ .

*Equation 2.1* then simplifies to

*Equation 2.2:*

$$\begin{aligned}\pi_M - \pi_F &= \left( p_M - \left( \frac{p_M}{1 + d_c} \right) \right) ns - (f_M - f_F) \\ &= \left( \frac{d_c p_M}{1 + d} \right) ns - (f_M - f_F)\end{aligned}$$

Therefore, theaters accrue equal profits for the production of the two scripts if and only if

*Equation 2.3:*

$$f_F = f_M - \left( \frac{d_c p_M}{1 + d} \right) ns$$

If the fee paid to playwrights were flexible, theaters could respond to audience discrimination by offering a lower fee to the female playwright for her script. However, the previously discussed DG contracts reduce variation in fees, including variation between the fees paid to male playwrights and to female playwrights. Since contracts force relative equality of the fees based on the location of the theater and the number of seats, let  $f_M = f_F = f$ .

Substituting  $f_M = f_F = f$  into *Equation 2.3* reveals that, given higher audience discrimination and equal fees, the male-written script will be chosen for production over the female-written script as the profit gain to theaters from this selection is as follows:

*Equation 2.4:*

$$\pi_M - \pi_F = \left( \frac{d_c p_M}{1 + d} \right) ns$$

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### 2.3.2 DISCRIMINATION BY CAST AND CREW

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Assume next that audience members have no preference between the two plays ( $p_M = p_F$ ) and that, as before, theaters seek to maximize profits; however, because cast and crew prefer to work with the male playwright, the wages demanded by theater workers as compensation for working on the female-written script are higher than the wages demanded by theater workers to work on the male-written scripts. Specifically,  $w_F = (1 + d_w)w_M$  where  $d_w$  is, as before, the discrimination coefficient; the subscript  $w$

denotes that the discrimination arises from worker tastes. The profit differential then becomes

*Equation 2.5:*

$$\pi_M - \pi_F = -(c_M(w_M, r, X) - c_F(w_F, r, X))n - (f_M - f_F)$$

In the face of worker discrimination, theaters accrue equal profits from the two scripts if and only if

*Equation 2.6:*

$$f_F = f_M + (c_M(w_M, r, X) - c_F(w_M(1 + d_w), r, X))n$$

As before, assume fee-equalizing contracts such as those successfully endorsed by the DG. *Equation 2.6* then simplifies to

*Equation 2.7:*

$$\pi_M - \pi_F = (c_F(w_M(1 + d_w), r, X) - c_M(w_M, r, X))n$$

Amid discrimination by cast and crew, and the equalization of playwright fees for otherwise-equivalent works, theaters would accrue equal profits from the male-written work and the female-written work only if capital and labor were perfect substitutes in production, (i.e. only if discriminatory crew members could be entirely replaced by capital of equal cost). Cast and crew are, however, instrumental to the existence of the theater industry.<sup>13</sup> Because labor and capital are not perfect substitutes in theater production, theaters will accrue higher profits by selecting the male-written script for production.

How much profit a theater will gain by selecting the male-written script for production amid discrimination by cast and crew depends not only on the discrimination

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<sup>13</sup> Theater professions such as that of lighting director may eventually be made obsolete with advances in technology. Nonetheless, at least until robots become commercialized, other professions such that of the stagehand will remain crucial to theater productions. Perhaps more important still, until those robots can sing and dance and cry convincingly, actors, too, will be irreplaceable by capital.

coefficient,  $d_w$ , but also on the extent of the scope for substitution between capital and labor in that theater. For example, if there is no scope for substitution, the cost function is additive.<sup>14</sup> Then, *Equation 2.7* simplifies to

*Equation 2.8:*

$$\pi_m - \pi_f = d_w w_m L n$$

where  $L$  is the number of man-hours of labor need each week in the production. In all likelihood there is some, but not full, scope for substitution between capital and labor in the theater industry. Therefore, the true profit differential will lie somewhere above zero and below this upper bound.

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### 2.3.3 DISCRIMINATION BY ARTISTIC DIRECTORS

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Finally, assume that neither audience members nor cast and crew discriminate, but that the artistic director derives utility not only from profits, but also from the gender of the playwright. Then, an artistic director acts as if his/her theater accrues profits  $\pi'$  of the form

*Equation 2.9:*

$$\pi' = p(q, ns)ns - c_g(w, r, X)n - (f' + Z)$$

where  $f'_M = f_M$  and  $f'_F = f_F(1 + d_e)$ . Given  $f_M = f_F = f$ , *Equation 2.9* simplifies to

*Equation 2.10:*

$$\pi'_m - \pi'_f = f * d_e$$

Therefore, a discriminatory artistic director will select the male-written script for production, even amid no discrimination by audience members or by cast and crew.

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<sup>14</sup> i.e.  $c(w, r, X) = w * L + r * K + C(X)$  where  $L$  is the number of man-hours of labor and  $K$  is the units of capital needed each week for the production.

Because theaters that discriminate due to artistic directors' tastes gain no additional revenue for discriminating, they will eventually go out of business as long as there is a competitive market in which the artistic directors' of other theaters do not share this taste for discrimination. Similarly, theaters that discriminate due to tastes of cast and crew will cease to exist in a competitive market if other theaters have cast and crew without tastes for discrimination. Therefore, all labor market discrimination that persists in a competitive industry theoretically results from customer tastes (Nardinelli and Simon, 1990). As I discuss in Chapter 6, however, the theater industry may not be perfectly competitive. In addition to audience discrimination, then, discrimination by cast and crew and/or by artistic directors may persist.

## CHAPTER 3

### EMPIRICS: METHODS OF TESTING FOR DISCRIMINATION IN THEATER

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In this thesis, I employ three different empirical approaches to study the extent to which discrimination may explain the small number of female-written plays. Each approach is grounded in the empirical literature that precedes it and is adapted for application to this study of the script selection process in theater.

#### 3.1 SEPARATING THE EXPLAINED FROM THE UNEXPLAINED

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One strand of literature on discrimination focuses on distinguishing an explained gap in wages and/or employment from an unexplained gap. The explained gap accounts for any differences in human capital endowments and/or investments; in a range of professions, differences in human capital account for a large proportion of differences in labor market outcomes (see, for example, O'Neill and Polachek, 1993; Becker and Lindsay, 1994; Light and Ureta, 1995; Olsen and Sexton, 1996; Blau and Kahn, 1997; Sicherman, 1996; Blau, 1998). The unexplained gap, in turn, is presented as evidence of discrimination (see, for example, Madden, 1985; Blau and Ferber, 1987). In Chapter 4, I adapt this approach to the study of the script selection process in theater.

Parallels can be drawn between the script-selection process and the hiring process. Artistic directors (employers) are presented with a range of script excerpts (resumes) from playwrights (job applicants). From these excerpts, they select some smaller number of scripts for a full reading (an interview). Following the full reading, they may choose to

meet with the playwright in person (second-round interview) prior to deciding whether or not to produce the script (hire).

In other regards, however, the script-selection process is distinct from the classic hiring process. Importantly, the product produced by the playwright is discrete; a theater signs a contract with the self-employed playwright, paying the playwright a fee in return for the rights to produce one of his/her scripts. As discussed in Chapter 2, some human capital characteristics of the playwright, such as how capable he/she is of re-writes and how easy he/she is to work, may impact the success of the play in production. According to artistic directors, however, characteristics of the script itself have by far the greatest bearing.

With data on over 20,000 playwrights and 80,000 scripts, some of which have reached production and others of which have not, I distinguish an explained gap in the likelihood that a given script reaches production from an unexplained gap attributable to playwright gender. The explained gap accounts for differences in the characteristics of scripts, including the total number of parts and the percentage of those parts that are female, as well as for differences in the characteristics of the playwright, such as whether or not he/she is represented by a literary agent. Holding these script and playwright characteristics constant, the unexplained gap accounts for differences in the probability that a script reaches production arising from the gender of the playwright.

This methodology is not, however, a perfect test of discrimination; any gap may either overestimate or underestimate the effect of discrimination. Since it is impossible to control perfectly for all script and playwright characteristics, the results almost certainly suffer from omitted variable bias. In addition, if an expectation of discrimination causes

women to invest less in playwriting human capital or to avoid the occupation all together, the resulting gap will understate the true effects of discrimination. Less biased estimates of the extent of gender discrimination in the script-selection process will come from alternative empirical methods.

### 3.2 AN AUDIT STUDY ADAPTED

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Audit studies, pioneered by researchers at the Urban Institute in Washington, D.C. in the early 1990s, provide an alternative approach to studying discrimination. Audit studies are particularly useful for finding evidence of discrimination in hiring decisions. Because discrimination involves differences in labor market outcomes for individuals who differ only along one dimension, audit studies put forth otherwise identical potential workers who vary only in the group to which they belong. Whereas inferences regarding discrimination drawn from differences in employment rates controlling for other observed characteristics can, as discussed, suffer from bias if there are differences between two groups of workers that are unobserved by the econometrician, an audit study overcomes this problem by completely matching the characteristics of the workers in different groups.

One example of an audit study is the distribution to employers of resumes that are identical in all regards except the group to which the individuals belong. For example, resumes may vary only in the race or gender of the potential worker. Researchers then look for any differences across groups in the probability that the employer invites the potential worker for an interview (see, for example, Cross et al., 1990; Turner et al., 1991; Kenney and Wissoker, 1994; Neumark, 1996). In Chapter 5, I adapt this methodology to study gender discrimination in the script-selection process.

Recall that an analogy can be drawn between a script excerpt and a resume; adapting the classic audit study to examine the script-selection process, I distributed four previously unseen scripts to artistic directors around the country, varying only the gender of the pen-name on each script. I asked respondents to rate the script along a range of different metrics, including measures of perceived overall quality, economic prospects, audience appeal, ease of casting, characteristics of the playwright, and fit with their theaters. Comparing the ratings garnered by scripts with female pen-names to those garnered by otherwise identical scripts with male pen-names provides direct insights into taste-based discrimination by artistic directors as well as into taste-based discrimination by audience members and cast and crew as perceived by artistic directors. This approach also permits a test for statistical discrimination by artistic directors.

As mentioned, statistical discrimination is generally challenging to distinguish from taste-based discrimination. In his discussion of racial discrimination, Arrow (1998) writes the following:

“If there are a number of observable variables, such as quantity of education, then the hypothesis of statistical discrimination implies that an estimate of wages based on these observables will be significantly improved by adding race as a predictor. But this is the same conclusion as arrived at by the hypothesis of market-based discrimination based on taste.”

To distinguish statistical discrimination, Arrow continues, one must be able to observe each worker’s marginal productivity. The literature on testing for statistical discrimination centers around two methods: The first uses observational data (see, for example, Neumark, 1999; Altonji and Pierret, 2001); the second uses controlled experiments (see, for example, Fershtman and Gneezy, 2001; Dickenson and Oaxaca, 2006). This thesis’s audit study is a controlled experiment.

In theater, the submission process leaves little room for imperfect information with regards to the script unless the submitted script is not read in its entirety; the real potential for imperfect information, and thus for statistical discrimination, arises with regards to certain characteristics of the playwright important in the production process (see Chapter 2 for a more involved discussion). These characteristics include whether or not the playwright will be capable of re-writes, how easy he/she will be to work with, and how successful his/her future career will be. To the extent that these characteristics vary – or are perceived to vary – between the genders, or to the extent that these characteristics are harder to predict accurately in female playwrights than in male playwrights, statistical discrimination may arise. With questions targeting these playwright characteristics in the audit study, I test for statistical discrimination by artistic directors.

Although it is conducive to testing for both statistical discrimination and all three sources of taste-based discrimination in theater, the audit study presented in Chapter 5 may suffer from hypothetical bias. To overcome the potential hypothetical bias, I employ an observational approach to testing for gender discrimination in the script-selection process in Chapter 6.

### 3.3 CHICAGO PRICE THEORY ON BROADWAY

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Comparing the marginal revenue products of workers to their wages is an alternative method for detecting discrimination. Whereas audit studies look at the effects of discrimination on hiring, this approach examines the effects of discrimination on wages. Derived from Becker's (1971) model of employer discrimination, evidence that one group of workers receives wages less than their marginal revenue product (MRP) while another group of workers receives wages equal to their MRP is evidence of

discrimination against the first group. The method has been employed in a variety of professions, including professional sports (see, for example, Kahn and Sherer, 1988; Nardinelli and Simon, 1990; and Hellerstein et al., 1999). In Chapter 6, I adapt this methodology to the script-selection process.

I substitute whether the script reaches production (employment) for wages because, as discussed in Chapter 2, the standardization of playwriting contracts endorsed by the Dramatist Guild leaves little room for discrimination in payment schemes. In addition, I substitute the quality of the play for the MRP of the worker since a playwright produces a discrete good. I then compare the quality of female-written scripts selected for production on Broadway over the past decade to the quality of their male-written counterparts. More specifically, defining quality as profits, I compare weekly revenues and run lengths of female-written and male-written productions on Broadway over the past decade, controlling both for the time of production and for the type of play, a partial control for production costs. A test of the null hypothesis that female-written and male-written plays are equally profitably is a test of no employer discrimination.

## CHAPTER 4

### SEPARATING THE EXPLAINED FROM THE UNEXPLAINED

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In light of the small number of female-written works in production, some cite employment discrimination as a primary driver. The small number of female-written productions is not, however, compelling evidence of employment discrimination, or even of employment differences between the genders. Perhaps women choose to enter the playwriting profession in lower numbers; the resulting occupational differences alone could explain the small number of female written works.<sup>15</sup> Alternatively, or in addition, perhaps women who become playwrights choose to write fewer scripts; this could also result in a smaller number of female-written productions, even amid equal rates of production between female-written and male-written scripts. Therefore, to set the stage for subsequent examination of discrimination in playwriting, this study examines occupational and employment differences between male and female playwrights using data from Doollee.com, an online database with records for over 20,000 playwrights and 80,000 scripts.<sup>16</sup>

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<sup>15</sup> This thesis does not examine occupational discrimination directly. However, differences in the rates at which men and women enter and/or remain in the playwriting profession could be driven by a variety of factors, one of which is occupational discrimination. If women perceive gender barriers in playwriting, they may choose not to enter the profession; in addition, amid employment discrimination discouraged female playwrights may exit the profession.

<sup>16</sup> This chapter uses data collected from Doollee.com. Doollee.com is an online database of playwrights and their theater plays founded and maintained by Julian Oddy. In response to an email request for a compilation of the data on Doollee, Mr. Oddy responded, “I am afraid I was a little bemused to receive your email asking me to send you a copy of a database with the fruits of years of research on it.” Nonetheless, the database is publically available and a computer program kindly created by Jonathan Mayer (’09) effectively scraped the data from the website, creating an equivalent database for use in this thesis.

Even if female playwrights do happen to be less likely to have their works reach production, this is not in and of itself evidence of employment discrimination; after all, male-written and female-written scripts likely differ in ways other than merely playwright gender. In this chapter I test the extent to which any employment differences between the genders can be explained by gender differences in either or both of two important characteristics of scripts. In addition, male and female playwrights may differ along more dimensions than gender, including representation by a literary agent. In this chapter, I also test the extent to which employment differences between the genders can be explained by gender differences in whether or not a playwright is represented by a literary agent.

The first characteristic that may differ between female-written and male-written scripts, and which may lead to a difference in the rate at which female-written and male-written works reach production, is the proportion of parts that are female. At a Town Hall Meeting on October 27, 2008 to discuss potential discrimination against female playwrights at New Dramatists in New York, one artistic director hypothesized that female playwrights are less likely to have their work produced because “women tend to write about other women, who are harder for men to relate to. Men have always had more difficulty relating to female characters than have women had difficulty relating to male characters; little boys will not watch stories about girls, but girls will watch stories about boys.” In this chapter, I distinguish between plays with majority female parts and plays with majority male parts. I then test whether female playwrights are more likely to write scripts with majority female parts and whether scripts with majority female parts are less likely to reach production.

Second, at this same Town Hall Meeting, a few of the female playwrights noted that they feel compelled to write scripts with smaller casts in order to increase the likelihood of their scripts reaching production. Intuitively, scripts with fewer parts are more likely to reach production because they are generally less expensive to produce and can be produced in any one of many smaller theaters. In this chapter, I test whether women tend to write scripts with fewer parts and whether scripts with fewer parts are more likely to attain production.

Finally, in outside discussions with other female playwrights, it was frequently mentioned that some literary agents seem to be more eager to represent male playwrights than to represent female playwrights. Since many theaters only accept script submissions through literary agents, moreover, agents often serve as gatekeepers. Even in the absence of discrimination by artistic directors, discrimination by literary agents could lead to a smaller proportion of female-written scripts reaching production. In this chapter, I test whether female playwrights are less likely to be represented by agents and whether a script whose playwright is represented by a literary agent is more likely to reach production.

I examine both occupational and employment differences first at the play level and then at the playwright level. At the play level, I test if women are less likely than men to write scripts, if the scripts women do write are less likely to reach production, and to what extent any differences in the likelihood of reaching production can be explained by differences in whether most of the parts are female, in the total number of parts, and in whether or not the playwright is represented by a literary agent. At the playwright level, I test if women are less likely than men to write at least one script, if women who do write

are less likely than their male counterparts to have at least one script produced, and whether any differences between male and female playwrights in the rates of first-production can be explained by the previously discussed script and playwright characteristics. I perform all of these tests first on the full sample, which includes a wide range of plays written in the English language since 1956, and then on a sample restricted to American playwrights registered with the Dramatist Guild.

#### 4.1 DATA

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Data for this chapter were collected from Doollee.com, an online database of playwrights and theater plays. Founded in 2003 by Julian Oddy, Doollee is an ongoing project that seeks to list every script written or produced in English since 1956, the year John Osborne's seminal script *Look Back in Anger* was first performed in the Royal Court of London. At the time of its launch, Doollee contained records for 3,093 playwrights and 8,146 scripts. With daily self-reported submissions and additions made by Julian Oddy himself throughout the years, the number of records on Doollee has ballooned since its 2003 founding. On November 4, 2008, the date on which data for this paper were scraped from the website, Doollee had records for 20,447 playwrights and 81,330 scripts.

Although Doollee is the most comprehensive database available, several cautions are in order. First, although the database is quite extensive, it certainly does not contain records for every script written in English since 1956. Second, because Doollee contains a collection of works chosen by Julian Oddy or self-reported by playwrights, those scripts that are included are likely not a random sample of all scripts written in English since 1956. For example, if Mr. Oddy selects male-written scripts in differing proportions from

female-written scripts, my estimates of the proportion of all scripts written by each gender will be biased. Perhaps more important, to the extent that male playwrights and female playwrights differ in the likelihood with which they submit records to the database, self-reporting will result in biased estimates.

Third, records also vary in completeness and, presumably, in the frequency with which they are updated. All records contain the name of the playwright followed by a list of scripts written by that playwright; the list of scripts for each playwright is not, however, always fully comprehensive. Many records also contain the name of the playwright's literary agent. In addition, some records contain the number of male parts, the number of female parts, and, if produced, the year of first production for each script.

For the purpose of this study, I assume that playwrights without a listed literary agent have no literary agent. It is possible, however, that some playwrights do not list their literary agent and/or that some playwrights obtained a literary agent after the initial record was created and that the record has not since been updated. To the extent that male playwrights and female playwrights with literary agents differ in the rates at which they report having a literary agent or at which they update their profiles, my estimates of the rates at which male and female playwrights are represented by literary agents will be biased.

Similarly, I assume that scripts without a year of first production have yet to be produced. It is possible, however, that some of these scripts were produced after the initial submission of the record and that the record has not since been updated. Again, if male playwrights differ from female playwrights in the frequency with which they update

the records on their works, my estimates of the rates at which male-written and female-written works are produced will be biased.

Data limitations, then, pose several difficulties for my analyses. While inspection of the Doollee database provides some interesting insights into the attributes of the scripts that reach production as compared to the attributes of scripts that do not, the findings must be considered cognizant of the incompleteness of the data and of the likely sample selection problems.

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#### 4.1.1 WORLDWIDE SAMPLE

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Recall that the mission of Doollee is to include all plays written in English since 1956. Created by an Englishman, the database includes records of plays written by English-speaking playwrights from around the world. Although I am most interested in studying the script-selection process in America, the worldwide characteristic provides valuable information – and a large sample size; I therefore include English-speaking playwrights from around the world in my first analysis.

A key variable in this paper is the gender of the playwright. From the Doollee records, I do not have explicit information on playwright gender. I do, however, have data on each playwright's full name. Using data on naming frequency from the 1990 US Census, I compute the probability that each of the high-frequency first names in the 1990 US Census is female as follows

$$ProbFemale_i = \frac{FemaleFrequency_i}{FemaleFrequency_i + MaleFrequency_i}$$

where  $i$  indexes first names.  $FemaleFrequency_i$  is the percentage of all female 1990 US Census respondents with first name  $i$ . Similarly,  $MaleFrequency_i$  is the percentage of all male 1990 US Census respondents with first name  $i$ .

Assigning gender on the basis of first name frequencies from the 1990 US Census, I obtain the probability of being female for individuals with each of 5,496 different first names. Of the 20,477 playwrights in the full Doollee sample, 83 percent have one of the 5,496 first names for which frequency can be calculated from the 1990 US Census. This leaves 16,965 playwrights for whom gender is identifiable; these 16,965 playwrights correspond to 68,117 script records. Throughout, I assume that each of these playwrights is female if the probability of being female as calculated from the 1990 US Census is greater than 0.5; similarly, I assume the playwright is male if the probability is less than 0.5.<sup>17</sup>

In assigning gender based on first names, the use of pseudonyms must be considered. If female playwrights fear discrimination, they may choose to write under male pen-names. From conversations with contemporary playwrights, I gather that the practice of adopting pseudonyms is rarer in contemporary theater than in other writing professions. The more limited use of pseudonyms in playwriting as compared to, for example, novel writing may arise in part from the need for face-to-face contact between playwrights and artistic directors. In addition, the rate at which female playwrights choose to employ pseudonyms appears to have fallen throughout the past century, perhaps because the playwriting community has become more outwardly accepting of

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<sup>17</sup> I drop those observations for which the probability that the playwright is female is precisely 0.5000, i.e. observations for scripts written by playwrights with first name Ariel, Hong, or Kris.

female-written works. Nonetheless, to the extent that female playwrights continue to adopt male pseudonyms on occasion, assigning gender on the basis of first name frequencies from the 1990 US Census may slightly understate the number of female playwrights and thus the number female-written scripts.

Summary statistics for the full sample and the sample with identifiable playwright gender are listed in Table 4.1. The final column lists the p-values corresponding to the null hypothesis that any given mean of the full sample equals the corresponding mean of the sample with identifiable gender. Restricting the sample to those scripts written by playwrights with identifiable gender alters some, but not all, characteristics of the sample. Importantly, even for those characteristics that are statistically significantly different in the sample with identifiable gender, significance is driven primarily by the large sample sizes and the magnitude of the difference is quite small.

Scripts in the full sample and the restricted sample have equal likelihoods of being produced; however, scripts written by playwrights identifiable gender vary slightly in other aspects. Scripts written by playwrights with identifiable gender on average contain 0.39 fewer parts (95% CI: [-0.559, -.211]) and have a ratio of female parts to total parts that is about 1 percentage point higher (95% CI: [0.494% to 1.448%]). Correspondingly, a slightly larger percentage of scripts in the restricted sample have majority female parts.

At the playwright level, the means of the full sample and of the sample with identifiable gender are also similar. Playwrights with identifiable gender are equally likely as playwrights in the full sample to have at least one script produced. The means of playwrights' average number of parts are equal in the two samples, and there are only

minimal differences in the percentage of playwrights whose works mostly have majority female parts. The most significant difference between the full sample and the sample with identifiable gender at the playwright level is that playwrights with identifiable gender are 3.6 percentage points more likely to have a literary agent (95% CI: [2.466%, 4.768%]).

**Table 4.1: Comparison of Summary Statistics, Full Sample and Sample with Identifiable Playwright Gender**

		Full Sample (1)			Sample with Identifiable Gender (2)			Mean1=Mean2
<i>Level</i>	<i>Variable</i>	<i>Obs.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Obs.</i>	<i>Mean</i>	<i>S.D.</i>	<i>p-value</i>
Play	Produced	81,330	0.635	0.481	68,117	0.635	0.481	0.662
	# of Parts	30,933	7.565	5.572	26,305	7.507	5.521	0.000
	% Parts Fem (F)	30,868	0.443	0.152	26,248	0.445	0.152	0.000
	Majority Parts F	30,868	0.219	0.414	26,248	0.221	0.415	0.000
Playwright	# Plays Produced ≥1	20,447	0.803	0.398	16,965	0.803	0.398	0.980
	Ave # of Parts	9,484	7.328	4.552	8,036	7.318	4.547	0.621
	Ave % Parts F	9,476	0.441	0.131	8,029	0.442	0.131	0.037
	% with Maj F	9,476	0.23	0.421	8,029	0.234	0.423	0.039
	Literary Agent	20,447	0.112	0.316	16,965	0.119	0.323	0.000

Notes: This table presents summary statistics for the data on Doollee.com, distinguishing between the full sample and sample for which gender is identifiable based on the previously discussed methodology derived from the 1990 US Census. The final column lists the p-value corresponding to the null hypothesis that the mean of the full sample equals the mean of the sample with identifiable gender.

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#### 4.1.2 AMERICAN SAMPLE

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Although the worldwide sample provides valuable information, I am particularly interested in occupational and employment differences between male and female playwrights in the United States. I therefore also create a sample comprised only of American playwrights. To do so, I obtain a dataset with the membership of the Dramatists Guild of America from the Guild’s Executive Director, Gary Garrison. According to the DG’s website, membership to the Guild is offered to “writers of the theater, whether they be writers of musical theater or plays.” Moreover, membership “is open to all dramatic writers, regardless of production or publication history.” In all, the DG dataset contains the names – and the actual genders – of the 5,691 playwrights who had been granted membership to the Guild between its founding in 1942 and the date on

which I received the dataset, October 17, 2008. According to the DG's membership list, 39% of member playwrights are female and 61% of member playwrights are male. Merging the Doollee dataset with this DG dataset by playwright's name, I obtain an American dataset containing 1,540 playwrights and 10,471 plays.<sup>18</sup>

Since the DG's membership database contains the actual gender of each member, it provides a convenient crosscheck for the gender assignment methodology used on the full sample. To test the validity of the methodology derived from the 1990 US Census, I compare the gender assigned to each American playwright via this methodology with the actual gender of each American playwright, as reported in the Guild's database. Overall, the methodology derived from the US Census is approximately accurate in assigning gender. For the sample with identifiable gender, 92 percent of American playwrights are identified as having the same gender as that reported by the Guild. For the remaining 8 percent of playwrights with identifiable gender, gender is incorrectly assigned. The misspecification rates from the US Census methodology provide some insights into the nature of the bias created by the methodology using the US Census.

Of the playwrights both in the DG database and registered on Doollee with a first name of identifiable gender, 1 percent of female playwrights are incorrectly categorized as male; moreover, 7 percent of male playwrights are incorrectly categorized as female. To the extent that this result can be extrapolated from the American sample to the full sample, it provides evidence against the previously hypothesized underestimation of

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<sup>18</sup> Only twenty-seven percent of DG members have records on Doollee. This confirms that the Doollee database is not a comprehensive list of all playwrights. The American dataset will nonetheless provide some information about the characteristics of scripts by American playwrights, both those that have been produced and those that have yet to reach production.

female representation resulting from, for example, the adoption of male-sounding pseudonyms by some female playwrights. Instead, this result indicates that the methodology derived from the US Census actually overestimates the proportion of all playwrights that are female.

Table 4.2 contains summary statistics for the American sample. About 60 percent of scripts have been produced and, of DG members on Doollee, nearly 85 percent of playwrights have had at least one script produced. The average script written by a member of the American DG has 6 parts, 46 percent of which are female; only 22 percent of scripts in the American dataset have majority female parts. Finally, and perhaps somewhat surprisingly, only 24 percent of DG playwrights are registered as having a literary agent.<sup>19</sup>

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<sup>19</sup> Two of many feasible explanations for the relatively small percent of American playwrights registered on Doollee who have literary agents are presented below. Each relies on the assumption, confirmed later in this chapter, that more successful playwrights have literary agents.

1. Perhaps more successful playwrights see less reason to put their works on Doollee as they already have high visibility in the theater community.
2. In addition, it seems intuitive that older playwrights would be more successful than younger playwrights on average as older playwrights have had more time to build their playwriting human capital and have, among other attributes, more experience. To the extent that older individuals are less likely to use the Internet for purposes such as this, more successful playwrights will be less likely to post on Doollee. Because these more successful playwrights are more likely to have literary agents, playwrights with literary agents will be less likely to post on Doollee.

<b>Table 4.2: Summary Statistics for American Sample</b>				
		<b>American Sample (3)</b>		
<i>Level</i>	<i>Variable</i>	<i>Obs.</i>	<i>Mean</i>	<i>S.D.</i>
Play	Produced	10,471	0.578	0.494
	# of Parts	4,572	6.253	4.549
	% Parts Female (F)	4,558	0.456	0.148
	Majority Parts F	4,558	0.222	0.416
Playwright	# Plays Produced $\geq 1$	1,540	0.847	0.360
	Ave # of Parts	989	6.535	3.364
	Ave % Parts F	988	0.453	0.118
	% with Majority F Parts	988	0.247	0.431
	Literary Agent	1,540	0.240	0.427

Notes: This table presents summary statistics for the sample of American playwrights on Doollee.com, identified by merging the Doollee database with the membership list for the Dramatists Guild of America.

## 4.2 METHODOLOGY AND RESULTS

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I begin by investigating the data with summary statistics and cross-tabulations; I then explore the relationship between production, playwright gender, number of parts, percentage of parts that are female, and the presence of a literary agent with OLS. Since the dependent variable in the models is consistently a binary random variable, such as whether or not the script was produced, or whether or not the playwright had at least one script produced, I also estimate with Probit models and report marginal effects. I perform these analyses first at the script level, clustering by playwright so as to obtain robust standard errors. I then perform additional analyses at the playwright level. The former case is a study of who is writing the works in production; the latter case is a study of who

is breaking into the profession. Although the two levels of analysis are linked, and I expect to find similar results at the two levels, the interpretations will be distinct.

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#### 4.2.1 WORLDWIDE SAMPLE

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##### 4.2.1.1 SUMMARY STATISTICS AND CROSS-TABULATIONS

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In the full sample with identifiable gender, only 26 percent of the scripts registered on Doollee are written by female playwrights. Of playwrights, moreover, only 32 percent are women. This provides evidence of occupational differences between the genders.

As for any employment differences between male and female playwrights, the question remains: Are the scripts written by female playwrights less likely to reach production? Summary statistics for the full sample with identifiable playwright gender separated by gender are listed in Table 4.3. The final column lists the p-values corresponding to the null hypothesis that any given mean of the male sample equals the corresponding mean of the female sample. I find that scripts on Doollee written by women are equally likely as those written by men to be produced. There are, however, some important differences between the male-written and female-written scripts in the sample.

First, female-written scripts are much more likely to have majority female parts. While 33 percent of female-written plays have majority female parts, only 19 percent of male-written plays have majority female parts. Cross-tabulation of majority female parts and production outcomes reveal that scripts with majority female parts are 6 percentage points less likely to reach production.

Second, female-written scripts tend to have fewer parts. While the average male-written script has 7.7 parts, the average female-written script has only 6.8 parts. As expected, scripts with fewer parts are more likely to reach production, perhaps because they are more easily cast and less expensive to produce, and therefore are more accessible to the numerous smaller theaters.

Finally, female-written scripts are 3 percentage points less likely to be represented by a literary agent. Though numerically small, this represents a difference of nearly 10 percent of the total mean, as only 29 percent of all scripts are written by playwrights with literary agents. Importantly, scripts written by playwrights with literary agents are 11 percentage points more likely to reach production.

The regression analysis in the next section will examine whether there are gender differences in attaining production controlling for these differences between male-written and female-written scripts.

		Male Sample (4)			Female Sample (5)			Mean4=Mean5
<i>Level</i>	<i>Variable</i>	<i>Obs.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Obs.</i>	<i>Mean</i>	<i>S.D.</i>	<i>p-value</i>
Play	Produced	50,714	0.636	0.481	17,403	0.633	0.482	0.401
	# of Parts	19,910	7.749	5.849	6,395	6.753	4.664	0.000
	% Parts Fem (F)	19,865	0.428	0.149	6,383	0.496	0.152	0.000
	Majority Parts F	19,865	0.186	0.389	6,383	0.328	0.469	0.000
Playwright	# Plays Produced $\geq 1$	11,620	0.807	0.395	5,345	0.794	0.404	0.049
	Ave # of Parts	5,709	7.546	4.620	2,327	6.761	4.312	0.000
	Ave % Parts F	5,706	0.421	0.125	2,323	0.493	0.130	0.000
	% with Maj F	5,706	0.178	0.383	2,323	0.369	0.483	0.000
	Literary Agent	11,620	0.121	0.326	5,345	0.114	0.318	0.203

Notes: This table compares summary statistics for the male subsample and the female subsample of the sample with identifiable gender on Doollee.com. The final column lists the p-value corresponding to the null hypothesis that the means of the two subsamples are equal.

#### 4.2.1.2 OLS AND PROBIT ANALYSES

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I estimate the relationship between production and playwright gender, the number of parts, whether the majority of parts are female, and whether the playwright is represented by a literary agent with both OLS and Probit regressions. Ultimately, I estimate

*Equation 4.1:*

$$\begin{aligned} Produced_i = & \alpha_0 + \alpha_1 FemalePlaywright_i + \alpha_2 MajorityPartsFemale_i + \alpha_3 Parts_i \\ & + \alpha_4 LitAgent_i + \eta_i \end{aligned}$$

where  $i$  indexes scripts.  $Produced_i$  equals 1 if script  $i$  had been produced by the last time the record was updated,  $FemalePlaywright_i$  if the playwright is female according to the previously discussed methodology derived from the US Census,  $MajorityPartsFemale_i$  equals 1 if the number of female parts in script exceeds the number of male parts, and  $LitAgent_i$  equals 1 if the playwright had a literary agent by the last time the record was updated. Finally,  $Parts_i$  contains the sum of the number of male parts and the number of female parts in the script. Building up the model one regressor at a time provides insights into the drivers behind the rates at which scripts by female playwrights reach production relative to scripts by male playwrights. Throughout, I cluster by playwright name in order to generate robust standard errors. Results are displayed in Table 4.4.

With the simple regression of whether or not the play reached production on the gender of the playwright in the full sample of plays written by playwrights of identifiable gender I find that, consistent with the cross-tabulation results, male-written and female-written scripts are equally likely to reach production. Before including additional

regressors in the model, however, I estimate this basic model with the restricted sample that will be used when the additional regressors are included. This reduces the sample size from 68,117 plays to 26,248 plays. Within the restricted sample, I find that female-written scripts are slightly more likely to reach production.

Adding whether the majority of a script's parts were female as an additional regressor, I find that scripts with majority female parts are less likely to reach production. This provides some evidence that women do better than expected, especially given that they write plays that have seemingly less desirable characteristics. Controlling for whether or not the script has majority female parts, female-written scripts are slightly more likely still to reach production as compared to male-written scripts.

It has been hypothesized that, in order to get their works produced, female playwrights feel compelled to write plays with fewer total parts. Adding the total number of parts in the script as yet another regressor reveals that plays with more parts are indeed less likely to be produced (p-value 0.000). Specifically, one additional role reduces the likelihood of production by about 0.7 percentage points. Although the effect of one additional role is relatively small, when extrapolating the effect of larger differences in the number of parts, even if non-linearly, the effect becomes notable.

The fact that female-written scripts have fewer total parts provides indirect evidence of wage differences between the genders. The playwriting contracts strongly encouraged by the DG have fees determined by the size and location of the theater. To the extent that women write plays with fewer parts, perhaps in order to achieve parity in production, and to the extent that plays with fewer parts are relegated to smaller or regional theaters, female playwrights may receive lower compensation for their works.

Finally, including whether or not the playwright has a literary agent as an additional regressor has little effect on the estimates of the coefficients on the other regressors. It does, however, reveal that representation by a literary agent increases the likelihood of a script being produced by about 7 percentage points (OLS 95% CI: [3.66%, 9.85%], Probit 95% CI: [3.62%, 10.34%]). If the positive correlation between having a literary agent and having any given work produced arises from a causal relationship, the causality could run in either or both of two directions. It could be that agents are good at picking writers likely to be produced and/or that writers are good at picking agents helpful in obtaining production. In all likelihood, the causal relationship runs in both directions.

**Table 4.4: Play-Level Results of Sample with Identifiable Gender, Equation 4.1**

	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
<i>Observations</i>	68,117		26,248		26,248		26,248		26,248	
Female Playwright	0.0033 (0.0076)	0.0034 (0.0076)	0.0246* (0.0134)	0.0247* (0.0136)	0.0295** (0.0136)	0.0297** (0.0138)	0.0233* (0.0136)	0.0236* (0.0138)	0.0237* (0.0136)	0.0240* (0.0138)
Majority Parts Female					-0.0361** (0.0155)	-0.0357** (0.0151)	-0.0356** (0.0154)	-0.0355** (0.0152)	-0.0352** (0.0154)	-0.0350** (0.0152)
Total # of Parts							-0.0073*** (0.0013)	-0.0070*** (0.0012)	-0.0071*** (0.0013)	-0.0068*** (0.0012)
Literary Agent									0.0676*** (0.0158)	0.0698*** (0.0172)

Notes: This table presents the results of OLS and Probit estimations of Equation 4.1, regressions of the probability that a script reaches production on the independent variables in the first column. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal  $\beta\Phi(\beta)$ . Standard errors, calculated clustering by Playwright, are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

Recall that just over 15 percent of scripts on Doollee are written by playwrights whose gender was unidentifiable on the basis of the methodology derived from the US Census; therefore, I re-estimate the above models on the full sample, including a binomial variable not only for whether the playwright is female, but also for whether the playwright's gender is identifiable. The results, displayed in Table 4.5, reveal that expanding the sample does little to alter the estimates of the previously discussed relationships although, as expected, statistical significance increases slightly in the larger

sample. Moreover, while scripts written by playwrights with unidentifiable gender are equally likely to reach production in the full sample, in the sample of scripts with records on the number of parts, scripts by playwrights with unidentifiable gender are 5 percentage points more likely to reach production.

	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
<i>Observations</i>	68,117		26,248		26,248		26,248		26,248	
Female Playwright	0.0033 (0.0076)	0.0034 (0.0076)	0.0246* (0.0134)	0.0245* (0.0136)	0.0294** (0.0135)	0.0293** (0.0136)	0.0230* (0.0135)	0.0231* (0.0137)	0.0233* (0.0135)	0.0233* (0.0137)
Playwright Gender Unknown	0.0134 (0.0088)	0.0135 (0.0089)	0.0534*** (0.0156)	0.0545*** (0.0163)	0.0545*** (0.0156)	0.0556*** (0.0164)	0.0519*** (0.0156)	0.0535*** (0.0164)	0.0543*** (0.0156)	0.0556*** (0.0164)
Majority Parts Female					-0.0354** (0.0142)	-0.0350** (0.0138)	-0.0351** (0.0141)	-0.0350** (0.0138)	-0.0348** (0.0141)	-0.0346** (0.0138)
Total # of Parts							-0.0075*** (0.0012)	-0.0072*** (0.0011)	-0.0074*** (0.0012)	-0.0070*** (0.0013)
Literary Agent									0.0547*** (0.0148)	0.0557*** (0.0159)

Notes: This table presents the results of OLS and Probit estimations of Equation 4.1, regressions of the probability that a script reaches production on the independent variables in the first column. Whereas 4.4 represented results restricted to the sample with identifiable gender, this table presents results of the full dataset, including scripts by playwrights without identifiable gender. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal  $\beta\Phi(\bar{x}\beta)$ . Standard errors, calculated clustering by Playwright, are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

Although I adjust my script level standard errors by clustering by playwright, I next perform analyses at the playwright level. It could be the case that the gender differences in whether any given play is produced are distinct in sign and/or magnitude from the gender differences in whether any given playwright has at least one work produced. These distinctions could occur if, for example, men and women write different numbers of plays. Overall, I expect to obtain similar results, but, as distinguished from the previous play level analysis, analysis at the playwright level will illuminate any differences in the rates at which men and women break into the playwriting profession.

To examine the relationship between breaking into the playwriting profession and playwright gender, among other script and playwright characteristics, I estimate the following:

Equation 4.2:

$$PlaywrightProduced_i = \alpha_0 + \alpha_1 FemalePlaywright_i + \alpha_2 MajMajPartsFemale_i + \alpha_3 AveParts_i + \alpha_4 LitAgent_i + \eta_i$$

where  $MajMajPartsFemale_i$  equals 1 if most of the playwright's scripts have majority female parts and  $AveParts_i$  is the average total number of parts in the scripts written by playwright  $i$ . Results from building up the model gradually are displayed in Table 4.6.

In the full sample with identifiable gender, female playwrights are 1 percentage point less likely to have at least one work produced. Women, then, are slightly less likely to break into the playwriting profession. Restricting the sample to those playwrights with recorded numbers of male and female parts, however, yields statistically insignificant differences in the rates at which male and female playwrights have at least one work reach production. Turning to script characteristics, playwrights most of whose works have majority female parts are slightly less likely to have at least one work produced, as are playwrights whose works have more parts on average. Finally, playwrights without literary agents are about 15 percentage points less likely to have at least one work produced.

Table 4.6: Playwright-level Results of Sample with Identifiable Gender, Equation 4.2										
	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
Observations	16,965		8,036		8,036		8,036		8,036	
Female Playwright	-0.0130** (0.0066)	-0.0129** (0.0065)	-0.0026 (0.0092)	-0.0026 (0.0092)	-0.0066 (0.0066)	-0.0066 (0.0066)	-0.0066 (0.0094)	-0.0063 (0.0094)	-0.0068 (0.0093)	-0.0062 (0.0092)
Maj Maj Parts Female					-0.0489*** (0.0064)	-0.0489*** (0.0064)	-0.0158 (0.0100)	-0.0156 (0.0099)	-0.014 (0.0099)	-0.0128 (0.0098)
Ave # of Parts							-0.0087*** (0.0009)	-0.0076*** (0.0008)	-0.0084*** (0.0009)	-0.0070*** (0.0008)
Literary Agent									0.1260*** (0.0103)	0.1536*** (0.0076)
Notes: This table presents the results of OLS and Probit estimations of Equation 4.2, regressions of the probability that the playwright had at least one play produced on the independent variables in the first column. Duplicate observations by playwright were dropped. This table presents results from the sample of playwrights with identifiable gender. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal $\beta\Phi(\lambda\beta)$ . Huber-White standard errors are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.										

Remaining at the playwright level, but expanding the sample to include all records on Doollee, not merely those with identifiable playwright gender, yields similar results. These results are displayed in Table 4.7.

Table 4.7: Playwright-level Results of Full Sample, Equation 4.2								
	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
<i>Observations</i>	20,447		9,484		9,484		9,484	
Female Playwright	-0.0130** (0.0066)	-0.0129** (0.0065)	-0.0061 (0.0066)	-0.0060 (0.0066)	-0.0064 (0.0093)	-0.0061 (0.0093)	-0.0066 (0.0092)	-0.0059 (0.0091)
Playwright Gender Unknown	-0.0043 (0.0077)	-0.0043 (0.0077)	-0.0003 (0.0776)	-0.0001 (0.0077)	0.0134 (0.0109)	0.0145 (0.0111)	0.0192* (0.0108)	0.0193* (0.0109)
Maj Maj Parts Female			-0.0531*** (0.0058)	-0.0544*** (0.0060)	-0.0175* (0.0092)	-0.0175* (0.0090)	-0.0159* (0.0091)	-0.0147* (0.0090)
Ave # of Parts					-0.0089*** (0.0008)	-0.0078*** (0.0008)	-0.0086*** (0.0008)	-0.0072*** (0.0008)
Literary Agent							0.1200*** (0.0096)	0.1451*** (0.0072)

Notes: This table presents the results of OLS and Probit estimations of Equation 4.2, regressions of the probability that the playwright had at least one play produced on the independent variables in the first column. Duplicate observations by playwright were dropped. Whereas Table 5.6 presented results from the sample of playwrights with identifiable gender, this table represents results from the full sample. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal  $\beta\Phi(\bar{x}\beta)$ . Huber-White standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

## 4.2.2 AMERICAN SAMPLE

### 4.2.2.1 SUMMARY STATISTICS AND CROSS-TABULATIONS

The American sample, created by merging the DG's membership list with the Doollee database, contains a slightly larger proportion of female playwrights and female-written scripts than the full sample. Twenty-eight percent of scripts in the American sample are written by female playwrights, as compared to 26 percent of scripts in the full sample. Moreover, of all DG members on Doollee, 34 percent are women. The percentage of American playwrights on Doollee who are female (34 percent), then, closely mirrors the percentage of DG members who are female (39 percent).

Summary statistics for the sample of American plays separated by playwright gender are listed in Table 4.3; the final column lists the p-values corresponding to the null

hypothesis that any given mean of the male sample equals the corresponding mean of the female sample. Female-written scripts in the American sample are approximately equally likely to be produced. Nonetheless, female-written scripts again differ systematically from male-written scripts in important ways. First, female-written scripts are more than twice as likely to have majority female parts. Interestingly, whereas scripts with majority female parts are less likely to be produced in the full sample, they are equally likely to be produced in the American sample. Second, female-written scripts in the American sample have fewer parts on average; yet, in the American sample, scripts with fewer parts are actually slightly more likely to reach production. Finally, female-written scripts in the American sample are about 13 percentage points less likely to have a playwright represented by a literary agent; this is markedly higher than the 3 percentage point difference in the full sample. However, whereas in the full sample scripts by playwrights with literary agents are 11 percentage points more likely to be produced, in the American sample scripts by playwrights with literary agents are only 3 percentage points more likely to reach production. Therefore, while there is a larger difference between the rates at which male and female playwrights are represented by literary agents in the American sample, representation by literary agents is less highly correlated with script production than it is in the full sample.

Table 4.8: Comparison of Summary Statistics, American Sample (3) by Gender								
		Male Sample (6)			Female Sample (7)			Mean6=Mean7
Level	Variable	Obs.	Mean	S.D.	Obs.	Mean	S.D.	p-value
Play	Produced	7,527	0.582	0.493	2,944	0.567	0.496	0.176
	# of Parts	3,353	6.347	4.682	1,205	5.992	4.145	0.020
	% Parts Fem (F)	3,353	0.436	0.142	1,205	0.512	0.148	0.000
	Majority Parts F	3,353	0.175	0.380	1,205	0.352	0.478	0.000
Playwright	# Plays Produced $\geq 1$	1,019	0.860	0.148	521	0.821	0.383	0.049
	Ave # of Parts	684	6.661	3.326	304	3.252	3.436	0.077
	Ave % Parts F	684	0.428	0.113	304	0.507	0.111	0.000
	% with Maj F	684	0.161	0.368	304	0.441	0.497	0.000
	Literary Agent	1,019	0.248	0.432	521	0.223	0.416	0.265

Notes: This table compares summary statistics for the male subsample and the female subsample of the American sample created by merging the data from Doollee.com with the membership list of the American Dramatists Guild. The final column lists the p-value corresponding to the null hypothesis that the means of the two subsamples are equal.

#### 4.2.2.2 OLS AND PROBIT ANALYSES

I estimate precisely the same models for the American sample as for the full sample with identifiable gender. Most of the estimated coefficients for the American sample are statistically insignificant, likely in part because the American sample is markedly smaller than the full sample with identifiable gender. Within the American sample, playwright gender, the presence or absence of majority female parts, and the presence or absence of a literary agent do not appear to be good predictors of whether or not a script reaches production. Only the number of parts is statistically significantly correlated with whether the script reaches production and, in contrast to the full sample in which each additional part reduced the probability of production by 0.7 percentage points, in the American sample each part increases the probability of production by about one-half of a percentage point.

Table 4.9: Play-Level Results of American Sample Equation, 4.1										
	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
Observations	10,471		4,558		4,558		4,558		4,558	
Female Playwright	-0.0145 (0.0293)	-0.0144 (0.0282)	0.0071 (0.0381)	0.0071 (0.0360)	0.0061 (0.0366)	0.0061 (0.0364)	-0.0043 (0.0364)	-0.0043 (0.0363)	-0.0024 (0.0360)	-0.0025 (0.0359)
Majority Parts Female					-0.0059 (0.0210)	-0.0059 (0.0209)	-0.0068 (0.0209)	-0.0069 (0.0208)	-0.0063 (0.0211)	-0.0063 (0.0210)
Total # of Parts							0.0047** (0.0020)	0.0049** (0.0022)	0.0046** (0.0020)	0.0048** (0.0022)
Literary Agent									0.0124 (0.0366)	0.0125 (0.0366)

Notes: This table presents the results of OLS and Probit estimations of Equation 4.1, regressions of the probability that a script reaches production on the independent variables in the first column. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal  $\beta\Phi(\beta)$ . Standard errors, calculated clustering by Playwright, are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

At the playwright level, results of *Equation 4.2* within the American sample reveal that female playwrights are about 4 percentage points less likely to have at least one script produced. This suggests that female playwrights in America are less likely to break into the profession. Restricting the sample to those playwrights with at least one script with recorded number of parts, however, female playwrights are equally likely as their male counterparts to have at least one script produced. American female playwrights who have never been produced, then, are less likely than their male counterparts to complete full records for their scripts on Doollee.com. Turning to script characteristics, playwrights work has mostly majority female parts or whose work averages more parts are slightly, but not statistically significantly, less likely to have at least one work produced. Finally, American playwrights with literary agents are about 6 percentage points more likely to have at least one work reach production. Recall that the magnitude of this estimate in the full sample was three times as large; literary agents, then, appear again to be less crucial in achieving production among playwrights in the American sample.

Table 4.10: Playwright-level Results of American Sample, Equation 4.2										
	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
<i>Observations</i>	1,540		989		989		989		989	
Female Playwright	-0.0382** (0.0194)	-0.0372** (0.0190)	0.0008 (0.0231)	0.0008 (0.0230)	-0.0279 (0.0199)	-0.0270 (0.0194)	0.0004 (0.0242)	0.0009 (0.0240)	0.0020 (0.0241)	0.0017 (0.0238)
Maj Maj Parts Female					-0.0435** (0.0188)	-0.0439** (0.0188)	-0.0055 (0.0259)	-0.0056 (0.0240)	-0.0040 (0.0258)	-0.0022 (0.0255)
Ave # of Parts							-0.0047 (0.0032)	-0.0041 (0.0029)	-0.0052 (0.0032)	-0.0046 (0.0029)
Literary Agent									0.0542** (0.0226)	0.0568** (0.0234)
Notes: This table presents the results of OLS and Probit estimations of Equation 4.2, regressions of the probability that the playwright had at least one play produced on the independent variables in the first column. Duplicate observations by playwright were dropped. This table presents results from the sample of American playwrights, all of which have identifiable gender. Probit parameters represent the marginal effect of a change in the independent variable on a change in the dependent variable where coefficients equal $\beta\Phi(\bar{x}\beta)$ . Huber-White standard errors are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.										

### 4.3 CONCLUSION

The results of this study indicate that women are less likely than men to enter the playwriting profession. Among playwrights, however, women are about equally likely as men to have their scripts reach production in the full sample, and only slightly less likely to have their scripts reach production in the American sample. Nonetheless, scripts written by female playwrights differ in three important ways from those written by male playwrights. First, female-written scripts are more likely to have majority female parts; scripts with majority female parts are, in turn, less likely to be produced in the full sample. Second, female-written scripts tend to have fewer parts; scripts with fewer parts are, at least in the full sample, more likely to be produced. Finally, female playwrights are less likely to have literary agents; scripts represented by literary agents are more likely to reach production.

Using the Doollee data, then, I find ample occupational differences between men and women, but no evidence of employment differences between male and female playwrights. These results must, however, be considered with an eye to the

incomprehensive nature and likely sample selection problems of the data. Possible explanations for the occupational differences observed not only in the Doollee sample, but also in the more comprehensive DG membership list, are numerous; one explanation is gender discrimination in the script-selection process. Due to unavoidable omitted variable bias in this approach, I did not test for discrimination. In the following two chapters, I test for discrimination directly with two methods, the first experimental and the second observational.

## CHAPTER 5

### AN AUDIT STUDY ADAPTED

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This audit study attempts to identify gender discrimination for the set of theaters sampled by approximating the *ceteris paribus* condition in which playwright gender is varied, but all else is kept constant.<sup>20</sup> I distributed four scripts to artistic directors around the country, varying only the gender of the pen-name on each script. I then asked respondents to rate each script along a variety of criteria, including measures of overall quality, economic prospects, audience appeal, ease of casting, and fit with respondents' theaters. Some measures targeted audience discrimination, others discrimination by cast and crew, and others still discrimination by artistic director. Additional measures examined the predicted human capital of the playwright, thereby targeting statistical discrimination.<sup>21</sup>

In this chapter, I compare the ratings garnered by a script bearing a female pen-name to the ratings garnered by an otherwise identical script bearing a male pen-name. Comparisons of ratings within scripts and between purported playwright genders provide tests of statistical and taste-based discrimination by artistic directors, and of perceived taste-based discrimination by audience members, cast, and crew. I make these comparisons first within the full sample of respondents. I then separate respondents by gender to test for any differences in levels of discrimination between male and female artistic directors. In addition, I compare the effect of playwright gender on the scripts

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<sup>20</sup> This chapter uses data collected between January 5, 2008 and February 5, 2009 through an online audit study funded by Princeton University's Industrial Relations Section and approved by Princeton University's Institutional Review Board for Human Subjects (approval code 4200). I, Emily Glassberg Sands, was the principal investigator on the study, advised by Professor Cecilia Rouse.

<sup>21</sup> The online survey is reproduced in hardcopy in Appendix A.

with female protagonists to the effect of playwright gender on the scripts with male protagonists.

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## 5.1 EXPERIMENTAL DESIGN

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### 5.1.1 SELECTING SCRIPTS

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The first step of the experimental design was to select four scripts for the study. The scripts must not previously have been read by survey recipients nor have had their content discussed in any public forum that might include artistic directors, literary managers, or producers. The novelty of the scripts was crucial to ensure that respondents believed the plays to have been written by the fictitious playwrights whose names they wore. Lynn Nottage, Tanya Barfield, Deb Laufer, and Julia Jordan each generously wrote and donated one script for the purpose of this study.<sup>22</sup>

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### 5.1.2 IDENTIFYING RECIPIENTS

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With the scripts secured, the second step of the experimental design was to select survey recipients. To obtain a comprehensive list of theaters in the United States, I turned to *The Dramatists Sourcebook, 24<sup>th</sup> Edition* and *2008 Dramatists Guild Resource Directory*. Produced by the Theatre Communications Group, the national organization

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<sup>22</sup> Lynn graduated from Brown University and the Yale School of Drama, received a Guggenheim Fellowship in 2005, and was awarded a MacArthur Genius Grant in 2007. Tanya graduated from the Juilliard School's Playwriting program, received the Helen Merrill Emerging Playwrights Award, and has had her works presented nationally and internationally, including at The Royal Court Theatre, the New York Theatre Workshop, and the Guthrie Lab. Deb also graduated from the Juilliard School's Playwriting Program, where she was later a Playwright-in-Residence. Deb is a two-time recipient of the LeCompte du Nouy grant from The LincolnCenter Foundation, and her play *End Days* was recently awarded The American Theatre Critics Association Steinberg citation. Finally, Julia Jordan is an award-winning playwright and television writer; a Juilliard Playwright Fellow and a Lucille Lortel Fellow, Julia was on the Kleban Award and the Francesca Primus Prize. I am eternally grateful to all four accomplished playwrights for their generous donations of their works.

for the American theater, *The Dramatists Sourcebook* is widely regarded as *the* annual book of opportunities for American playwrights.<sup>23</sup> Meanwhile, *The Dramatists Guild Resource Directory* is the official annual reference for playwrights published by the Dramatists Guild, the professional association of American playwrights. From discussions with numerous playwrights, I gather that merging the two lists of theaters provides a comprehensive listing of submission opportunities.

After merging the two books' lists of theaters, I restricted my sample from the full list of approximately 600 theaters to the 455 theaters with an email address published in either or both of the sources. Of the 455 email addresses published in the *Dramatists Sourcebook* and the *Dramatists Guild Resource Directory*, 203 emails were undeliverable. In all, then, survey recipients numbered 252. Perhaps the theaters that list valid email addresses are fundamentally different in some ways from those that do not; if so, this study's results are best applied only to theaters that publish valid email addresses for electronic submissions.

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### 5.1.3 CREATING PEN-NAMES

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The third step of the experimental design was to create fictitious playwright names. I generated one fictitious male first-name and one fictitious female first-name, as well as one shared last name, by which to identify the playwright of each of the four scripts. The choice of names was important to the experiment.

Generic last names were selected and held fixed for each play in order to minimize noise. Specifically, I chose the last names with the twenty-fifth to twenty-

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<sup>23</sup> As Paula Vogel, Pulitzer Prizewinning author of *How I Learned to Drive* puts it, "If a playwright washes up on a desert island, one of her ten books must be the *Dramatists Sourcebook*. With the *Sourcebook* one could even publish from there" (Amazon, 2008).

eighth highest frequencies in the 1990 US Census data. These names are Walker, Hall, Allen, and Young.<sup>24</sup> I did not choose even more generic names for fear that the respondents might become skeptical of the authenticity of the names; four John Smith-like names might have been a red flag that the names do not correspond to actual playwrights.

I then selected eight first names, four male and four female. To determine which first names are distinctively and exclusively male and which are distinctively and exclusively female, I tabulated names by gender using frequency data from the 1990 US Census. Distinctive names are those that have high frequency in one gender; exclusive names are those that have a zero frequency in the other gender.

I then matched each distinctive and exclusive male name with a similarly distinctive and exclusive female name. Names are matched not only for having similar frequencies, but also for having similar sounds. The matched pairs are Mary and Michael, Jennifer and George, Susan and Steven, and Lisa and Larry. The frequencies of the selected first and last names in the 1990 US Census are listed in Table 5.1.

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<sup>24</sup> Because only the first names of the purported playwright vary in this audit study, any biases resulting from last names will be accounted for in the play fixed-effects and so will not influence results provided that the effect of any bias arising from the last name exists regardless of whether the purported playwright is male or female.

<b>Table 5.1: First and Last Names Used in Audit Study</b>		
<b>Last Name</b>	<b>Overall Frequency (%)</b>	<b>Rank</b>
Walker	0.219	25
Hall	0.200	26
Allen	0.199	27
Young	0.199	28
<b>First Name</b>	<b>Male Frequency (%)</b>	<b>Female Frequency (%)</b>
Michael	2.629	0.000
Mary	0.000	2.629
George	0.927	0.000
Jennifer	0.000	0.932
Steven	0.780	0.000
Susan	0.000	0.794
Larry	0.598	0.000
Lisa	0.000	0.510
Notes: This data was extracted from a comprehensive list of high frequency first and last names in the 1990 U.S. Census as published by the U.S. Census Bureau at <a href="http://www.census.gov/genealogy/names/names_files.html">http://www.census.gov/genealogy/names/names_files.html</a>		

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#### 5.1.4 RANDOMIZING SURVEY VERSIONS

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The fourth step of the experimental design was to determine the versions of the survey and to randomly assign these versions to recipient theaters. I have four scripts, which I refer to as Script A, Script B, Script C, and Script D. In assigning playwrights' names, I gave a male first-name and a female first-name to each script, holding last name constant, as follows:

<b>Table 5.2: Script-Playwright Matching</b>		
<b>Script</b>	<b>Male Name</b>	<b>Female Name</b>
Script A	Michael Walker	Mary Walker
Script B	George Hall	Jennifer Hall
Script C	Steven Allen	Susan Allen
Script D	Larry Young	Lisa Young

Randomizing over playwright's gender yields sixteen script-naming schemes. That is, each of the four scripts was assigned one of two names for a total of  $2*2*2*2 =$

16 options.<sup>25</sup> The script naming schemes are laid out explicitly in Table 5.3. I then randomly assigned theaters to each of these naming schemes. Specifically, with the list of theaters imported, I use Stata to randomly generate one number for each of the 455 email addresses. I then sorted theaters' email addresses by their randomly assigned number. The first twenty-eight theaters ordered by randomly assigned number received Naming Scheme 1, the next twenty-eight theaters received Naming Scheme 2, and so on through Naming Scheme 9. Starting with Naming Scheme 10, twenty-nine theaters receive each scheme. With theaters ordered by their randomly assigned number, the naming schemes were sent to theaters as described in Table 5.3.

Table 5.3: Script Naming Schemes					
Naming Scheme	Theater Recipients	Script A	Script B	Script C	Script D
1	1-28	Michael Walker	George Hall	Steven Allen	Larry Young
2	29-56	Mary Walker	George Hall	Steven Allen	Larry Young
3	27-84	Michael Walker	Jennifer Hall	Steven Allen	Larry Young
4	85-112	Michael Walker	George Hall	Susan Allen	Larry Young
5	113-140	Michael Walker	George Hall	Steven Allen	Lisa Young
6	141-168	Mary Walker	Jennifer Hall	Susan Allen	Lisa Young
7	169-196	Michael Walker	Jennifer Hall	Susan Allen	Lisa Young
8	197-224	Mary Walker	George Hall	Susan Allen	Lisa Young
9	225-252	Mary Walker	Jennifer Hall	Steven Allen	Lisa Young
10	253-281	Mary Walker	Jennifer Hall	Susan Allen	Larry Young
11	281-310	Mary Walker	Jennifer Hall	Steven Allen	Larry Young
12	311-339	Mary Walker	George Hall	Susan Allen	Larry Young
13	340-368	Mary Walker	George Hall	Steven Allen	Lisa Young
14	369-397	Michael Walker	Jennifer Hall	Susan Allen	Larry Young
15	398-426	Michael Walker	Jennifer Hall	Steven Allen	Lisa Young
16	427-455	Michael Walker	George Hall	Susan Allen	Lisa Young

Notes: Each theater's recipient number was randomly assigned within Stata.

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<sup>25</sup> Note that randomization of the order in which plays were presented was not necessary as all comparisons will be made across respondents within the same script, not within respondents across different scripts.

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### 5.1.5 OBTAINING A HIGH RESPONSE RATE

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In my discussions with people in the theater industry it became apparent that artistic directors had little time to spare. I was asking for approximately forty minutes of their time. In an attempt to encourage responses, I therefore offered to enter each respondent's theater into a lottery to win one of four \$1,000 donations.

Most research indicates that monetary incentives paid directly to respondents are more effective than non-monetary incentives in eliciting responses, even controlling for the value of the incentive (Singer et al, 1999). Interviews with artistic directors in New York, however, revealed that they and their colleagues "might feel awkward" personally accepting monetary incentives. Most theaters are non-profit entities and the thought of a "kick-back" for responding to a survey on behalf of the theater is perceived by some as "abrasive".

Therefore, instead of monetary incentives to the respondents, I offered a charitable donation to their theater. The literature on the effectiveness of charitable donations in eliciting responses is mixed (see, for example, Robertson and Bellenger, 1978; Warriner et al., 1996; and Tzamourrani, 2000). In the case of this study, however, I benefitted from a close connection between the charity to which the donation is made and the respondent; specifically, the charity is the respondent's employer and, in most cases, the respondent is therefore highly invested in the success of the charity. If a charitable donation were to be made to each theater the cost of the study would become highly variable with the response rate and the individual donations would need to be quite small; therefore, I chose instead to hold a drawing for each of four larger donations. The

literature finds that lotteries are effective at improving response rates (see, for example, Warriner et al 1996; Harkness and Mohler, 1998).

Importantly, if some survey recipients were more apt to respond to the donation incentive than were others, the lottery may have biased the sample. For example, respondents are more likely to be those recipients who either had a high volume of spare time or who had a high valuation of the potential donation. In the latter case, these may be artistic directors from smaller, less financially successful establishments. This potential selection bias must be considered in the interpretation of results.

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#### 5.1.6 TARGETING GENDER DISCRIMINATION

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Are plays written by women less well received by the theater community just because they bear a woman's name? By sending half of theaters a script purportedly written by a woman and the other half of theaters the identical script purportedly written by a man I control for any differences in content and form between plays written by women and those written by men. Moreover, because the chosen pen-names are fictitious playwright reputation will have no impact on the results. To test the hypothesis that there is discrimination against female playwrights in the theater community at large I asked respondents, the very people who make the decision of which plays to produce at their theater, for their evaluation of each of the four scripts. Some questions targeted the perceived overall quality of the script, economic prospects of the script, and human capital of the playwright. Other questions targeted perceived audience discrimination, perceived discrimination by cast and crew, and actual discrimination by respondents themselves.

Within the questions on the perceived quality of the script, I asked respondents to rate the extent to which the script is an example of artistic exceptionalism, the likability of the characters, and the script's likelihood of winning a prize. Only one of these, the extent to which the piece is an example of artistic exceptionalism, is the respondent's own subjective rating of the script. The remaining two, how likable the characters are and how likely the script is to win a prize, are measures of the respondent's perceptions of how positively the theater community more broadly would respond to the script.

To test if a script bearing a female pen-name is deemed to have poorer economic prospects, I asked for the script's likelihood of being produced, the venue size of best fit if produced, the projected quality of reviews, and how supportive respondents' theaters' marketing directors would be of the script. If respondents are aware – consciously or subconsciously – of discrimination against female playwrights in the theater community at large, I expect that the ratings of projected economic prospects will be lower for scripts bearing female pen-names. For example, do artistic directors notice that some plays are relegated to smaller venues purely because they are written by women? Alternatively – or in addition – do artistic directors expect some plays to garner poorer reviews just because they bear a woman's name? The final question on economic prospects, relating to respondents' theaters' marketing directors, could instead have been classified as a measure of worker discrimination. Since, however, marketing directors, as distinguished from cast and crew, do not have direct interaction with playwrights, I classify this variable as a measure of perceived economic prospects instead. After all, a marketing director's primary job is to maximize revenues at his/her theater.

Moving away from potential discrimination in the theater community at large and into more direct measures of potential discrimination in the respondents' theaters, I asked respondents for the likelihood of production in their own theaters. Any preference for the otherwise-equivalent works bearing male pen-names arise from statistical discrimination or taste-based discrimination.

Statistical discrimination occurs amid imperfect information. In the case of the actual script – which is read in full by the artistic director or producer in selecting the play for production – there is near-perfect information.<sup>26</sup> It is largely with regards to the playwright, then, that there is potential for imperfect information. Artistic directors and producers have noted that there are certain attributes of the playwright that are important in deciding whether or not to produce his/her work. As one artistic director noted at the Town Hall Meeting of October 27, 2008, “Part of the decision-making process [behind play production] revolves around whether or not there is a human-fit and the playwright will be easy to work with. For example, you need to know if the playwright is able to make re-writes. It’s way more important what’s on the page, but the person matters too.” From the script alone, playwright characteristics are not easily observable. Perhaps female playwrights have a reputation for being harder to work with or for being less capable of rewrites. Then, to the extent that gender is a good signal of one or more of these characteristics, statistical discrimination could arise. If there is statistical

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<sup>26</sup> To conserve respondents' time, I did not ask survey recipients to read scripts in their entirety. Rather, I asked for their evaluation of approximately ten-page excerpts, which are reproduced in Appendix A. In the real world theater industry, excerpts of this length are traditionally submitted to artistic directors. These decision-makers can then request a full script from the playwright if they are preliminarily interested in producing the work. If artistic directors are quicker to pass up on reading female-written scripts in their entirety, statistical discrimination could also arise with regards to the script.

discrimination in favor of male playwrights I would expect that, even for precisely the same script, female playwrights would receive lower ratings along these measures.

In addition, statistical discrimination could arise from a theater's uncertainty about the playwright's likelihood of future success. If theaters derive utility not only from the playwright's play that they produce in-house, but also from the playwright's future trajectory, and if female playwrights tend to have less successful careers than male playwrights, then theaters would have an incentive to select a male-written script over an identical female-written script. Potential reasons for a less successful future trajectory among female playwrights include careers interrupted for child bearing or child rearing, or future gender discrimination by other artistic directors.<sup>27</sup> I therefore asked artistic directors to rate the likelihood of the playwright's future success.

Statistical discrimination aside, I also asked questions targeting the three types of taste-based discrimination as identified by Becker: customer, worker, and employer discrimination. To test for customer discrimination, I asked each respondent how eager his/her theater's potential audience members would be to see the play and how well the play would resonate with his/her theater's audience members. These are not direct measures of customer discrimination; rather both are measures of customer discrimination as perceived by respondents. To test for worker discrimination, again as perceived by respondents, I asked both how easy it would be to cast the play and how eager crew and theater administrators would be to work on the play. Finally, to test for employer discrimination within a given theater, I asked how easy it would be for the respondent himself or herself to relate to the playwright. For somewhat subtler

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<sup>27</sup> This kind of statistical discrimination could create a self-enforcing equilibrium in which women who write the same quality plays would have poorer outcomes even if their careers were interrupted no more than those of their male counterparts.

indications of employer discrimination, I also asked each respondent to rate how well the script fits with his/her theater's mission statement and how similar it is to other works his/her theater has produced.

Finally, to study variation in the levels of potential discrimination – or awareness of discrimination – among different types of respondents, I collected data on the respondents and their theaters. In particular, I asked for the number of stages in the theater and the capacity of the largest stage; these two attributes provide proxies for theater size and revenue. I also asked for the theater's mission statement, which could shed some light on the respondent's motivations. In particular the mission statement will reveal if his/her theater's goals include connecting with playwrights with whom they have historically worked, or advancing minority playwrights, or producing female playwrights.<sup>28</sup> In my final questions, I collect data on the respondent. I asked for his/her gender, role in the theater, year of birth, ethnicity, and self-described political views.

## 5.2 DATA

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### 5.2.1 RESPONDENT CHARACTERISTICS

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In the 6-week period during which the survey was open, 82 of the 252 recipients responded to the survey for a total response rate of 33%. Of the 170 non-respondents, 29 kindly responded via email with reasons the survey did not apply well to them. The most frequently reported reasons for non-responses came from comedy clubs specializing in all original work that do not accept outside submissions, theatrical production companies that work on the development and production of new scripts, but do not have a home

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<sup>28</sup> Although interesting in its own right, asking respondents for their theater's mission statement was included largely as one of many decoys to cover my true motivations of testing for gender discrimination.

base, summer theaters that did not have the staff on hand to fill out the survey given the time of year, and dinner theaters specializing in a variety of niche productions. Online investigation into each of the remaining 146 non-respondents revealed that 13 others were summer theaters, 9 had gone out of business, 9 were still in business but were closed for the season for reasons other than being a summer theater, 9 were companies without their own location, 8 were children's theaters, 5 were comedy clubs, and 4 were Shakespeare festivals. The number of eligible non-respondents, or non-respondents for which additional information could not be accessed, thus totaled 89 for an adjusted response rate of 48%. Table 5.4 displays summary statistics on respondents' gender, year of birth, and role in theater in addition to summary statistics on their theaters' number of stages and the seating capacity of the largest stage of their theater. For the purpose of summary statistics, I transform all of these variables into indicators except for respondents' year of birth and the number of stages in respondents' theaters.

The majority of respondents (56 percent) were artistic directors, the primary decision makers of which play to produce. Of the remaining respondents, most were literary managers, the gatekeepers deciding what will be passed on to the artistic directors making the final production decisions. Of all respondents, approximately half were female and half were male.<sup>29</sup> The mean age of respondents at the time of survey completion was 49.<sup>30</sup> In addition, respondents came from a broad range of theaters. The average respondent worked at a theater with two stages. When asked for the number of

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<sup>29</sup> The equal number of male and female respondents is somewhat surprising as it is frequently noted that both the artistic director profession and the literary manager profession are male-dominated. Perhaps this is an false perception, or perhaps female survey recipients were more likely to respond than their male counterparts.

<sup>30</sup> I do not include a breakdown of respondents' self-described political views as nearly all respondents of both genders (over 85% in both cases) described themselves as liberal or very liberal.

seats in their theater’s largest stage, about one-fifth of respondents selected each of the windows provided: 0-99 seats, 100-199 seats, 200-299 seats, 300-399 seats, and 400-499 seats.<sup>31</sup>

		Full Sample (1)		Female Respondents (2)		Male Respondents(3)		Mean2=Mean3
Variable	Sub-Variable	Obs.	Mean	Obs.	Mean	Obs.	Mean	p-value
Female Respondent		79	0.494	39	1.000	40	0.000	0.000
Year of Birth		79	1959	39	1961	39	1957	0.373
Role in Theater	Artistic Director	82	0.561	39	0.564	40	0.600	0.746
	Literary Manager	82	0.280	39	0.308	40	0.250	0.567
	Producer	82	0.110	39	0.077	40	0.150	0.307
	Other	82	0.183	39	0.179	40	0.200	0.816
Theater’s # of Stages		79	1.557	36	1.417	40	1.700	0.189
# of Seats in Largest Stage	0-99	80	0.263	39	0.308	40	0.175	0.168
	100-199	80	0.200	39	0.154	40	0.250	0.288
	200-299	80	0.200	39	0.179	40	0.225	0.615
	300-399	80	0.150	39	0.128	40	0.175	0.562
	400-499	80	0.188	39	0.308	40	0.175	0.168

Notes: This table contains summary statistics on respondents and their theaters. The final column lists the p-value corresponding to the test of the null that the mean of the subsample with female respondents equals the mean of the subsample with male respondents. All variables have been transformed into indicators except Year of Birth and Theater’s # of Stages.

## 5.2.2 OUTCOME VARIABLES

This study includes eighteen outcome variables. Of the eighteen outcome variables, three are holistic measures of play quality, four are measures of the play’s economic prospects, and three are measures of the playwright’s human capital, script aside. In addition, of the remaining outcome variables, one is a general measure of how likely the respondent would be to select the script for production in his/her theater, two are measures of taste-based customer discrimination, two are measures of taste-based worker discrimination, one is a direct measure of taste-based employer discrimination, and two are indirect measures of employer discrimination, which measure the play’s fit with the respondent’s theater. From each of the 82 respondents, I have four observations for each

<sup>31</sup> I select these windows because they are the windows used in the determination of playwriting contracts and therefore determine the fee paid to the playwright.

of the outcome variables – one observation corresponding to each of the four scripts; I therefore have 328 observations for each outcome variable. All but one of the outcome variables fall on a 1 to 7 scale where 1 is the least favorable rating and 7 is the most favorable rating; the final variable, labeled *Venue* falls on a scale of 1 to 5, similarly ranging from the least favorable rating of 1 to the most favorable rating of 5. Table 5.5 contains definitions of each of the outcome variables, listed within their respective groupings and each with its corresponding summary statistics.

Table 5.5: Summary Statistics of Outcomes Variables					
Outcome Category	Outcome Variable	k	Definition	Mean	S.D.
Play Quality	Exceptional	1	"On a scale of 1 to 7, to what extent is {Playwright's First Name}'s script an example of artistic exceptionalism?"	3.059	1.447
	Likable	2	"On a scale of 1 to 7, how likable are {Playwright's First Name}'s characters?"	3.528	1.604
	Prize	3	"On a scale of 1 to 7, what is the likelihood of {Playwright's First Name} winning a prize / award for this script?"	3.113	1.533
	<i>Aggregated Play Quality</i>	1, 2, 3	$(Exceptional + Likable + Prize) / 3$	3.220	1.306
Play's Economic Prospects	Produced	4	"On a scale of 1 to 7, what is the likelihood of {Playwright's First Name}'s script being produced somewhere?"	4.028	1.510
	Venue	5	"If produced, what would be the venue size of best fit for {Playwright's Name}'s play?" (1-99seats=1, 100-199seats=2, 200-299seats=3, 300-399seats=4, 400-499seats=5)	1.816	0.896
	Reviews	6	"If produced, on a scale of 1 to 7, how positive would you expect the reviews of {Playwright's First Name}'s play to be?"	3.689	1.334
	Marketing Director	7	"If you have a marketing director, on a scale of 1 to 7, how supportive would your marketing director be of producing {Playwright's First Name}'s play?"	3.479	2.170
	<i>Aggregated Economic Prospects</i>	4, 5, 6, 7	$(Produced + (7/5)Venue + Reviews + Marketing Director) / 4$	3.253	1.112
	Production in Respondent's Theater	You Produce	8	"On a scale of 1 to 7, how eager would you be to produce {Playwright's First Name}'s script?"	2.472
Playwright's Human Capital	Re-writes	9	"On the basis of the excerpt alone, acknowledging that you have incomplete information, how capable do you think {Playwright's First Name} would be of re-writes?" (1-7 scale)	4.145	1.400
	Work With	10	"On the basis of the excerpt alone, acknowledging that you have incomplete information, how easy would it be to work with {Playwright's First Name}?" (1-7 scale)	4.204	1.247
	Future	11	"Based exclusively on this excerpt, on a scale of 1 to 7, how would you rate {Playwright's First Name}'s potential for future success?"	4.054	1.509
	<i>Aggregated Human Capital</i>	9, 10, 11	$(Re-writes + Work With + Future) / 3$	4.127	1.192
Customer Discrimination	Audience	12	"On a scale of 1 to 7, how eager would your potential audience members be to see {Playwright's Name}'s play?"	2.956	1.571
	Resonate Audience	13	"On a scale of 1 to 7, to what extent would the content of {Playwright's First Name}'s play resonate with your audience members?"	3.066	1.708
	<i>Aggregated Customer Discrimination</i>	12, 13	$(Audience + Resonate Audience) / 2$	3.006	1.580
Employee Discrimination	Cast	14	"On a scale of 1 to 7, how easy would it be for you to cast {Playwright's First Name}'s play?"	5.291	1.749
	Crew	15	"On a scale of 1 to 7, how eager would the crew and theater administrators be to work on {Playwright's First Name}'s play?"	3.331	1.727
	<i>Aggregated Employee Discrimination</i>	14, 15	$(Cast + Crew) / 2$	4.304	1.368
Employer Discrimination	Relate	16	"On the basis of the excerpt alone, acknowledging that you have incomplete information, how easy would it be to relate to {Playwright's First Name} on a personal level?"	4.287	1.335
Fit with Theater	Mission Statement	17	"On a scale of 1 to 7, to what extent does {Playwright's First Name}'s script match your theater's mission statement?"	3.007	1.929
	Similar	18	"On a scale of 1 to 7, how similar is {Playwright's First Name}'s script to other plays you have produced?"	2.719	1.695
	<i>Aggregated Fit with Theater</i>	16, 17, 18	$(Mission Statement + Similar) / 2$	2.870	1.670

Notes: This table presents each of the outcome variables tested in the audit study, each along with its definition, mean, and standard deviation in the full sample of. The number of observations throughout is 368 as each of the 82 respondents rated each of the four scripts along each metric.

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### 5.2.3 REVEALED IMPORTANCE OF VARIABLES

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While it will be informative to know of any statistical discrimination or of any of the three forms of taste-based discrimination, these results will be most meaningful when considered with an eye to how responsive the actual decision of whether or not to produce a script is to these forms of discrimination. Therefore, I first analyze the revealed importance of each of the outcome variables to whether or not a script is predicted to reach production. I analyze the revealed importance of each outcome variable both to whether or not the script is predicted to reach production in respondents' theaters and to whether or not the script is predicted to reach production in the theater community at large.

Results of regressing *YouProduce*, which measures how eager the respondent would be to produce the script in his/her theater, on the set of other measures included in the survey indicate that the questions addressed in the audit study comprehensively cover the primary factors considered by respondents in their decision of whether or not to produce a script. Over 83% of the variation in how eager the respondent would be to produce any given script is explained by variation in the sixteen other outcome variables ( $R^2 = 0.8320$ ).<sup>32</sup> Results are displayed in Table 5.6. Respondents' reported likelihoods of producing the script are most highly correlated with their perceptions of the script's audience appeal, artistic exceptionalism, and fit with their theaters. Any evidence of lower rating for scripts bearing female pen-names along these measures may provide meaningful explanations for the small number of female-written scripts that reach production.

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<sup>32</sup> Of the eighteen total outcome variables, in this model one is a dependent variable, sixteen are independent variables, and the final variable, *Produced*, is exempted as it is a measure of whether the script is predicted to be produced by the theater community at large.

A regression of *Produced*, which measures how likely respondents believe the script is to be produced at some theater, on the set of other measures included in the survey reveals that nearly 70% of the variation in how likely respondents believe other theaters are to produce any given script is explained by variation in fourteen of the outcome variables. Results are displayed in Table 5.6.<sup>33</sup> The perceived likelihood of a script being produced by the theater community at large is most highly correlated with the script's perceived economic prospects and likelihood of winning a prize or award. While artistic directors claim to select scripts for production based on their audiences, on artistic quality, and on the quality of fit with their theater, they perceive artistic directors in other theaters to select scripts for production based largely on economic prospects and on the external validation of prizes and awards.

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<sup>33</sup> Of the eighteen total outcome variables, in this model one, *Produced*, is a dependent variable, fourteen are independent variables, and the respondent-specific measures, *YouProduce*, *MissionStatement*, and *Similar*, are exempted.

Table 5.6: Revealed Importance of Outcome Variables				
Outcome Category	Outcome Variable	k	(YouProduce)	(Produced)
Play Quality	Exceptional	1	0.147*** (0.048)	0.097* (0.057)
	Likable	2	0.093* (0.050)	0.027 (0.058)
	Prize	3	-0.006 (0.050)	0.270*** (0.062)
Play's Economic Prospects	Venue	5	-0.118* (0.061)	0.122* (0.071)
	Reviews	6	0.049 (0.052)	0.277*** (0.070)
	Marketing Director	7	0.053 (0.039)	-0.032 (0.039)
Playwright's Human Capital	Re-writes	9	0.083 (0.060)	0.03 (0.069)
	Work With	10	-0.074 (0.088)	-0.102 (0.100)
	Future	11	-0.013 (0.057)	0.164** (0.067)
Customer Discrimination	Audience	12	0.129* (0.076)	0.064 (0.087)
	Resonate Audience	13	0.205*** (0.066)	-0.025 (0.074)
Employee Discrimination	Cast	14	0.071** (0.031)	0.035 (0.036)
	Crew	15	0.059 (0.056)	0.108* (0.065)
Employer Discrimination	Relate	16	0.172** (0.084)	-0.021 (0.095)
Fit with Theater	Mission Statement	17	0.305*** (0.045)	N/A
	Similar	18	0.094** (0.045)	N/A
<b>R-squared</b>			<b>0.8320</b>	<b>0.6906</b>
Notes: This table contains results of the regression of first <i>YouProduce</i> , which measures how likely the respondent reports being to produce the script in his / her theater, and then <i>Produced</i> , which measures how likely the respondent believes it is that the script will be produced by the theater community at large, on the remaining relevant outcome variables. Each regression had 328 observations, one observation for each of the four scripts for each of the 82 respondents. Huber-White standard errors are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.				

## 5.3 METHODOLOGY AND RESULTS

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### 5.3.1 GENERAL ANALYSIS

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For the full sample I study whether respondents' reactions to the play or the playwright depend on the playwright's purported gender. To that end, I perform an OLS regression of each of the eighteen outcome variables on playwright gender, controlling for the script. That is, I estimate

*Equation 5.1:*

$$Y_{i,j}^k = \alpha_0^k + \alpha_1^k \text{FemalePlaywright}_{i,j} + \alpha_2^k \text{ScriptB}_j + \alpha_3^k \text{ScriptC}_j + \alpha_4^k \text{ScriptD}_j + \varepsilon_{i,j}^k$$

where  $k$  denotes the outcome variables ( $k = 1, 2, \dots, 18$ ),  $i$  denotes respondents, and  $j$  denotes scripts.  $\text{FemalePlaywright}_{i,j}$  is a dummy variable equal to 1 if the pen-name attached to script  $j$  sent to respondent  $i$  was female,  $\text{ScriptB}_j$  is a dummy variable equal to 1 if script  $j$  was purportedly written by George or Jennifer Hall,  $\text{ScriptC}_j$  is a dummy variable equal to 1 if the script  $j$  was purportedly written by Steven or Susan Allen, and  $\text{ScriptD}_j$  is a dummy variable equal to 1 if the script  $j$  was purportedly written by Larry or Lisa Young.<sup>34</sup> Results are displayed in Table 5.7.

To study differences in each of the previously defined groupings' results arising from differences in playwright gender, I employ the seemingly unrelated regression model developed by Arnold Zellner (1962). In general, Zellner's technique is used to analyze a system of multiple equations with cross-equation parameter restrictions and correlated error terms. The reported results are the averages across the coefficients on *FemalePlaywright* within each grouping, with their associated standard errors.

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<sup>34</sup> In order to avoid perfect multi-colinearity, I do not include a dummy variable to identify the script purportedly written by George or Jennifer Hall.

Specifically, I estimate  $\alpha_1^g = \frac{1}{(l-j)+1} \sum_{k=j}^l \alpha_1^k$  where  $g$  indexes groupings and  $k = (j, j + 1, \dots, l)$ , where  $(j, j + 1, \dots, l)$  are the outcome variables in grouping  $g$ .<sup>35</sup> Results are displayed in Table 5.7.

As reported in Table 5.7, the ratings garnered by female pen-names along all three holistic measures of play quality are lower than those garnered by male pen-names for precisely the same scripts. In the case of *Likable*, the estimate of the coefficient is -0.803 (95% CI: [-1.280, -0.325]) and the negative result is statistically significant at the 1% significance level. On a 1 to 7 scale, then, the exact same characters are perceived to be about four-fifths of a point less likable when the pen-name is female. Aggregating the three holistic measures of play quality, i.e. creating an average of their coefficients with the corresponding standard error, reveals that scripts bearing a female pen-name are deemed to be of lower quality than precisely the same scripts bearing a male pen-name. Specifically, female pen-names garner a rating about 0.30 points lower on a 1 to 7 scale (95% CI: [-0.582, -0.02]).

Overall, I find not only lower perceived quality, but also poorer perceived economic prospects when a script bears a female pen-name (95% CI: [-0.501, -0.033]). Nonetheless, respondents appear to be equally eager to produce scripts irrespective of playwright gender. In addition, while respondents perceive some worker discrimination, especially by crew members, they perceive insignificant customer discrimination and do not appear to discriminate themselves. Finally, since the coefficients on *Rewrites*, *WorkWith*, and *Future* are indistinguishable from zero, I find no evidence of statistical discrimination.

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<sup>35</sup> When aggregating, I scale up *venue*, the one variable not already on a 1 to 7 scale, by (7/5).

**Table 5.7: Results of Equation 5.1, Coefficient on *FemalePlaywright***

Outcome Category	Outcome Variable	k	$\alpha_1^k$
Play Quality	Exceptional	1	-0.208 (0.167)
	Likable	2	-0.568*** (0.169)
	Prize	3	-0.132 (0.172)
	Aggregated Play Quality	1, 2, 3	-0.303** (0.142)
Play's Economic Prospects	Produced	4	-0.186 (0.162)
	Venue	5	-0.142 (0.010)
	Reviews	6	-0.199 (-0.149)
	Marketing Director	7	-0.484** (0.244)
	Aggregated Economic Prospects	4, 5, 6, 7	-0.267** (0.120)
Production in Respondent's Theater	You Produce	8	-0.050 (0.182)
Playwright's Human Capital	Re-writes	9	0.010 (0.157)
	Work With	10	0.009 (0.139)
	Future	11	-0.057 (0.171)
	Aggregated Human Capital	8, 9, 10, 11	0.016 (0.131)
Customer Discrimination	Audience	12	-0.080 (0.170)
	Resonate Audience	13	-0.124 (0.186)
	Aggregated Customer Discrimination	12, 13	-0.102 (0.169)
Employee Discrimination	Cast	14	-0.223 (0.185)
	Crew	15	-0.405** (0.190)
	Aggregated Employee Discrimination	14, 15	-0.314** (0.144)
Employer Discrimination	Relate	16	0.011 (0.148)
Fit with Theater	Mission Statement	17	-0.093 (0.227)
	Similar	18	-0.123 (0.189)
	Aggregated Fit with Theater	16, 17, 18	-0.108 (0.187)
Overall	Total	1-18	-0.156 (0.115)

Notes: This table reports the results of a regression of each outcome variable on the gender of the playwright, controlling for the scrip. Huber-White standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

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### 5.3.2 EXTENSION: COMPARISON OF RESULTS BY RESPONDENT GENDER

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Ideally, in order to compare male respondents and female respondents' responses to scripts bearing male and female pen-names, I would have randomized over the gender of recipients. Since, however, most of the contact information obtained from *The Dramatists Sourcebook, 24<sup>th</sup> Edition* and *2008 Dramatists Guild Resource Directory* did not contain the name of the recipient, and since the email addresses were often of a generic form such as info@[theater's name].org, there was little room for even speculation of the corresponding recipient's gender. Although I did not randomize survey versions over the gender of the recipient, it is nonetheless informative to separate the male respondents from the female respondents and compare results.

Inspection of the summary statistics previously presented in Table 5.4 reveals that male respondents and female respondents have similar characteristics. There are no statistically significant differences in roles between the genders; approximately equal proportions of respondents of each gender are artistic directors, literary managers, and producers. In addition, there is no statistically significant difference in the size of the theaters at which male and female respondents work; men and women in this sample work at theaters with approximately equal numbers of stages and at theaters with an approximately equal numbers of seats in their largest stages.<sup>36</sup>

I re-estimate *Equation 5.1* separately for male respondents and female respondents. Results are displayed in Table 5.8. On aggregate, male respondents assign nearly identical ratings to a script irrespective of the gender of the pen-name. Female

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<sup>36</sup> Female respondents are slightly, though not statistically significantly, more likely to work either at a very small theater with less than 99 seats in its largest stage, or at a very large theater, with more than 400 seats in its largest stage.

respondents, however, assign markedly lower ratings to a script when that script bears a female pen-name. The lower ratings assigned by female respondents to purportedly female-written scripts may be attributable to heightened awareness among female respondents of the barriers faced by female playwrights.

Female respondents believe a script purportedly written by women will be perceived by the theater community to be of lower overall quality; aggregation of the coefficients on *Exceptional*, *Likable*, and *Prize* based on Zellner's (1962) seemingly unrelated regressions model yields a statistically significantly negative coefficient. However, female respondents do not report personally believing that a script with a female pen-name is of lower quality. Specifically, female respondents assign lower ratings for *Likable* and *Prize* when a script has a female pen-name; these questions ask generally if the characters are likable and how likely it is that the playwright will win a prize. In the more personal rating measuring the extent to which the respondent herself deems the play to be an example of artistic exceptionalism, in contrast, female respondents assign a given script the same rating irrespective of playwright gender.

Female respondents also deem purportedly female-written works to have poorer economic prospects and to face both customer and worker discrimination. Although female respondents report being approximately equally likely to produce a script in their own theaters irrespective of playwright gender, they perceive a script to be less likely to be produced by the theater community at large and to be less supported by their own marketing directors when the pen-name is female. Moreover, female respondents believe that a female-written script will have less audience appeal and that crew members will be less eager to work on the script. Finally, perhaps as a result of the perceived customer and

worker discrimination, female respondents deem a script bearing a female pen-name to fit less well with their theaters.

Table 5.8: Results of Equation 5.1, Coefficient on <i>FemalePlaywright</i> by Respondent Gender					
			Male Respondents	Female Respondents	Chi-Squared Test
Outcome Category	Outcome Variable	k	$\alpha_1^k$	$\alpha_1^k$	p-value
Play Quality	Exceptional	1	-0.069 (0.244)	-0.348 (0.234)	0.464
	Likable	2	-0.266 (0.241)	-0.803*** (0.242)	0.147
	Prize	3	0.149 (0.263)	-0.500** (0.229)	0.058*
	Aggregated Play Quality	1, 2, 3	-0.0162 (0.206)	-0.550*** (0.201)	0.254
Play's Economic Prospects	Produced	4	-0.049 (0.242)	-0.443** (0.220)	0.202
	Venue	5	-0.041 (0.126)	-0.246 (0.153)	0.269
	Reviews	6	-0.228 (0.230)	-0.262 (0.200)	0.862
	Marketing Director	7	-0.242 (0.361)	-0.745** (0.333)	0.328
	Aggregated Economic Prospects	4, 5, 6, 7	-0.144 (0.1722)	-0.449*** (0.171)	0.581
Production in Respondent's Playwright's Human Capital	You Produce	8	0.076 (0.271)	-0.319 (0.252)	0.297
Customer Discrimination	Re-writes	9	0.145 (0.235)	0.027 (0.222)	0.713
	Work With	10	0.062 (0.214)	-0.044 (0.191)	0.751
	Future	11	0.020 (0.252)	-0.217 (0.245)	0.448
	Aggregated Human Capital	9, 10, 11	0.076 (0.193)	-0.078 (0.186)	0.430
Employee Discrimination	Audience	12	0.237 (0.250)	-0.427* (0.241)	0.061*
	Resonate Audience	13	0.069 (0.269)	-0.472* (0.262)	0.171
	Aggregated Customer Discrimination		0.153 (0.246)	-0.449* (0.243)	0.258
Employer Discrimination	Cast	14	-0.143 (0.272)	-0.365 (0.257)	0.527
	Crew	15	-0.125 (0.287)	-0.721*** (0.264)	0.127
	Aggregated Employee Discrimination	14, 15,	-0.134 (0.209)	-0.543*** (0.205)	0.135
Fit with Theater	Relate	16	0.104 (0.225)	-0.114 (0.206)	0.513
	Mission Statement	17	0.173 (0.341)	-0.586** (0.294)	0.122
	Similar	18	0.103 (0.264)	-0.524* (0.275)	0.116
Overall	Aggregated Fit with Theater	16, 17, 18	0.138 (0.263)	-0.555** (0.262)	0.065*
	Total	1-18	0.009 (0.164)	-0.387** (0.167)	0.166

Notes: This table reports the results of a regression of each of the outcome variables on playwright gender, controlling for the script. Huber-White standard errors are reported in parentheses. Results presented in this table arise from separating the full sample into one subsample with the 39 female respondents and one subsample with the 40 male respondents. In the sample of female respondents, there is one observation for each of the four scripts for each of the 29 female respondents for a total of 156 observations; in the subsample of male respondents, moreover, there are 160 observations. The final column contains the p-value corresponding to the test of the null hypothesis that the coefficient on *FemalePlaywright* is the same in the female subsample as in the male subsample. \*, \*\*, and \*\*\* indicates significance at the 10%, 5%, and 1% levels, respectively.

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### 5.3.3 EXTENSION: COMPARISON OF RESULTS BY PROTAGONIST GENDER

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In addition to my primary analysis of how reactions to all four of the scripts vary with playwright gender, I also examine how reactions to the two scripts with male protagonists vary with playwright gender as compared to how reactions to the two scripts with female protagonists vary with playwright gender.

Importantly, the design of this study controls experimentally only for the gender of the playwright, not also for the gender of the protagonist. An experimental design that varies protagonist gender in addition to playwright gender would be feasible, in particular if scripts with otherwise gender-neutral protagonists are chosen. I do not, however, employ such an experimental design in this study because I am primarily interested in the relationship between playwright gender and play production.<sup>37</sup>

While not part of the experimental design, examining how the gender of the protagonist influences reactions to playwright gender provides some interesting insights into the relationships among production, playwright gender, and protagonist gender. This is not, as noted, a perfect test of the relationship because Scripts A and C differ from Scripts B and D not only in protagonist gender. Any results of the effect of protagonist gender may therefore be confounded with other attributes that differ between the scripts with male protagonists and the scripts with female protagonists.

As a broader generalization, Scripts A and C deal with men's worlds. Script A tells the story of the Emperor, "an elderly African man with a distinguished face" through his interactions with his scribe, "a petite African man with a deferential posture." Script

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<sup>37</sup> Any additional variation in, for example, protagonist gender would reduce the probability of finding statistically significant results holding the sample size constant. Therefore, in this study, each of the scripts is a unique script and only playwright gender is randomly assigned.

C, meanwhile, provides a window into the lives of two teenage boys playing video games; one of the boys, Dilan, is a foster child in the other boy, Kyle's, home.

Scripts B and D, in contrast, deal with women's worlds. Script B revolves around Luanne, "the ultimate five-armed mother who controls every situation and everyone around her," and Carleen, "burned in love and increasingly bitter and angry." Script D, meanwhile, tells the story of forty-six-year-old Elizabeth and her best friend Mae, with whose nineteen-year-old son Elizabeth is having an affair.

To examine any differences arising from protagonist gender, or, more generally, from the gender slant of the content, in the relationship between playwright gender and outcome variables I estimate

*Equation 5.2:*

$$Y_{ij}^k = \beta_0^k + \beta_1^k FemPlFemPr_{i,j} + \beta_2^k FemPlMalPr_{i,j} + \beta_3^k ScriptB_j + \beta_4^k ScriptC_j + \beta_5^k ScriptD_j + v_{i,j}^k$$

$FemPlFemPr_{i,j}$  is a dummy variable equal to 1 if respondent  $i$  was assigned a female pen-name for script  $j$  and if script  $j$  has a female protagonist.  $FemPlMalPr_{i,j}$ , meanwhile, is a dummy variable equal to 1 if respondent  $i$  was assigned a female pen-name for script  $j$  and if script  $j$  has a male protagonist. To test the null hypothesis that ratings vary only with playwright gender and the individual script, and not with the interaction of playwright gender and protagonist gender, I test the null hypothesis that  $\beta_1^k = \beta_2^k$ . Results, displayed in Table 5.9, indicate that the effect of playwright gender is approximately the same for the scripts with female protagonists as for the scripts with male protagonists. There are, however, three notable exceptions.

First, female playwrights are more penalized for their gender in ratings of character likability when the characters are female than when the characters are male. Recall that, aggregating across the four scripts, precisely the same characters are perceived as less likable when the script bears a female-pen name. In fact, however, the gender of the pen-name does not statistically significantly alter the results of *Likable* for the scripts with male protagonists. It is only for the scripts with female protagonists that the presence of a female pen-name lowers ratings; in the female-protagonist scripts, the presence of a female pen-name lowers ratings by one full point on a 1 to 7 scale. The difference in the effect of a female pen-name on likability of characters between the scripts with male protagonists and the scripts with female protagonists is significant at the 5% level.<sup>38</sup>

Second, for the key outcome variable *Produced*, the penalization for a female pen-name is also greater for the scripts with female protagonists than for the scripts with male protagonists. For the scripts with male protagonists, the presence of a female pen-name actually increases slightly the perceived likelihood of being produced, although the effect is not statistically significant. For the scripts with female protagonists, in contrast, the presence of a female pen-name reduces the perceived likelihood of being produced by about 0.5 points on a scale of 1 to 7.

The third difference in the effect of a female pen-name between the scripts with female protagonists and the scripts with male protagonists relates to the outcome variable *Rewrites*. Here, my results indicate that the difference between the ratings garnered by male and female pen-names works in the reverse direction, in favor of women writing

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<sup>38</sup> Recall that, because I did not randomize over gender of the protagonist holding scripts constant, there could be confounding variables in play.

about women. Female playwrights are deemed to be more capable of performing re-writes on the scripts with female protagonists than their male counterparts and equally capable of performing re-writes on the scripts with male protagonists. This result may arise from a belief that a female playwright is better able to understand women's experiences and, therefore, that a female playwright's writing process is more fluid than that of a male playwright when the subject matter is women.

Finally, I re-estimate *Equation 5.2* separating the sample by respondent gender.<sup>39</sup>

On aggregate, male respondents do not penalize female playwrights for their gender, irrespective of protagonist gender. Female respondents, however, penalize female playwrights more for scripts with female protagonists than for scripts with male protagonists. While female respondents deem male-protagonist scripts to be equally likely to reach production regardless of the gender of the playwright, they deem female-protagonist scripts to be less likely to reach production when the playwright is female. This may be driven in part by the perception among female respondents that, while characters in male-protagonist scripts are equally likable irrespective of playwright gender, characters in female-protagonist scripts are significantly less likable when the playwright is female.

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<sup>39</sup> Results are available upon request.

<b>Table 5.9: Results of Equation 5.2, Coefficients on <i>FemPIFemPr</i> and <i>FemPIMalPr</i></b>					
<b>Outcome Category</b>	<b>Outcome Category</b>	<b>k</b>	<b><math>\beta_1^k</math></b>	<b><math>\beta_2^k</math></b>	<b>p-value for <math>H_0: \beta_1^k = \beta_2^k</math></b>
Play Quality	Exceptional	1	-0.212 (0.234)	-0.205 (0.238)	0.983
	Likable	2	-0.953*** (0.238)	-0.212 (0.239)	0.035**
	Prize	3	-0.247 (0.242)	-0.016 (0.245)	0.502
	<i>Aggregated Play Quality</i>	1, 2, 3	-0.461** (0.218)	-0.144 (0.181)	0.264
Play's Economic Prospects	Produced	4	-0.502** (0.227)	0.133 (0.228)	0.049**
	Venue	5	-0.182 (0.135)	-0.102 (0.137)	0.675
	Reviews	6	-0.285 (0.210)	-0.112 (0.212)	0.563
	Marketing Director	7	-0.113 (0.342)	-0.862** (0.342)	0.125
	<i>Aggregated Economic Prospects</i>	4, 5, 6, 7	-0.289 (0.178)	-0.246 (0.158)	0.858
Production in Respondent's Theater	You Produce	8	-0.309 (0.256)	0.213 (0.258)	0.0151
Playwright's Human Capital	Re-writes	9	0.348* (0.220)	-0.185 (0.221)	0.074*
	Work With	10	0.208 (0.196)	-0.193 (0.197)	0.149
	Future	11	-0.225 (0.248)	0.097 (0.237)	0.350
	<i>Aggregated Human Capital</i>	8, 9, 10, 11	0.119 (0.191)	-0.094 (0.180)	0.418
Customer Discrimination	Audience	12	-0.327 (0.238)	0.172 (0.241)	0.141
	Resonate Audience	13	-0.241 (0.263)	-0.006 (0.264)	0.529
	<i>Aggregated Customer Discrimination</i>	12, 13	-0.284 (0.257)	0.084 (0.217)	0.275
Employee Discrimination	Cast	14	-0.199 (0.262)	-0.248 (0.263)	0.597
	Crew	15	-0.459* (0.269)	0.350 (0.208)	0.776
	<i>Aggregated Employee Discrimination</i>	14, 15	0.329* (0.196)	-0.299 (0.210)	0.917
Employer Discrimination	Relate	16	0.175 (0.208)	-0.155 (0.210)	0.264
Fit with Theater	Mission Statement	17	-0.034 (0.314)	-0.158 (0.330)	0.785
	Similar	18	0.057 -0.265	-0.309 (0.270)	0.335
	<i>Aggregated Fit with Theater</i>	16, 17, 18	0.012 (0.262)	-0.234 (0.267)	0.513
Overall	Total	1-18	-0.195 (0.175)	-0.141 (0.151)	0.814

Note: This table reports the results of regressing each of the outcome variables on the interaction between a female playwright and a female protagonist as well as the interaction between a female playwright and a male protagonist, controlling for script. Huber-White standard errors are reported in parentheses. The final column reports the p-value corresponding to a test of the null that the coefficients on the two interaction terms are equal. \*, \*\*, and \*\*\* indicate significance at the 1%, 5%, and 10% levels, respectively

## 5.4 CONCLUSION

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While results of this audit study provide no evidence of statistical discrimination, they do provide evidence of taste-based discrimination in theater. Female-written plays are perceived by artistic directors and literary managers to be of lower overall quality, to have poorer economic prospects, and to face worker discrimination. These results are most pronounced within the sample of female respondents, who also perceive customer discrimination against female playwrights and believe that a script fits less well with their theater when that script is purportedly written by a woman. In addition, the theater community seems to react particularly aversely to women writing about women. Plays with female protagonists are, according to respondents, less likely to reach production if they bear a female pen-name; this result arises in part because female-written characters are less well received when purportedly written by women.

There are several potential limitations to my results. Critiquing the audit study, Heckman (1998) writes, “A well-designed audit study could uncover many individual firms that discriminate, while at the same time the marginal effect of discrimination on the wages of employed workers could be zero.” While this audit study’s questions are effective in finding discrimination within individual theaters, discrimination at the individual level is different from discrimination at the group level. As demonstrated in Becker’s (1971) model of discrimination, the causal effect of being a playwright who is female is defined by the marginal theater with which the marginal female playwright deals. That is, the effect of market discrimination is not determined by the most discriminatory theaters in the market, or by the average level of discrimination among theaters. Rather, the effect of market discrimination is determined at the margin.

In addition, this nature of this audit study may suffer from hypothetical bias. The benefits of a more realistic study, however, are likely outweighed by the benefits of this hypothetical study. A more realistic study, which could be undertaken in future research, would consist of sending out script excerpts and comparing the rates at which survey recipients request full versions of the scripts with female pen-names and with male pen-names. While such a study would test for the existence of gender discrimination, it would not provide insights into the sources of the potential discrimination (i.e. decompose any discrimination into statistical discrimination and/or any of the three types of taste-based discrimination).

Since the primary goal of this study was to decompose any potential discrimination into its sources, I chose instead to send out a hypothetical survey. This facilitated asking a broad range of more specific questions that targeted more than just the final decision of whether or not to produce a script. It thereby illuminated differences arising from playwright gender in reactions to scripts along a variety of metrics and provided tests of both statistical discrimination and each of the three types of taste-based discrimination. However, since survey questions asked, for example, how eager respondents *would* be to produce the script, the results of this study may suffer from hypothetical bias.

In the next chapter, I overcome the potential hypothetical bias inherent in this experimental design by comparing the quality of the male-written and female-written works actually in production.

## CHAPTER 6

### CHICAGO PRICE THEORY ON BROADWAY

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In the preceding chapter, I took an experimental approach to testing for discrimination. By including questions targeting each type of potential discrimination, the survey shed light on some of the specific factors driving the small number of female-written plays. However, because the results may suffer from hypothetical bias, the question remains: Is there, in practice, discrimination against female playwrights? In this chapter, I compare the quality of the female-written productions on Broadway over the past decade to the quality of their male-written counterpart. In the absence of gender discrimination by the artistic directors selecting scripts for production, I expect the marginal female-written and male-written scripts chosen for production to be of approximately equal quality (Chapter 3).

#### 6.1 THEORY: TESTING FOR DISCRIMINATION VIA PROFITS

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The challenge in studying playwriting, as in studying most any art, is that opinions about “quality” vary widely across people, and may even be highly contentious. One could put faith in the critics and use a measure of how positive the reviews are as a measure of the quality of a play. Perhaps, however, the critics themselves discriminate. Alternatively, one could rely on the receipt of playwriting awards as a measure of the quality of the playwright and then assume that this translates directly into the quality of any play written by that playwright. Members of awards committees, however, may also discriminate. In addition, it seems tenuous to extrapolate the quality of any one play from the quality of the playwright; even playwriting geniuses write the occasional flop and no-

names write the occasional genius-work. In relying on either reviews or awards to determine play quality, moreover, quantification of observed outcomes adds an additional dimension of complexity. Do the words “brilliant” and “exceptional” in a review signify different levels of quality? And which playwright is of higher quality: the winner of the O’Neill Theater Program or of the winner of the POW Festival?

Broadway is a unique venue in that the “quality” of a play, at least from the point of view of the Broadway theaters themselves, can be measured by profitability. The term “Broadway” refers to the 39 large professional theaters with 500 or more seats located in the Theater District of New York City. What is unique about Broadway as compared to the many non-profit, often smaller theaters across America is that, with the exception of its three non-profit theater companies, Broadway theaters seek to maximize profits.<sup>40</sup>

Whereas a test of the null hypothesis that the marginal male-written and female-written plays are of equal quality is a test of no discrimination, in what follows I demonstrate that using profitability as a proxy for quality is more specifically a test of no employer discrimination. Examination of play profits does not provide insights into whether there is customer and/or worker discrimination.

As developed in Chapter 2, the profit differential between a male-written play and a female-written play can be expressed as

*Equation 6.1:*

$$\begin{aligned} \pi_M - \pi_F = & (p_M(q_M, n_M s_M) n_M s_M - p_F(q_F, n_F s_F) n_F s_F) - (c_M(w_M, r, X) n_M - c_F(w_F, r, X) n_F) \\ & - ((f_M + Z_M) - (f_F + Z_F)) \end{aligned}$$

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<sup>40</sup> Most non-profit firms, meanwhile, appear to engage in least-cost production (see, for example, Newhouse, 1970).

Again assume two otherwise identical scripts, one written by a man and the other written by a woman. Because they are otherwise identical, the plays are of equal quality ( $q_M = q_F$ ). For now, assume also that the plays would be performed on stages of equal size ( $s_M = s_F$ ) for the same number of weeks ( $n_M = n_F$ ), and that the fees paid to playwrights and all other fixed costs of the two plays are equal ( $f_M + Z_M = f_F + Z_F$ ).<sup>41</sup>

Assume there is both customer and worker discrimination; audience members prefer to see the male-written play, and cast and crew prefer to work on the male-written play.<sup>42</sup> Equation 5.1 then becomes

Equation 6.2:

$$\pi_M - \pi_F = \left( p_M(q, ns) - \left( \frac{p_M(q, ns)}{1 + d_c} \right) \right) ns - (c_M(w_M, r, X) - c_F(w_M(1 + d_w), r, X))n$$

Customer discrimination would drive down the revenues accrued by the female-written work. Worker discrimination, meanwhile, would drive up the costs of producing the female-written work. Therefore, both customer and worker discrimination are accounted for in a comparison of profits between the two plays. h

In general terms, employers can discriminate by refusing to hire someone with a marginal value greater than his/her marginal cost; in the context of play production, I

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<sup>41</sup> In subsequent empirical analyses, I consider whether weeks in production do, in practice, vary with playwright gender.

<sup>42</sup> Since the scripts are otherwise identical, a preference for the male-written work among audience members is overt customer discrimination. A perhaps more prevalent source of audience preference for male-written works could arise if the scripts were not otherwise identical. In this case, audience members could prefer the male-written work because they have a taste for the types of works written by men. This is not overt discrimination. In fact, if a key end-goal of theater is connection with the audience, this is a wholly reasonable measure of play quality. Understandably, the average woman writes a different kind of play than does the average man. Some have hypothesized that this “feminine aesthetic,” as it is often termed, may have less appeal to audiences and, therefore, lower profitability. However, any such differences will be accounted for by the variable  $q$ , the quality of the play, in the model. If one assumes approximately equal costs in producing female-written and male-written plays, then, male-written plays would be more profitable. This alone could justify the greater number of male-written works selected by artistic directors for production.

define the marginal value of a play as that play's profitability and the marginal cost of a play as the profitability of the relevant alternative play that could instead be staged in the theater. In terms similar to those of Becker, when faced with two plays, a male-written play with profitability  $\pi_M$  and a female-written play with profitability  $\pi_F$ , a discriminatory artistic director selects the female play only if  $\pi_F(1 - d_e) > \pi_M$  where  $d_e$  is the discrimination coefficient measuring the intensity of that employer's taste for discrimination.

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## 6.2 EMPIRICS: TESTING FOR DISCRIMINATION VIA PROFITS

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### 6.2.1 METHODOLOGICAL ISSUES

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In order to isolate employer discrimination, I would like to define a play's "quality" as its total profits. Total profits, in turn, are the difference between total revenues and total costs. Unfortunately, production costs are unpublished and difficult to estimate accurately. From the available data, only total revenues are observable. These total revenues can be separated into average weekly revenues and run lengths, where a play's run length is defined as the number of weeks the play remains in production. In what follows, I present estimates of differences in weekly revenues and run lengths between female-written and male-written plays on Broadway. Using either weekly revenues or run lengths as proxies for profits has strengths and weaknesses.

Two issues are important for using differences in average weekly revenues to estimate differences in profits between female-written and male-written productions. First, if plays written by women tend to have different production costs than those written by men, my estimates of gender differences in profitability will be biased. In particular, if

women write plays with lower (higher) production costs than do men, using revenues as a proxy for profits to measure quality will place a downward (upward) bias on my estimates of discrimination. If, however, female-written plays do not tend to have different production costs than male-written plays, using average weekly revenues as a measure of profits will provide unbiased estimates of employer discrimination. Second, even if the only difference in production costs between the genders would arise from worker discrimination, rejection of the null hypothesis that the marginal male-written and female-written plays have the same revenues only implies discrimination by employers and/or by workers; it does not allow me to distinguish between employer discrimination and worker discrimination.

Two issues are important for the analysis of discrimination using differences in run-lengths between female-written and male-written production. First, if I assume that the decision of whether or not to keep a show on Broadway is determined only by the extent to which that show advances the goal of nearly all Broadway theaters – profit maximization – a comparison of run-lengths better controls for any noise from variation in production costs between the genders than does a comparison of average weekly revenues. Specifically, since some of the variation in production costs between the genders may arise from worker discrimination, this methodology would target employer discrimination more precisely. Second, however, run-lengths are only a good proxy for total profits if I maintain the assumption that the decision of whether or not to keep a show on Broadway is determined solely by the goal of profit maximization. If I relax this assumption and consider that decision-makers in Broadway theaters may take into account their own tastes not only in deciding whether or not to accept a play for

production, but also in deciding how long to produce that show, run-lengths are no longer a good proxy for total profits. For example, to the extent that artistic directors have some preference for keeping male-written works in production, female-written works may have run lengths equal to the run lengths of male-written works, even amid higher profits accrued by female-written works.

Regardless of my measure of quality, I am forced to substitute average values for marginal values. How would one define the “marginal” male-written or female-written play on Broadway? One option would be to examine plays just off-Broadway. Revenue and run length data for plays just off-Broadway are, however, far more challenging to obtain. I therefore examine the plays actually on Broadway and infer marginal values from average Broadway values.

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## 6.2.2 DATA

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In this chapter I employ weekly revenue data from BroadwayLeague.com, the official website of the Broadway Theater Industry, for all plays produced on Broadway over the decade-long period beginning January 1, 1999 and ending January 1, 2009.<sup>43</sup> This dataset includes the 355 productions produced on Broadway in at least one of the 520 weeks in this window.<sup>44</sup> To eliminate survivorship bias I drop from the sample the 26 productions that began before January 1, 1999; this yields a sample of 329 productions.

The Broadway Theater Industry reports data by show not only on weekly revenue, but also on the number of tickets sold weekly; dividing weekly revenue by the number of

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<sup>43</sup> All data used is publically available at [www.broadwayleague.com](http://www.broadwayleague.com).

<sup>44</sup> In fact, there are 387 productions in the full sample. However, thirty-two of these are concerts, stand-up comedies, dance shows, poetry, magic, or some other type of production without a clearly identifiable playwright or book writer. Exempting these productions leaves a sample of 355 straight plays, musicals, one-man shows, and other types of productions with a clearly identifiable playwright or book author.

tickets sold weekly yields the average ticket price each week. Averaging a play’s weekly ticket price, number of tickets sold, and revenue across the run length of each show, I generate the average ticket price, the average number of tickets sold, and the average weekly revenue for that play. From weekly revenues I also calculate the run length for each play, defined as the number of weeks the play remained in production on Broadway between January 1, 1999 and January 1, 2009. Table 6.1 displays summary statistics for these variables.

<b>Variable</b>	<b>Obs.</b>	<b>Mean</b>	<b>S.D.</b>	<b>Min</b>	<b>Max</b>
Average Ticket Price	329	\$55.44	\$15.14	\$14.12	\$112.87
Average Tickets Sold (per week)	329	5,592	2,340	826	15,376
Average Revenue (per week)	329	\$332,196	\$213,329	\$23,606	\$1,305,905
Run Length (in weeks)	329	32.46	48.54	1	378

Notes: This table contains summary statistics for the 329 productions on Broadway with an identifiable playwright or book-writer over the decade-long period starting January 1, 1999, excluding plays that began before January 1, 1999. The reported run length for the 30 plays still in production on January 1, 2009 is the lower bound as these plays may have remained in production beyond the end of the chosen window.

As discussed, I am unable to control precisely for production costs. I do, however, control for play type since there are large variations in costs across play types; the average musical, for example, is intuitively far more expensive to produce than the average one-man show as it has a larger cast and more ornate sets and costumes. I distinguish among four types of plays: musicals, straight plays, one-man shows, and exceptions.<sup>45</sup>

<sup>45</sup> I classify as exceptions shows with a clearly identifiable playwright or book writer that do not fit well into one of the other three categories. For example, Cirque Dreams: Jungle Fantasy, which is a production in the style of Cirque de Soleil, is classified as an exception.

From Internet Broadway Database, the official database for Broadway theater information, I obtain the gender(s) of the playwright(s) of each production.<sup>46</sup> Musicals have three writers – a book writer, a composer, and a lyricist. For the purpose of this study, I am most interested in the gender of the individual writing the text of the story and so code musicals based on the gender of the book writer. Of the 326 productions in the sample, 13 are written by some combination of male and female writers. I code these based on the relative frequency of female writers.<sup>47</sup> Table 6.2 contains the frequency of male-written, coed-written, and female-written productions in my sample. In all, only 11 percent of productions in the sample are written exclusively by a woman.

Play Type	Frequency (Row Percentage)			Total
	Male Playwright	Co-ed Playwright	Female Playwright	
Musical	102 (83.30)	8 (6.61)	11 (9.09)	141 (100.00)
Straight	131 (88.51)	0 (0.00)	17 (11.49)	151 (100.00)
One-Man	20 (71.43)	4 (14.29)	4 (14.29)	28 (100.00)
Exception	28 (87.50)	0 (0.00)	4 (12.50)	32 (100.00)
<i>Total</i>	<i>281</i> <i>(85.41)</i>	<i>12</i> <i>(3.65)</i>	<i>36</i> <i>(10.94)</i>	<i>329</i> <i>(100.00)</i>

Notes: This table identifies the play type and playwright gender of the 329 shows on Broadway during the decade-long period beginning January 1, 1999, exempting both productions without an identifiable playwright or book writer and productions that opened before January 1, 1999. Row frequencies are reported in parentheses.

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## 6.2.3 Methodology and Results

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### 6.2.3.1 BASIC DECOMPOSITION

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<sup>46</sup> Data used for gender-coding is publically available through the Internet Broadway Database at [www.ibdb.com](http://www.ibdb.com).

<sup>47</sup> For example, Broadway's *Lion King*, which was co-written by Roger Allers and Irene Mecch, I code as half female-written. Similarly, the musical *It Ain't Nothin' but the Blues* has five authors, one of whom is female; I thus code this production as 20% female-written.

I estimate the total revenue differential between male-written and female-written plays on Broadway, decomposing this differential into differences in average weekly revenues and differences in run lengths.

To derive the methodology, first note that

$$TotalRevenue_p^s = \sum_{w=j}^{j+r} Rev_{w,p}^s$$

where  $Rev_{w,p}^s$  is the revenue in week  $w$  of production  $p$  written by playwright of sex  $s$ ; this production  $p$  opens in week  $j$  and remains in production for a run length of  $r$  weeks. Multiplying by  $\frac{r}{r}$ , this can be decomposed into the product of average weekly revenue and run length as follows:

$$\begin{aligned} TotalRevenue_p^s &= \left[ \frac{1}{r} \sum_{w=j}^{j+r} Rev_{w,p}^s \right] * r \\ &= AverageWeeklyRevenue_p^s * RunLength_p^s \end{aligned}$$

A log-transformation of this equation yields the additive function

$$\ln(TotalRevenue_p^s) = \ln(AverageWeeklyRevenue_p^s) + \ln(RunLength_p^s)$$

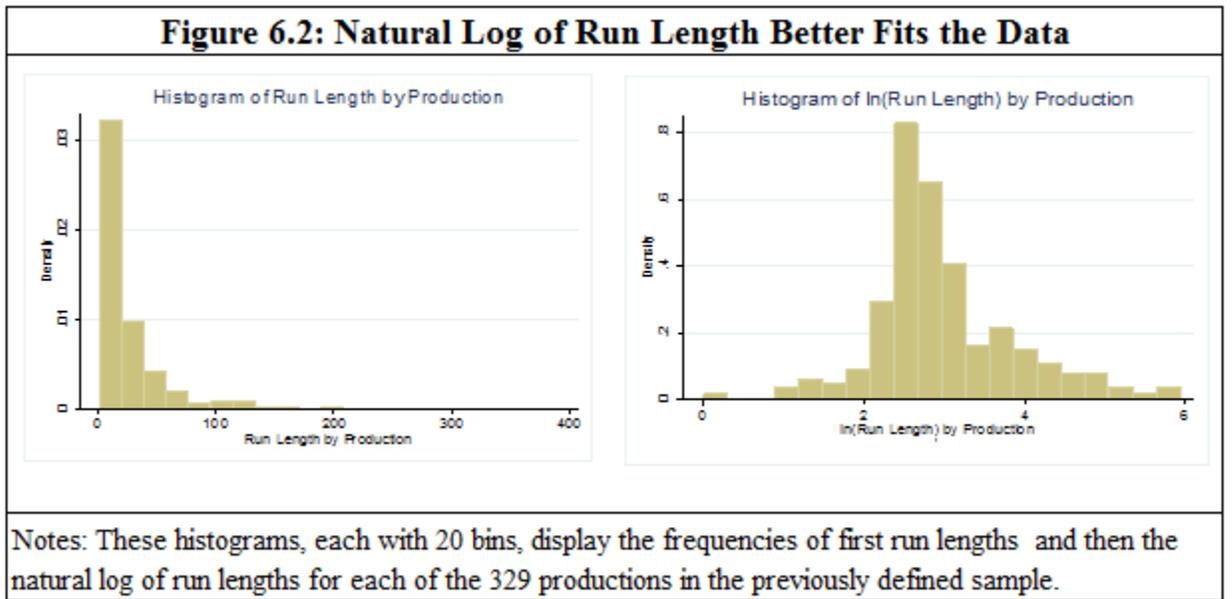
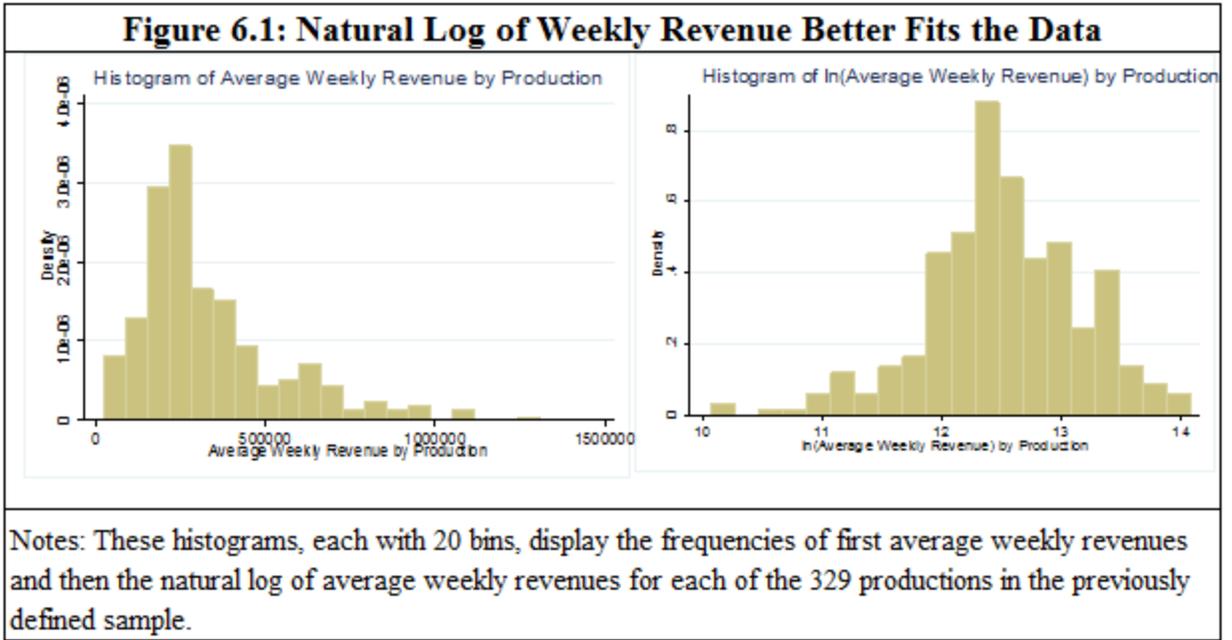
Therefore, the difference between the natural log of total revenues of a given female-written play, call it Production 1, and a given male-written play, call it Production 2, is

$$\ln\left(\frac{TotalRevenue_1^F}{TotalRevenue_2^M}\right) = \ln\left(\frac{AverageWeeklyRevenue_1^F}{AverageWeeklyRevenue_2^M}\right) + \ln\left(\frac{RunLength_1^F}{RunLength_2^M}\right)$$

The percentage difference in total revenues between the female-written and male-written plays, then, is the sum of the percentage differences in average weekly revenues plus the percentage difference in run-lengths.

The log transformation simplifies the calculation; it also best fits the data. Histograms of average weekly revenues and run lengths reveal long right tails.

Histograms of the natural log of each variable, in contrast, more closely resemble normal distributions (Figure 6.1, 6.2).



In the decomposition of  $\ln\left(\frac{\text{TotalRevenue}_f}{\text{TotalRevenue}_M}\right)$  I estimate

*Equation 6.3:*

$$\ln(Y_p^g) = \alpha_0^g + \alpha_1^g \text{FemalePlaywright}_p + \alpha_2^g \text{StraightPlay}_p + \alpha_3^g \text{Musical}_p \\ + \alpha_4^g \text{OneManShow}_p + \sum_{b=2}^{24} \alpha_{4+b}^g \text{OpeningHalfYear}_{p,b} + \mu_p^g$$

where  $\ln(Y_p^1) = \ln(\text{AverageWeeklyRevenue}_p)$  and  $\ln(Y_p^2) = \ln(\text{RunLength}_p)$ . I include *StraightPlay<sub>p</sub>*, *Musical<sub>p</sub>*, and *OneManShow<sub>p</sub>* indicators to control partially for production costs.<sup>48</sup> In addition, I include half-year indicators to control for any average weekly revenue or run-length differences in plays that open at different points in the decade-long sample.

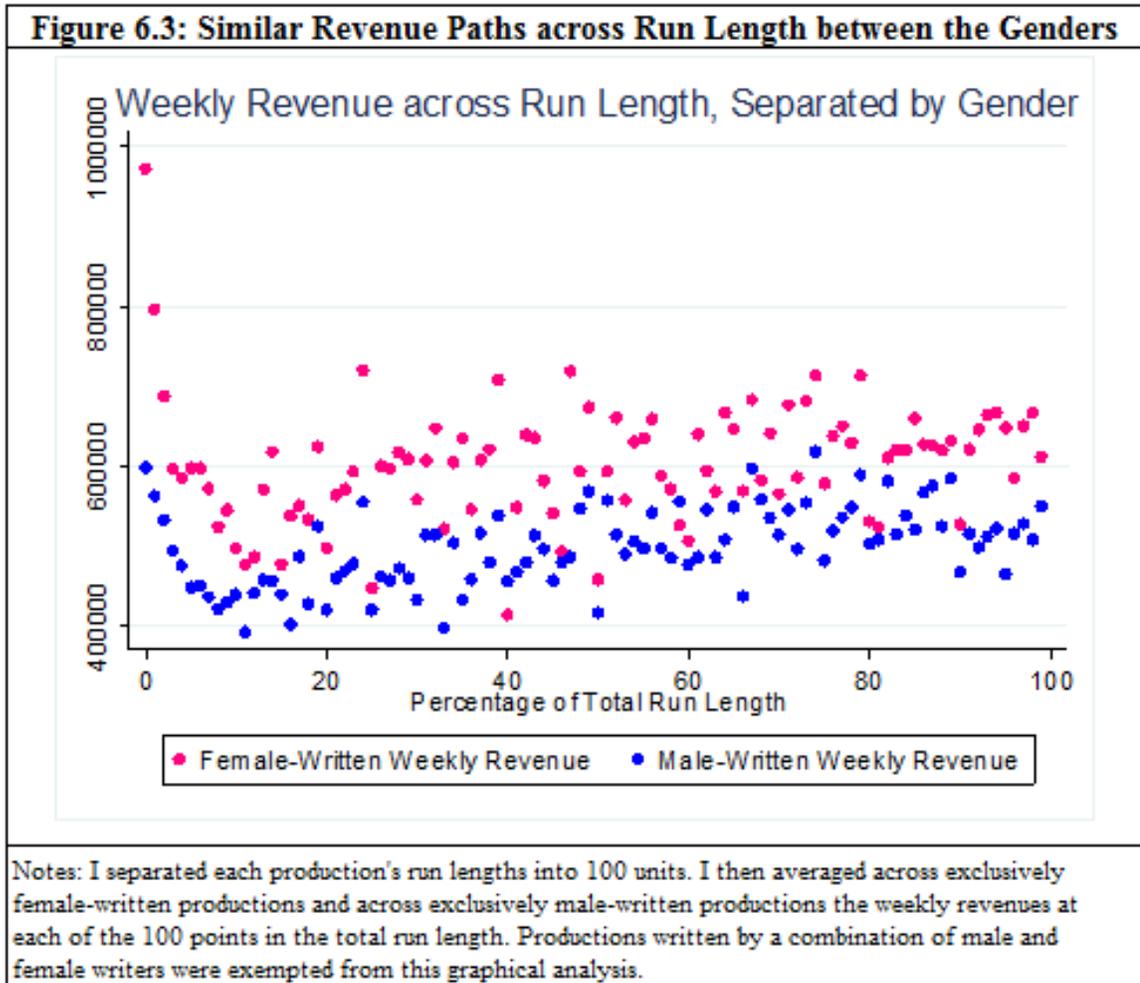
In my estimations, I account for the artificial truncation of the data resulting from the arbitrarily-chosen decade-long window. Recall that I dropped from the sample all shows that began before January 1, 1999 in order to avoid survivorship bias; therefore, I need not factor in truncation on this end. However, shows that remained in production beyond January 1, 2009 have been left in the sample.

As indicated by Figure 6.3, which displays weekly revenues averaged across first female-written and then male-written plays for each percentage of the plays' total run-lengths, the slight increase in weekly revenues over the course of the average female-written play's run-length is approximately equivalent to the increase in weekly revenues over the course of the average male-written play's run length. For the 30 productions that continued beyond January 1, 2009, then, the relationship between the average weekly revenues of male-written and female-written plays calculated with the available data should be very similar to the actual relationship observed with additional data in the future. Therefore, when the dependent variable is defined as the natural log of average

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<sup>48</sup> I omit the indicator *Exception<sub>p</sub>* to avoid perfect multi-collinearity.

weekly revenue ( $g = 1$ ), I need not account for censoring and so estimate *Equation 6.3* by OLS. The resulting estimates of  $\alpha_1^1$  are the percentage difference in average weekly revenues between male-written and female-written plays, controlling for play type and the half-year in which the play opened.<sup>49</sup> Results are reported in Table 6.3.



I do, however, account for truncation at the end of the sample when defining the dependent variable as the natural log of run length. The reported run lengths of the 30 plays in the sample that remained on Broadway after January 1, 2009 are right-censored;

<sup>49</sup> i.e.  $\hat{\alpha}_1^1 = \ln \left( \frac{\text{AverageWeeklyRevenue}^F}{\text{AverageWeeklyRevenue}^M} \right)$

that is, I know with certainty only that the run length is greater than or equal to the run length calculated during the decade-long window. Therefore, when the dependent variable is the natural log of run length ( $g = 2$ ), I estimate *Equation 6.3* with a censored-normal regression. The resulting estimates of  $\alpha_1^2$  are the percentage difference in run lengths between male-written and female-written shows, again controlling for play-type and the half-year in which the play opened.<sup>50</sup> Results are reported in Table 6.3.

Over the past decade, female-written productions on Broadway have, on average, garnered significantly higher weekly revenues than their male-written counterparts. Specifically, controlling for play type, female-written productions garner an estimated 18% higher weekly revenue than their male-written counterparts; this estimate is statistically significantly different from zero at the 10% level. Assuming approximately equal production costs between the genders for shows of the same type, this indicates that female-written plays on Broadway are, on average, more profitable than their male-written counterparts. If this holds not only for the average play, but also for the marginal play, it provides evidence of employer discrimination on Broadway as female-written works must be more profitable than male-written works in order to be selected by artistic directors for production.

Despite the higher average weekly revenue accrued by female-written shows, female-written shows have run-lengths that are approximately equal to those of their male-written counterparts, again controlling for play type. This result could have at least two interpretations. First, if I assume that employer discrimination might occur only in the decision of whether or not to begin producing a play, and that the decision of whether

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<sup>50</sup> i.e.  $\hat{\alpha}_1^2 = \ln\left(\frac{RunLength^F}{RunLength^M}\right)$

or not to continue producing that play is contingent only on profitability, then the equal run lengths indicates that, although female-written plays have higher revenues, they have equal profits. This would imply higher costs for female-written plays. Second, if I allow for the possibility of employer discrimination also in the decision of whether or not to continue producing any given play, the equal run-lengths of male-written and female-written works amid higher average weekly revenues of female-written works provide evidence of higher costs for female-written works and/or employer discrimination.

Table 6.3: Result of Equation 6.3		
Dependent Variable	ln(Average Weekly Revenue)	ln(Run Length)
Female Playwright	0.1813* (0.0948)	-0.1206 (0.1412)
Straight Play	0.3086*** (0.0986)	0.9956*** (0.1736)
Musical	0.8964*** (0.0982)	0.2593 (0.1726)
One-Man Show	-0.0645 (0.1542)	0.2039 (0.2252)
$R^2$	0.5616	0.1915

Notes: This table contains the results of the regressions of first the natural log of average weekly revenues and then the natural log of run length on playwright gender, controlling for play type. Where the dependent variable is defined as the natural log of average weekly revenue, these are the results of an OLS regression and the reported  $R^2$  is the standard  $R^2$ . Where the dependent variable is defined as the natural log of run length, these are the results of a censored-normal regression, where productions that played beyond January 1, 2009 are left-censored; in this case, the reported  $R^2$  is a pseudo- $R^2$ . In both cases, Huber-White standard errors are reported in parentheses. Both samples have 329 observations, one for each of the productions in the decade-long sample with an observable writer, exempting productions that began before January 1, 1999. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

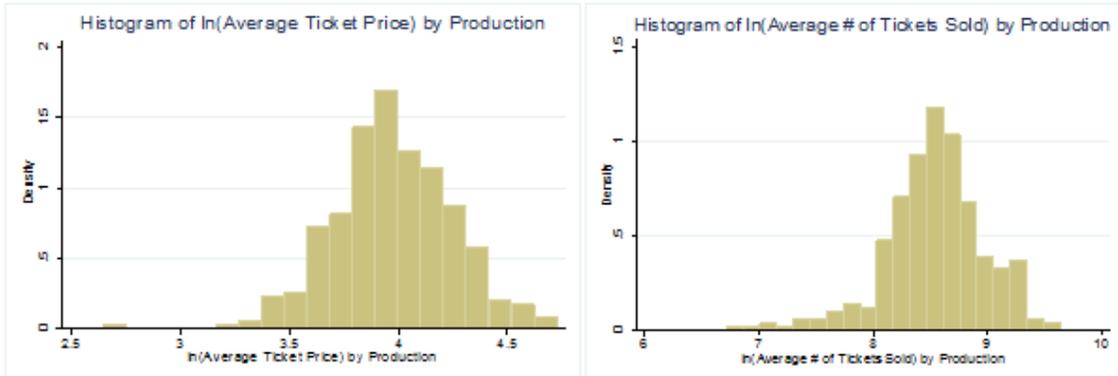
### 6.2.3.2 EXTENDED DECOMPOSITION

Having found that female-written plays on Broadway have higher average weekly revenues, I examine whether these higher average weekly revenues are driven by higher average ticket prices charged by Broadway theaters for female-written productions or by a greater average number of tickets sold per week to female-written shows.<sup>51</sup> As in my analysis of average weekly revenues and run lengths, log transformations of average

<sup>51</sup> I define the average number of tickets sold as  $\frac{1}{r} \sum_{w=j}^{j+r} (\# Tickets Sold_w)$  and the average ticket price as  $\frac{1}{r} \sum_{w=j}^{j+r} \frac{Rev_w}{\# Tickets Sold_w}$ .

ticket price and average number of tickets sold result in approximately normal distributions (Figure 6.4).

**Figure 6.4: Distributions of the Natural Log of Average Ticket Price and the Natural Log of Average Number of Tickets Sold Weekly**



Notes: These histograms, each with 20 bins, display the frequencies of first the natural log of average ticket price and then the natural log of the average number of tickets sold weekly for each of the 329 productions in the previously defined sample.

I therefore re-estimate *Equation 6.3* defining the dependent variable first as the natural log of the average ticket price and then as the natural log of the average number of tickets sold. Results are displayed in Table 6.4. Broadway theaters charge nearly identical ticket prices for female-written and male-written productions. However, the average female-written work on Broadway sells more tickets per week than its male-written counterpart. Overall, then, the average female-written play has greater audience appeal than does the average male-written play. To the extent that the audience appeal of the marginal production can be inferred from that of the average production, female playwrights must write works with greater audience appeal in order for artistic directors to select their works for production on Broadway.

Table 6.4: Results of Equation 6.3 for Extended Decomposition		
Dependent Variable	ln(Average Ticket Price)	ln(Average # of Tickets Sold Weekly)
Female Playwright	0.0287 (0.0439)	0.1551** (0.0655)
Straight Play	0.0747** (0.0343)	0.2299*** (0.0812)
Musical	0.2023*** (0.0333)	0.6883*** (0.0827)
One-Man Show	0.0497 (0.0581)	-0.1194 (0.1137)
$R^2$	0.529	0.5218

Notes: This table contains the results of OLS regressions of first the natural log of average ticket price and then the natural log of average number of tickets sold weekly on playwright gender, controlling for play type. In both cases, Huber-White standard errors are reported in parentheses. Both samples have 329 observations, one for each of the productions in the decade-long sample with an observable writer, exempting productions that began before January 1, 1999. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

### 6.3 CONCLUSION

In this chapter, I decomposed total revenue differentials between male-written and female-written works on Broadway over the past decade. I find that, for the sample type of play, female-written shows have significantly higher average weekly revenue, but remain in production for approximately the same number of weeks. Unless female-written works have higher production costs than their male-written counterparts, even after controlling for play-type, this provides evidence that artistic directors on Broadway discriminate against female playwrights both in the decision of which scripts to select for production and in the decision of how long to keep shows in production. In addition, decomposing the average weekly revenue differential between male-written and female-written works into average ticket prices and average numbers of tickets sold, I find that, while Broadway theaters charge nearly identical ticket prices for female-written and male-written shows, female-written shows sell significantly more tickets per week. Female-written scripts, then, must have greater higher audience appeal than their male-written counterparts in order to be selected by artistic directors for production on Broadway.

The methods employed in this chapter have some limitations. First, the conclusions of this study are certain to hold only if there are both male-written and female-written plays available for production that are just marginally inferior to the average male-written and female-written plays currently on Broadway, respectively. This assumption is challenging to test as the actual profits of the marginal plays are difficult to predict *ex ante*. As mentioned, to the extent that plays just off Broadway represent the marginal plays, a follow-up analysis on plays just off Broadway would shed additional light on the relationship between the profits of Broadway's marginal male-written and female-written productions. Second, recall that I control only imperfectly for production costs throughout this chapter. Another follow-up study with similar analyses performed using actual production costs – or more complete proxies for them such as number of set changes and number of parts – will provide more definitive evidence of employer discrimination on Broadway.

## CHAPTER 7

### CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER ANALYSIS

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On aggregate, the results of the three empirical methods presented in this thesis provide evidence that female playwrights face more barriers in achieving production than do their male counterparts.

Separating the explained from the unexplained, I find ample evidence of occupational differences between male and female playwrights, but no direct evidence of employment differences between the genders. The data used in this analysis, however, were neither comprehensive nor a random sample of playwrights and their scripts. In addition, the method almost certainly induced omitted variable bias. Since a more comprehensive dataset is not available, further attempts to separate the explained from the unexplained in the script selection process will be subject to similar flaws. I therefore undertook two additional analyses, one experimental and the other observational.

Results of my adaptation of the experimental audit study reveal ample evidence of all three forms of taste-based gender discrimination in theater. Scripts bearing female pen-names are deemed by artistic directors to be of lower overall quality and to face poorer economic prospects than otherwise identical scripts bearing male pen-names. In addition, artistic directors believe cast and crew will be less eager to work on a female-written script. Female artistic directors, in particular, deem scripts bearing female pen-names to be poorer fits with their theaters, and to face not only worker discrimination, but also customer discrimination. The severity of the discrimination against female playwrights appears to be more pronounced for women writing about women than for

women writing about men. Interestingly, even amid much taste-based discrimination, the results of this audit study provide no evidence of statistical discrimination.

Since this audit study may suffer from hypothetical bias, a more realistic audit study could be the basis for future research. Such a study might distribute script excerpts as if they were genuine submissions and compare the rates at which purportedly female-written and purportedly male-written scripts yield requests for full readings. Upon sending out full scripts, the study could then examine the rates at which purportedly female-written and purportedly male-written scripts are actually selected for production.

In this thesis, I also took an observational approach to studying gender discrimination in theater. To test for actual taste-based employer discrimination on Broadway, I compared the profits of the male-written and female-written plays in production over the past decade. I find that, while less than one-eighth of productions on Broadway are female-written, female-written plays on supposedly profit-maximizing Broadway over the past decade averaged significantly higher revenues than did their male-written counterparts. This result holds even when controlling for play type, a partial proxy for production costs. Female-written scripts, then, must have higher audience appeal than their male-written counterparts in order to reach production. These results provide preliminary evidence of discrimination by artistic directors on Broadway.

My analysis of employer taste-based discrimination on Broadway has two main limitations. First, it is an analysis of the difference in the qualities of the average female-written and male-written plays, not of the difference in the qualities of the marginal scripts. It is the relative qualities of the marginal female-written and male-written scripts, however, which determine whether theaters maximizing pure profits should select a script

by a woman or by a man for production. Future research could define the quality of Broadway's marginal script as the quality of the average play just off Broadway, compare the average profits of male-written and female-written plays just off-Broadway, and use these results to infer the relative qualities of the marginal male-written and female-written scripts for Broadway.

My analysis of employer taste-based discrimination on Broadway was also limited by only partial controls for production costs. The theaters themselves likely retain comprehensive records of production costs; if these data could be obtained, the estimates of the average profit differential between male-written and female-written plays on Broadway could be estimated more accurately. Even in the absence of true production costs, additional proxies such as the number of set changes and the number of parts could be included to control more completely for any variation in production costs between male-written and female-written works.

Although this thesis focused on potential gender discrimination in the decision of which plays to select for production, the results of the audit study indicate that artistic directors perceive scripts bearing female pen-names also to be less likely to receive prizes and awards. Since these very artistic directors are often the judges in playwriting competitions, I have reason to believe that gender discrimination may occur in the allocation of prizes and awards as well. One creative approach to testing for gender discrimination would be to compare the more recent results from competitions that are now blind with the older results from those same competitions during periods in which they were not blind (see, for example, Blank, 1991; Goldin and Rouse, 2000).<sup>52</sup>

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<sup>52</sup> The O'Neill Theater Program, which transitioned to a blind process in the early 1990s, provides one such natural experiment.

Alternatively, or in addition, future research could compare the results of blind competitions with otherwise comparable non-blind competitions in a test for gender discrimination in the allocation of playwriting prizes and awards.

## APPENDICES

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### APPENDIX A HARD-COPY OF ONLINE AUDIT STUDY

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#### EMAIL TO SURVEY RECIPIENTS

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Hello,

I hope you recently received my letter asking you to participate in important research on the decision making process behind play production. In conjunction with Dr. Cecilia Rouse of Princeton University, I am conducting an independent study of the factors influencing whether a script is selected for production at theatres nationwide. The participation of your theatre's artistic director or literary manager is critical to the success of the study. We believe the results of this study, which will be made available to your theatre, will be important to help all concerned parties better understand the decision making process.

The survey presents short excerpt from each of four plays and asks that you share your personal evaluation of the scripts. It also asks a brief series of questions about you and your theatre. Your personalized link to this survey is

**[http://www.princetonosurvey.org/survey/\[PersonalizedCode\]](http://www.princetonosurvey.org/survey/[PersonalizedCode])**

As a reminder, all responses to this survey will be kept strictly confidential. Neither you nor your theatre will ever be identified by name or in any other manner that could allow another researcher, member of the theatre community, or member of the public to infer your identity. We sincerely hope that you will complete this questionnaire. If for any reason you prefer not to answer it, please let me know by sending me an email at this address, [esands@princeton.edu](mailto:esands@princeton.edu)

We recognize that you have many constraints on your time, and appreciate the time that you will put into our survey. As an added incentive, we will enter all participating theatres in a random drawing for **one of four \$1,000 donations**. To be eligible for the drawing, you must return complete the survey online by **February 5, 2008**. I want to thank you in advance for your time. If you have any questions or concerns, please feel free to call me at (406) 581 8418.

Sincerely yours,

Emily Sands  
Principal Investigator  
Princeton University

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## ONLINE SURVEY

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### The Process of Script Evaluation

Welcome. This survey studies the decision making process behind play production. The survey results will be used to better understand the reasons different scripts are selected for production in different theaters. Your responses are very important to this research. We ask that you answer each question, although you may skip any question you prefer not to answer.

Please remember that all responses to this survey will be kept strictly confidential and neither you nor your theater will ever be identified by name or in any other manner that could allow another researcher or member of the public to infer your identity.

The survey should take about 40 minutes to complete. If at any point you feel like taking a break you may come back to complete it at a later point. Just close the survey. The next time you click the link, you will be automatically taken to the point in the survey where you left off. You may change any of your responses at any point while taking the survey; once you have completed the survey, however, your responses will be recorded and no further changes may be made.

After you have completed this survey, your theater will be entered in a drawing to win one of four \$1,000 donations.

Questions about the survey may be directed to: Emily Sands at [esands@princeton.edu](mailto:esands@princeton.edu) or toll-free at (866) 823 4833. Questions about your rights as someone taking part in the study may be directed to: Joseph Broderick at (609) 258 3976

Please think specifically about your theater:

▶ How many stages does your theater have?

Please select one ... ▼

▶ How many audience members does your largest stage seat?

Please select one ... ▼

▶ Please briefly summarize your theater's mission statement.

NEXT >>

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## The Process of Script Evaluation

We will now run through four short excerpts, each followed by a brief series of questions.

If you prefer, you may print out the excerpts to read hard-copy. We do, however, ask that you return to the computer after reading each individual excerpt in order to complete the brief questionnaire online.

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Completed 3%

The Emperor Breathes

by Michael Walker  
One Act Play

Place

A presidential dwelling  
Whenever

Characters

The Emperor  
The Scribe

The Emperor, an elderly African man with a distinguished face, sits slumped over in his chair. Eyes closed, mouth agape. Still. The Scribe, a petite African man with a deferential posture, enters.

He studies the Emperor from afar.

The Scribe slowly creeps toward the Emperor, hesitates, then places his ear to the Emperor's mouth.

A moment.

EMPEROR

Yes, I'm still breathing you fool, now move away.

The Scribe, startled, drops his notebook. The loose papers scatter.

SCRIBE

Oh thank goodness, (gathering papers) Your Benevolence.

EMPEROR

Why are you hovering? Make yourself useful and get me something to drink.

SCRIBE

Magnanimous sir, the physician has forbidden vice.

EMPEROR

Really? Well, when our young physician has lived as long as I, only then will I heed his advice.

SCRIBE

But, if I bring you spirits, and God forbid...you know, they'll write that I was your assassin.

A moment.

EMPEROR

So? At least you'll be remembered. Damn you, get me a drink, I need a drink to face this day.

SCRIBE

As you wish.

EMPEROR

What? No argument? Why?

Surprised, the Emperor sits erect.

EMPEROR (continued)

But you frighten me, my friend, my Scribe. I might think that you were conspiring with the generals to kill me. You give in so easily this morning.

SCRIBE

I certainly am not!

EMPEROR

Said with too much conviction, (snaps) I don't believe you.

SCRIBE

(softer/apologetic) I will not be your assassin.

EMPEROR

No? Come here! Let me see your eyes.

The Scribe eases toward the Emperor.

EMPEROR

No, I'm afraid the coward still dwells behind your eyes. Move away. You sicken me.

The Scribe bows and retreats.

SCRIBE

How did his benevolence sleep?

EMPEROR

I was poisoned again in my dreams. I recognized the bitter after taste. I awakened before death overwhelmed me.

SCRIBE

But you awakened, and that is such a blessed event. Oh yes, a reason to rejoice, no?

A moment. The Emperor stares long and hard at the Scribe.

SCRIBE

Blessed, yes, did I say blessed? Yes. Blessed.

EMPEROR

Enough.

SCRIBE

Shall I fetch your drink?

EMPEROR

I am no longer thirsty, you idiot.

SCRIBE

Beg my pardon, your eminence. I will move more quickly in the future.

EMPEROR

Yet, another promise to be broken. Have you forgotten why you're here?

A moment.

What's the business at hand?

SCRIBE

Where shall we begin today?

EMPEROR

Is my wife still in Zurich?

SCRIBE

It was Geneva, I believe.

A moment.

EMPEROR

Oh... Tell me this, have the rebels been subdued?

SCRIBE

We are working on it.

EMPEROR

Very good, Scribe. Then all is satisfactory.

The Scribe sits down.

SCRIBE

Excuse me, but I have something to discuss with you, most gracious and good. The generals are out—

EMPEROR

Ah! Let the vultures circle. They need the exercise.

SCRIBE

But, may I be so bold as to be honest with you--

EMPEROR

Correspondence. I want to hear my correspondence!

The Scribe opens his note book.

SCRIBE

(tentatively) The Minister of agriculture is resigning, there's a letter from the German Ambassador, it seems he objects to having been fined for a public display of ostentation. A note from your wife's accountant. The minister of (clears his throat) has made some requests. Your physician wishes to be paid. The League of Women, object. And AIDS, well, AIDS. And there are several documents on matters of the state.

The Scribe quickly thumbs through the papers.

SCRIBE (continued)

Not important, not important, um, not important.

A moment.

Oh yes that Organization of – you know. Again.

EMPEROR

Again?

SCRIBE

Again.

EMPEROR

Damn them. Where do they get the gall? Round up those bastards and give them a lesson in. . .etiquette.

SCRIBE

But the gendarmery have not been paid.

EMPEROR

And why not?

SCRIBE

I don't know.

EMPEROR

Whose job is it to ensure that these things get done?

SCRIBE

It was the Under Secretary's, but he was arrested last month. No predecessor has been appointed.

EMPEROR

He was a pompous fool. Am I wrong? You tend to it. Assign someone. No, have a touch more of the blue stuff printed. Small denominations this time. And follow it with a decree of some sort.

SCRIBE

But-

EMPEROR

Bla, bla, bla. Make it happen.

The Scribe writes as the Emperor speaks.

SCRIBE

As you know the North has been devastated by a storm, cholera is officially a concern, and your wine has won a competition in California, a silver medal. Bravo! And, oh yes, she has written again.

The Emperor giggles.

EMPEROR

She?

A moment.

EMPEROR

She has written.

SCRIBE

But, the Generals are waiting outside. That is what I wish to discuss with you. Should I have them come in now, Your Benevolence?

EMPEROR

Let them wait. I'm not in the mood today. Imbeciles, vultures, parasites, hyenas I am surrounded by opportunists and maggots. Anyway. What, what, WHAT?

SCRIBE

They are very anxious to speak with you. They want to-

EMPEROR

Enough. (Without a breath) Did I tell you I was poisoned again in my dreams? Fed figs by a friend with a serpent's tongue. I ate until the dish was clean  
As I doubled over in pain, the entire empire vanished beneath a canopy of clouds, and I awakened alone in bed and for the briefest of moments it was a relief. Have you anything to say?

SCRIBE

Is that why you appear tired, your ineffable?

EMPEROR

I am tired. Tell me what the papers are writing?

SCRIBE

They write the same things every day...

EMPEROR

Which is? Go on.

SCRIBE

Of your impending demise.

EMPEROR

(with wicked smile) But I live on.

SCRIBE

Yes, of course.

EMPEROR

Why are you so cruel to me?

SCRIBE

I, cruel? I am merely an interpreter. You've asked me what they write, the only conqueror, our President. Should I lie?

EMPEROR

(snaps) You always have, my friend.

SCRIBE

And yet you continue to ask?

EMPEROR

Because God damnit your lies are so sumptuous, that the truth seems paltry by comparison. I live in your diabolical lies. In fact, I no longer have a taste for the truth. I forbid it.

SCRIBE

Very well.

The Emperor studies the Scribe.

EMPEROR

How long have we known each other?

SCRIBE

Thirty one years, this Spring.

EMPEROR

It is fair to say that we are friends, no?

SCRIBE

If you'd like. Friends. Perhaps. Why not? Yes.

EMPEROR

I don't know that I've had a friend in thirty one years. No, I haven't permitted myself until this moment. .. I feel the need suddenly for a friend. Impending demise, were those the words used?

SCRIBE

No, I'm afraid they say you are dying.

A moment.

EMPEROR

Am I?

SCRIBE

Your Goodness it not my place to-

EMPEROR

How marvelous to defy expectations. Did it lead? Was it emblazoned across the headlines?

SCRIBE

Yes.

EMPEROR

Which picture?

SCRIBE

Your fatigues.

EMPEROR

Very good. Young, aggressive, virile. Wait one minute. Are you telling me the truth?

SCRIBE

But of course.

EMPEROR

(barks) I want the truth!

SCRIBE

How am I to know that you're not testing me?

EMPEROR

Are you lying to me, then?

SCRIBE

I do only as you wish.

EMPEROR

I want the truth.

SCRIBE

(ventures) The-

EMPEROR

Stop.

The Emperor laughs.

EMPEROR

I know the truth. Now quiet!

A moment.

SCRIBE

I-

EMPEROR

Is there anything that I can do to change things now? I wonder?

SCRIBE

It is always a possibility, is it not?

EMPEROR

But, you are a liar, oh God Scribe you're making me crazy. You have driven me mad. Never mind, never mind. Read me my list of enemies.

The Scribe produces a list.

SCRIBE

Akuna.

EMPEROR

(savoring) Yes, yes. He thinks he's a French man. I swear to you he was two shades darker than I when we were in grade school together. And he went to France during to study economics at the Sorbonne and now he looks like God damn Maurice Chevalier in Gigi (Sings with French accent)"Thank heaven for little girls" I absolutely hate him. So superior and educated, it disgusts me. Place him under house arrest, so I won't have to see him until Spring at the dog races. Next.

SCRIBE

What should I list as his crime?

EMPEROR

The usual.

SCRIBE

Really? And Balunde.

EMPEROR

The name does not register.

SCRIBE  
The wife.

EMPEROR  
The wife?

SCRIBE  
He has the wife with-

EMPEROR  
Ooooo yes, yes, yes. The wicked little creature had the audacity to bring that absolutely luscious woman into my company and parade her like some Indian princess. Did you see the way her big brown bottom rippled beneath the apricot silk? I'm too old to be tantalized. My friend, my scribe I'm an old man and temptation at my age can be deadly, in fact it is a crime.

---

## The Process of Script Evaluation

First, thinking holistically about this script:

▶ On a scale of 1 to 7, how unique is Michael's script?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent is Michael's script an example of artistic exceptionalism?

Please select one ... ▼

▶ On a scale of 1 to 7, how likable are Michael's characters

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Michael winning a prize / award for this script?

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Michael's script being produced somewhere?

Please select one ... ▼

▶ If produced, what would be the venue size of best fit for Michael's play?

Please select one ... ▼

▶ If produced, on a scale of 1 to 7, how positive would you expect the reviews of Michael's play to be?

Please select one ... ▼

▶ Based exclusively on this excerpt, on a scale of 1 to 7, how would you rate Michael's potential for future success?

Please select one ... ▼

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## The Process of Script Evaluation

Now, thinking more specifically about this script in relation to your theater:

▶ On a scale of 1 to 7, how easy would it be for you to cast Michael's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would the crew and theater administrators be to work on Michael's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would your potential audience members be to see Michael's play?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent would the content of Michael's play resonate with your audience members?

Please select one ... ▼

▶ If you have a marketing director, on a scale of 1 to 7, how supportive would your marketing director be of producing Michael's play?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how capable do you think Michael would be of re-writes?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to relate to Michael on a personal level?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to work with Michael?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent does Michael's script match your theater's mission statement?

Please select one ... ▼

▶ On a scale of 1 to 7, how similar is Michael's script to other plays you have produced?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would you be to produce Michael's script?

Please select one ... ▼

You have now finished your evaluation of the first script and are ready to begin reading the second. Remember that if at any point you feel like taking a break you may come back to complete it at a later point. Just close this window. The next time you click the link, you will automatically be taken to this point in the survey.

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The Hoax

by George Hall

The Characters:

Sonny Golden: Stand-up comic. Nasty, bitter, nihilistic, misogynist, but likeable. About to turn 40. At a crisis in his life.

Donny: 30's Sonny's cousin. Married to Luanne. Lots of kids. Lives vicariously through Sonny, whom he admires enormously. Very hen-pecked. Very eager to fit in, be part of the pack.

Vince: 30's Sonny and Donny's friend. Makes soft-core porno films. Wishes he were Sonny. He and Sonny are embroiled in an on-going contest of out-hoaxing each other. Sonny always gets the better of him.

Luanne: 30's Donny's wife. The ultimate five-armed mother. Controls every situation and everyone around her.

Carleen: 30's Attorney. Burned in love. Increasingly bitter and angry.

Scene 1

(Late afternoon. A bench at the playground. Luanne is camped out. She has bags and bags of child paraphernalia surrounding her. She is breast-feeding a baby under a blanket while she eats a sandwich and monitors the other children.)

LUANNE

(Calling across the park)

Hey, little Donny! Get that plastic bag off your head -- that bag is not a toy. No! Not on your little sister. Not... aw jeez.

(Carleen approaches, smoking.)

CARLEEN

Hey, Lu.

LUANNE

Sweetheart! Carleen!

CARLEEN

Don't get up.

(She bends down and kisses her three times -- cheek, cheek, mouth, then exhales her smoke the other way. The baby--)

He's getting big, huh?

LUANNE

Eats like an animal. Here, sit -- move that over -- I brought you a sandwich -- liverwurst -- in the red...

CARLEEN  
That's ok.

LUANNE  
Eat. It's good.

CARLEEN  
I'm not hungry.

LUANNE  
What's wrong? You're not hungry? What's wrong? Is there something wrong?

CARLEEN  
Luanne.

LUANNE  
You look like hell. Are you sleeping?

CARLEEN  
Never eat. Never sleep.

LUANNE  
That smoking is gonna kill you.

CARLEEN  
Wow. You think?

LUANNE  
(The baby bites her.)  
Ow. Hey, Mikey, easy.

(Switching breasts.)  
Like an animal.

(To Carleen)  
So what's a matter with you? You look awful.

CARLEEN  
Thanks.

LUANNE  
You never call. You never come by.

CARLEEN  
I been real...

LUANNE  
You forget you have a family?

CARLEEN  
I got a heavy load right...

LUANNE  
(To child)  
Hey!!! Angie!!! You get down from there. You break your neck, I'm gonna smack you silly.

(Back to Carleen without missing a beat)  
You always got a load. When you gonna get married and have some kids and take it easy for a while?

CARLEEN  
Right after the lobotomy. Look, I got to head back. Good seeing you Luanne.

LUANNE  
What??? You just got here.

CARLEEN  
Yeah, I gotta...

LUANNE  
Fine, Go. We'll see you Sunday.

CARLEEN  
Yeah...

LUANNE  
Wear something colorful. Pink, maybe. You're all washed out.

CARLEEN  
It looks like I'm gonna be working, Luanne. This case...

LUANNE  
On SUNDAY??? No. You don't work on Sunday. You come to dinner. And bring that guy.

CARLEEN  
What guy?

LUANNE

The guy... The guy we saw you with that day. Cute. I liked him.

CARLEEN

Doug?

LUANNE

Doug. Bring Doug.

CARLEEN

I work with Doug. He's not...

LUANNE

So what? There's a law against you working with him?

CARLEEN

Well, actually there's a company policy, but that's beside the...

LUANNE

You bring him to dinner. What can it hurt?

CARLEEN

He's not interested, Luanne.

LUANNE

You pick your head out of your papers you'd notice -- he seemed very interested to me.

CARLEEN

In women, Luanne. He's not interested in women.

LUANNE

He's not interested in... Oh. Huh.

CARLEEN

Yeah, so...

LUANNE

Huh. He seemed so nice.

CARLEEN

Well, that's why.

LUANNE

Aright then. I got someone for you.

CARLEEN

No.

LUANNE

It's perfect. I thought you were with this Doug, so I didn't meddle. But if there's nothing there...

CARLEEN

I don't want anyone, Luanne.

LUANNE

What do you mean you don't want anyone? What does that mean?

CARLEEN

It means...

LUANNE

To love? To share your life with? To have children by?

CARLEEN

I don't...

LUANNE

Company when you're lonely you don't want? Comfort when you're sick...

CARLEEN

My life is...

LUANNE

Your life is what?

CARLEEN

Look, Luanne. Men...

LUANNE

Men what? You can't even tell me. What???

CARLEEN

Men suck, Luanne! Men suck! I don't like the ones I've gone out with, I don't like the ones I work with, I don't like the ones I pass on the street. I see them, I have an impulse to take a big knife, cut their hearts out and make them eat it.

(There is a moment of shocked silence.)

LUANNE  
Carleen!

CARLEEN  
I'm sorry.

LUANNE  
Carleen, sweetheart. I'm shocked to hear you talk this way. What's happened to you? I'm...

(To one of the kids)  
Not up your nose!!!

(Back to Carleen)  
...heartbroken that you could say this about men.

CARLEEN  
I'm sorry, Luanne. I've just been a little...

LUANNE  
You like Donny, don't you? You love Donny.

CARLEEN  
Yeah, well Donny...

LUANNE  
I know there aren't a lot of Donnys out there. I know I got the best of the lot, but there are men. Good men. So, you got burned with that Brian character...

CARLEEN  
Bruce.

LUANNE  
I never liked him.

CARLEEN  
You never met him.

LUANNE

There are lots of good men you could share your life with, Carleen.

CARLEEN

I don't want to share my life, Luanne. My life is full. I don't have enough to share.

LUANNE

Stop that! Life doesn't mean anything if you don't share it, Carleen. You hurt me with this attitude. I just thank God your mother isn't alive to hear this.

CARLEEN

Look, Luanne, I got to go...

LUANNE

You'll come to dinner?

CARLEEN

No.

LUANNE

Don't do this to me, Carleen. Don't hurt me like this.

CARLEEN

This is not about you, Luanne.

LUANNE

Not about me?

(To a child)

Joey, I swear to God, I'm going to come over there and beat you till you're black and blue if you don't get off your sister!

(Back)

Not about me? You put down love, you put down marriage, you put down children, you're putting down me.

CARLEEN

Really, Luanne. I'm not.

LUANNE

Come on Sunday.

CARLEEN

No.

LUANNE

I'm setting a place. That's it. You're coming.

CARLEEN

We'll see.

LUANNE

I'll be expecting you. Five o'clock.

CARLEEN

We'll see.

(Gets up)

LUANNE

Go. Get back to your papers. I'll see you Sunday.

CARLEEN

Bye kids!

(They are doing something horrible)

Jesus. Okay. Bye.

LUANNE

Bye sweetheart. Go. Eat something. You're a skeleton.

(Carleen walks off)

(To kids)

Don't eat that! That's not food! Don't make me come over there. Don't make me...

(Lights down.)

## The Process of Script Evaluation

First, thinking holistically about this script:

▶ On a scale of 1 to 7, how unique is George's script?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent is George's script an example of artistic exceptionalism?

Please select one ... ▼

▶ On a scale of 1 to 7, how likable are George's characters

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of George winning a prize / award for this script?

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of George's script being produced somewhere?

Please select one ... ▼

▶ If produced, what would be the venue size of best fit for George's play?

Please select one ... ▼

▶ If produced, on a scale of 1 to 7, how positive would you expect the reviews of George's play to be?

Please select one ... ▼

▶ Based exclusively on this excerpt, on a scale of 1 to 7, how would you rate George's potential for future success?

Please select one ... ▼

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## The Process of Script Evaluation

Now, thinking more specifically about this script in relation to your theater:

▶ On a scale of 1 to 7, how easy would it be for you to cast George's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would the crew and theater administrators be to work on George's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would your potential audience members be to see George's play?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent would the content of George's play resonate with your audience members?

Please select one ... ▼

▶ If you have a marketing director, on a scale of 1 to 7, how supportive would your marketing director be of producing George's play?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how capable do you think George would be of re-writes?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to relate to George on a personal level?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to work with George?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent does George's script match your theater's mission statement?

Please select one ... ▼

▶ On a scale of 1 to 7, how similar is George's script to other plays you have produced?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would you be to produce George's script?

Please select one ... ▼

**You have now finished your evaluation of the second script and are ready to begin reading the third. Again, if at any point you feel like taking a break you may come back to complete it at a later point. Just close this window.**

**The next time you click the link, you will automatically be taken to this point in the survey.**

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UNTITLED

by Steven Allen

SCENE ONE

Dilan tries to hook Playstation II up to an old TV. The TV is the kind with antlers. Late afternoon.

Kyle enters. Kyle is soaked and carries a small boulder.

DILAN

Friggin bullshit is what this is. Castlevania Lament of Innocence! Bull-hokey. Bull friggin hokey. Guaranteed, my ass!

(looking at Kyle)  
What're you starin at, bug-eyed.

Kyle looks at Dilan simply, without affect.

KYLE  
The dog ran off.

DILAN  
So?

KYLE  
Can't collect no sheep, no dog.

DILAN  
Don't be a worm-brain. The dog'll be back. When she gets hungry enough, she'll be back.

KYLE  
She's hungry now.

DILAN  
I take care of that bitch, hear.

Beat. Kyle stares at Dilan, unblinkingly.

KYLE  
What're you doing?

DILAN  
Bringing us into the modern world is what I'm doing. What's it look like?

KYLE  
Playstation 2.

(beat)  
TV's too old.

DILAN  
My ass.

KYLE  
Need a new TV for Playstation 2.

DILAN  
I'm spose to be able to use this with any goddamn TV I got.

KYLE  
I was working on the fence, through most of the night and the morning too.

Dilan slams his hand down on the TV. The antenna falls off.

DILAN  
Guaranteed! Guaranteed, my ass!

KYLE  
After the dog ran off, someone strangled me.

Dilan storms out of the room.  
On the TV, glimmering images. Kyle is captivated. He stares at the screen as if he can drink it in.  
Dilan storms back into the room. He carries seven VCRs, two video game boxes, a cable box and a snarl of wires. Dilan begins trying to hook various things up to the television. He makes little progress.

DILAN  
Fuckin game.

(to Kyle)  
You could be liftin a finger t'help.

KYLE  
I need your help.

DILAN  
(shoving the TV)  
Fuck this shit!

KYLE  
I don't think any of that's gonna work.

DILAN

Oughtta send you back. Mom oughtta. Fifty-five years old. What does she get from child services for you? Practically only a dollar, that's all.

(beat)

KYLE

Maybe you should get a new TV.

DILAN

Did I ask you about the TV? Did I ask your fuckin opinion, no. Dilan hits the TV again.

Paulie enters. She looks at the boulder.

PAULIE

Whaddya doing with that boulder?

KYLE

I was working on the fence.

PAULIE

Well, put it outside already.

KYLE

Okay.

PAULIE

You weren't working on the fence. I saw you this morning wandering around like some sorta freak.

KYLE

That was after, before the rain. That was in the dew of morning. This morning I was walking in the grass this morning.

PAULIE

Barefooted?

KYLE

I left my shoes on the porch.

Mattie enters the kitchen.

PAULIE

Ma?

MATTIE  
What.

PAULIE  
Come in here, Ma.

MATTIE  
What.

PAULIE  
I said come in here and talk to your children.

MATTIE  
Incontinence.

PAULIE  
What?

MATTIE  
Incontinence.

PAULIE  
(annoyed)  
Ma.

MATTIE  
That's loose bowels. That's what it's called.

PAULIE  
Kyle, would you please put that rock outside already.

Kyle exits with the small boulder.

DILAN  
Dang, Paulie.

PAULIE  
Why should Kyle bring rocks in the house. We don't need a house fulla rocks, do we.

DILAN  
He's been working on the fence.

PAULIE  
He should round up those sheep is what he should do.

DILAN  
He can't round up the sheep til he fixes the fence.

PAULIE  
All I said was to put a rock outside, that's all I said.

DILAN  
Sure thing.

Mattie begins bringing four plates and serving dishes into the living room.

PAULIE  
Dil, you're gonna have t'drive Ma into town tomorrow.

DILAN  
(watching TV)  
Can't.

MATTIE  
I'm not goin into town tomorrow.

PAULIE  
Yeah, y'are.

DILAN  
Why's she hafta go for?

PAULIE  
She has an interview.

MATTIE  
Never gonna get that job.

DILAN  
What's it for?

PAULIE  
Looking after folks at St. Vince.

DILAN

You mean cleanin up their feces and shit.

PAULIE  
No, looking after them.

MATTIE  
I'm not goin.

DILAN  
How's she gonna know how t'do that?

PAULIE  
Ma's practically a trained nurse.

MATTIE  
I ain't a nurse.

PAULIE  
Practically.

MATTIE  
I don't got the skills of a nurse.

PAULIE  
(to Dilan)  
Her appointment's at four.

DILAN  
She'll never keep that job. No sense tryin. She couldn't even keep that volunteer job washin floors at the Born Again church.

PAULIE  
If she had just gone in and made herself known she would've kept it.

DILAN  
Well, she didn't go in, did she? Just waited at the bus stop to come home. After I drove her all the way there. If she can take the bus home, she can take the bus there, right?

MATTIE  
Born Agains don't understand the Bible. They're too religious.

PAULIE  
The bus stop's over 5 miles.

DILAN  
Did it before.

PAULIE  
6 years ago. When she was young.

DILAN  
Ain't old now.

MATTIE  
I could never walk all that way on my bad leg, Dilan.

DILAN  
Have ya tried?

MATTIE  
My own son hates me.

DILAN  
Paulie can borrow the car and take you.

PAULIE  
I can't drive her, I'm going over to Linda's.

DILAN  
How?

PAULIE  
Walking.

DILAN  
It's over five miles, ain't it.

PAULIE  
Near the bus stop.

DILAN  
Linda. Linda's more important than your own Ma?

PAULIE  
Her guy ran out on her and her kid screams all day. I said I'd help.

DILAN  
What's a woman like that need your help for?

PAULIE  
I'm babysitting.

DILAN  
She payin ya?

PAULIE  
It's a favor.

Kyle comes back in.

PAULIE (CONT'D)  
People do that for each other sometimes. People do each other favors. They offer their help without receiving anything in return. That's the definition of favor.

DILAN  
Linda's a dyke.

PAULIE  
She is not.

DILAN  
Heard she was. That's why Butler left. Said at night she was dreamin about girls.

PAULIE  
That's not true.

DILAN  
That is so true. Ain't it, Kyle? You heard so yourself.

PAULIE  
Did you hear that, Kyle?

KYLE  
Yeah.

PAULIE  
Who? Who said that?

KYLE  
Don't remember.

PAULIE  
(to Dilan)  
He don't even remember.

DILAN  
He heard it, tho.

PAULIE  
If you can't quote your source, it's not worth talking about.

DILAN  
Okay, drop it.

They eat and watch TV.

PAULIE  
How's Butler even gonna know what his wife's dreamin in the first place?

DILAN  
She talks in her sleep.

PAULIE  
Whole sentences? Does she say whole sentences in her sleep?

DILAN  
Guess so.

PAULIE  
Butler's a liar.

DILAN  
Okay, sure.

PAULIE  
So anyways, in the first place, you gotta drive Ma.

MATTIE  
I don't want that job.

PAULIE  
What're you gonna do all day, sit home and spit in a cup?

MATTIE  
They'll never hire an old woman like me.

PAULIE  
You're not old.

MATTIE  
Wouldn't think of hiring me.

DILAN  
See, it's a waste of time goin.

PAULIE  
This's called "social phobia."

MATTIE  
You haven't a clue what you're talkin about, young lady.

DILAN  
Paulie thinks she's an expert on jes about everything, ain't ya, Paulie?

PAULIE  
Why can't you just drive her?

DILAN  
I'm meetin up with Bernie Johnson.

PAULIE  
Bernie? Bernie Johnson?

DILAN  
That's what I said, didn't I.

PAULIE  
So, steal me a car while you're at it. Except maybe not a Datsun.

DILAN  
You're lucky I got that car. Datsun's are fine good cars. Didn't see you complain about the hatch-back.

PAULIE

Why're you meeting with Bernie?

DILAN

He got sprung and I thought the neighborly thing t'do would be t'say hello.

PAULIE

Well, Ma's just gonna have to miss her interview then.

(to Mattie)

You're gonna have to miss your interview. You're gonna have to call and reschedule. People don't look kindly on folks that don't show up without notice.

MATTIE

I'm well versed with phone calls, thank you very much.

PAULIE

Just trying to be helpful is all. Tryin to be of some assistance.

Paulie gets up in a huff and goes to her room.

MATTIE

She's always had feminine problems, Dilan, you know that. Shouldn't even try and talk t'her when she's menstruating. Moody, always has been.

(beat)

Kyle, your social worker stopped by today. Says she's gonna keep you placed here.

KYLE

She is?

MATTIE

Says you're adjusting nicely.

DILAN

Whaddya mean?

---

## The Process of Script Evaluation

First, thinking holistically about this script:

▶ On a scale of 1 to 7, how unique is Steven's script?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent is Steven's script an example of artistic exceptionalism?

Please select one ... ▼

▶ On a scale of 1 to 7, how likable are Steven's characters

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Steven winning a prize / award for this script?

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Steven's script being produced somewhere?

Please select one ... ▼

▶ If produced, what would be the venue size of best fit for Steven's play?

Please select one ... ▼

▶ If produced, on a scale of 1 to 7, how positive would you expect the reviews of Steven's play to be?

Please select one ... ▼

▶ Based exclusively on this excerpt, on a scale of 1 to 7, how would you rate Steven's potential for future success?

Please select one ... ▼

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## The Process of Script Evaluation

Now, thinking more specifically about this script in relation to your theater:

▶ On a scale of 1 to 7, how easy would it be for you to cast Steven's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would the crew and theater administrators be to work on Steven's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would your potential audience members be to see Steven's play?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent would the content of Steven's play resonate with your audience members?

Please select one ... ▼

▶ If you have a marketing director, on a scale of 1 to 7, how supportive would your marketing director be of producing Steven's play?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how capable do you think Steven would be of re-writes?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to relate to Steven on a personal level?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to work with Steven?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent does Steven's script match your theater's mission statement?

Please select one ... ▼

▶ On a scale of 1 to 7, how similar is Steven's script to other plays you have produced?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would you be to produce Steven's script?

Please select one ... ▼

**You have now finished your evaluation of the third script and are ready to begin reading the fourth and final script. Remember that if at any point you feel like taking a break you may come back to complete it at a later point. Just close this window. The next time you click the link, you will automatically be taken to this point in the survey.**

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THE WHITE KITCHEN

by Larry Young

ELIZABETH- 46, married, attractive, well groomed, a successful local actress.

MAE-47, married, careless about her appearance, an ex actress.

FRANKIE-19, handsome but geeky.

JOSHUA- Elizabeth's husband, a real estate salesman.

GIO- Mae's husband. Obsessed with trains and their schedules.

Elizabeth stands behind the island in her white kitchen. A cup of coffee in her hand. The newspaper spread out before her. She leans, chin in hand, elbow down and flips a page of the paper.

ELIZABETH

Hmmm...

She takes a sip of coffee and adjusts her position slightly. She catches her breath. She moves subtly. Closes her eyes. Moans.

ELIZABETH

Ah... I...

The sound of a car pulling up outside.

ELIZABETH

Oh shit.

FRANKIE, 20, stands up behind the island.

ELIZABETH

It's your Mom.

She reaches down and pulls up Frankie.

FRANKIE

Oh shit.

ELIZABETH

Hide.

She buttons her jeans and looks out the window at Frankie's mom coming up the walk.

FRANKIE

Where?

ELIZABETH

Go! There! I don't... Just! Get ou...

He runs out the door.

The door opens, MAE bursts in. She is obviously upset. She bangs her purse down. She throws open a cupboard looking for a cup. She barely makes eye contact. She knows this home very well.

MAE

You have coffee? Tell me you have coffee. I need coffee.

ELIZABETH

What's going on?

MAE

I need coffee first.

ELIZABETH

Okay.

ELIZABETH pours her a cup. MAE goes to the fridge and looks inside.

MAE

You don't have cream? Tell me you have cream...

ELIZABETH

I never have cream. Why the...

MAE

I'm gonna buy you cream. Gonna buy it and leave it here so... How can you drink that shit?

ELIZABETH grabs the skim and pours some in to MAE's coffee.

MAE

Tastes gray.

ELIZABETH

It tastes fine.

MAE

No. It's terrible. Everyone knows it. Coffee, tastes terrible, and skim doesn't disguise it. Kids know it. Kids tell the truth. When Frankie was little he used to always whine when we were at a restaurant and ordered coffee after. The meal was over and he just wanted to go home, go play, go do whatever he was into doing. Anything but sit there while we sipped some brown liquid he wasn't sposed to drink. And this one time, I think he was maybe eight... He asked if he could taste it. So I let him and he took a sip of my black coffee and, I never forget the look on his face... When he said, "It doesn't even taste good." A look of disgust.

Not at the flavor, but at his father and I. Like we had held up coffee as some unbelievably wonderful treat that we so loved we would willingly torture our child rather than skip it. Which of course to a little boy is something sweet and delicious and creamy. You know?

ELIZABETH

When he tasted it did you have cream in it?

MAE

I always have cream in it, unless I'm here.

ELIZABETH

And he still thought it tasted like shit so what's your point?

MAE

Do you remember it?

ELIZABETH

What?

MAE

Thinking coffee was something so special, and scotch, and every adult thing you weren't allowed to have was something so delicious and wonderful that... That you weren't allowed to have it yet... You remember thinking that?

ELIZABETH

Sort of.

MAE

That's what having kids does to you.

ELIZABETH

What?

MAE

Makes you remember things like that.

ELIZABETH

I can remember it without having kids.

MAE

You said "sort of." You'd remember it better if you had a kid.

ELIZABETH

Mae. Did something happen?

MAE  
Like what?

ELIZABETH  
I don't know. I wasn't there.

MAE  
If you had kids, the size of your hips would already be shot to shit, and you'd remember that forbidden drinks should be delicious. Sweet. And Creamy. It would be a life improvement. If you had kids. And cream in the house.

ELIZABETH  
Mae, you love your kids.

MAE  
No, I don't.

ELIZABETH  
Mae...

MAE  
Liz... Okay, I do. But sometimes... You know...

ELIZABETH  
Kids.

MAE  
They ruin your life. You shoulda had some.

ELIZABETH  
You want to ruin mine?

MAE  
Why would I want to do that?

ELIZABETH  
Maybe you...

MAE  
What?

ELIZABETH  
Wish you were more...

MAE  
You can say it.

ELIZABETH  
Free?

MAE  
To fuck my best friends son?

MAE sips her coffee.

MAE  
Frankie. Get your ass out here.

FRANKIE  
(From offstage)  
Uh... no.

MAE  
I said...

ELIZABETH  
Mae...

MAE  
You, don't speak.

ELIZABETH  
But...

MAE  
What did I say?

ELIZABETH  
I'm not your kid...

MAE  
No. You're not. You are fucking him.

FRANKIE bursts in.

FRANKIE  
Don't use that word!

MAE  
Don't you tell me what word I can say! I tell you what words you can say!

FRANKIE  
I LOVE HER!

MAE  
Really?

ELIZABETH  
You do? No, you don't.

FRANKIE  
Yes, I DO! I DO TOO!

ELIZABETH  
No. No. See...

MAE  
See what you've done? You've unleashed this.

FRANKIE  
She didn't do anything.

ELIZABETH  
I'm... Unleashed?

MAE  
She did something.

FRANKIE  
She didn't unleash.

MAE  
You were leashed. I had you leashed up quite tightly.

ELIZABETH

I'm sorry...

MAE  
He was LEASHED!

FRANKIE  
I slept with Connie Tawill too.

ELIZABETH  
Who?

MAE  
Your babysitter?

FRANKIE  
She wasn't my babysitter.

MAE  
I paid her by the hour when your dad and I went out. To watch you guys.

FRANKIE  
To watch Sadie and Will.

ELIZABETH  
You slept with your babysitter?

FRANKIE  
She wasn't my babysitter. She was Will and...

MAE  
That bitch.

FRANKIE  
She was really nice actually.

ELIZABETH  
I thought I was your first.

FRANKIE  
Yeah... No.

MAE

Who else?

FRANKIE

No one.

MAE

If I find out you're lying...

ELIZABETH

It's over.

MAE

I will...

FRANKIE

What?

MAE

Take away the car and...

ELIZABETH

I can't do this anymore.

MAE

Tell your father!

FRANKIE

But I love you!

ELIZABETH

I don't love you.

FRANKIE

But I love you. I love you... I... Love...

ELIZABETH

Sometimes life and love are like coffee. Like, remember when you were a kid and your parents would drink coffee after dinner. At a restaurant. And you'd be, like, dying to leave, run around, go home. But they'd stay there and drink this brown liquid that was off limits for you. And you thought, well there must be some great reason they were wasting their time drinking the stuff. It must taste delicious. It must be like nectar from the gods. And then you tasted it one day and were like, what is this bitter shit? They made me sit around and wait for this? These people are insane. Why don't you have a delicious milk shake you dumb fucks! That's love.

MAE and FRANKIE stare bewildered.

ELIZABETH

Sometimes what you think must be delicious, isn't. Like love.

FRANKIE

My love for you is delicious.

MAE

This coffee is shit.

ELIZABETH

I don't love you. I never loved you. Doesn't that make you feel terrible? I used you to hurt your mom because I was jealous of her happy life....

MAE

I'm not happy. Do I look happy?

FRANKIE

That's because she used me to hurt you, that's what she's saying.

ELIZABETH

That's right and...

MAE

No. I wasn't happy before I found out about the pedophilia.

ELIZABETH

He is nineteen.

MAE

You are forty six.

FRANKIE

Well-kept forty six.

MAE

Are you saying I'm not...

FRANKIE

Ugh... You're my mother!

ELIZABETH  
STOP!

Silence.

ELIZABETH  
My affair with your of age son has ended.

FRANKIE  
No.

ELIZABETH and MAE  
Yes.

FRANKIE  
Bitch.

They both give him the look of death. He cowers.

ELIZABETH  
I am hoping that can be water under the bridge. And that you won't tell Joshua.

MAE  
He told me.

ELIZABETH  
What?

MAE  
Your husband told me about you and Frankie, when I refused to sleep with him out of loyalty to you. I'm going to go out right now and buy you that cream. Frankie. Move it.

---

## The Process of Script Evaluation

First, thinking holistically about this script:

▶ On a scale of 1 to 7, how unique is Larry's script?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent is Larry's script an example of artistic exceptionalism?

Please select one ... ▼

▶ On a scale of 1 to 7, how likable are Larry's characters

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Larry winning a prize / award for this script?

Please select one ... ▼

▶ On a scale of 1 to 7, what is the likelihood of Larry's script being produced somewhere?

Please select one ... ▼

▶ If produced, what would be the venue size of best fit for Larry's play?

Please select one ... ▼

▶ If produced, on a scale of 1 to 7, how positive would you expect the reviews of Larry's play to be?

Please select one ... ▼

▶ Based exclusively on this excerpt, on a scale of 1 to 7, how would you rate Larry's potential for future success?

Please select one ... ▼

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## The Process of Script Evaluation

Now, thinking more specifically about this script in relation to your theater:

▶ On a scale of 1 to 7, how easy would it be for you to cast Larry's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would the crew and theater administrators be to work on Larry's play?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would your potential audience members be to see Larry's play?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent would the content of Larry's play resonate with your audience members?

Please select one ... ▼

▶ If you have a marketing director, on a scale of 1 to 7, how supportive would your marketing director be of producing Larry's play?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how capable do you think Larry would be of re-writes?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to relate to Larry on a personal level?

Please select one ... ▼

▶ On the basis of the excerpts alone, acknowledging that you have incomplete information, how easy would it be to work with Larry?

Please select one ... ▼

▶ On a scale of 1 to 7, to what extent does Larry's script match your theater's mission statement?

Please select one ... ▼

▶ On a scale of 1 to 7, how similar is Larry's script to other plays you have produced?

Please select one ... ▼

▶ On a scale of 1 to 7, how eager would you be to produce Larry's script?

Please select one ... ▼

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## The Process of Script Evaluation

Now, thinking about your decision of whether or not to produce any given play, how important is it that....

▶ ...the play would be easily cast?

Please select one ... ▼

▶ ... the crew and theater administrators would be eager to work on the play?

Please select one ... ▼

▶ ... potential audience members would be eager to see the play?

Please select one ... ▼

▶ ... the content of the play would resonate with your audience members?

Please select one ... ▼

▶ ... your marketing director would be supportive of the play?

Please select one ... ▼

▶ ... the playwright would be capable of re-writes?

Please select one ... ▼

▶ ...the playwright would be easy to relate to?

Please select one ... ▼

▶ ...the playwright would be easy to work with?

Please select one ... ▼

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## The Process of Script Evaluation

Finally, we would like to learn a bit about you. Please remember that all responses will be kept strictly confidential and that neither you nor your theater will ever be identified by name or in any other manner that could allow another researcher or member of the public to infer your identity.

### ▶ What is your role in the theater?

- Artistic Director
- Literary Manager
- Producer
- Literary Intern
- Other

### ▶ In what year were you born?

Please select one ... ▼

### ▶ What is your gender?

- Male
- Female

### ▶ What is your ethnicity? Please check all that apply.

- African American
- Alaskan Native / Native American
- Asian American
- Caucasian / White
- Hispanic / Latina / Latino
- Other

### ▶ How would you describe your political views?

- Very liberal
- Liberal
- Moderate
- Conservative
- Very conservative
- Other

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SUBMIT

## The Process of Script Evaluation

Thank you for your responses. You have finished the survey and your responses have been recorded.

Your theater has now been entered into a drawing to win one of four \$1,000 contributions. Winning theaters will be notified in March.

Questions about the survey and its results may be directed to: Emily Sands at [esands@princeton.edu](mailto:esands@princeton.edu) or toll-free at (866) 823 4833.  
Questions about your rights as someone taking part in the study may be directed to: Joseph Broderick at (809) 258 3976

Close

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## HONOR PLEDGE

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This paper represents my own work in accordance with University regulations.