Women as Men and People: Effects of Gender-Marked Language

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This study examined the implications of gender-marked language. It was hypothesized that man-suffix occupation titles (e.g., chairman) would lead perceivers to interpret a social target's personality as more masculine than no-suffix occupation titles (e.g., chair) and that person-suffix occupation titles (e.g., chairperson) would lead perceivers to interpret a social target's personality as less masculine than no-suffix occupation titles. Experiment 1 supported these predictions. Moreover, the effect was stronger for participants who reported more traditional gender role beliefs. Experiment 2 replicated this effect and showed that repeated exposure to occupation title suffixes (i.e., priming), coupled with the knowledge that the occupation title was chosen by the target (i.e., implicit personality effects), mediated the findings. In addition to explaining some of the cognitive underpinnings of sexist language, these results speak to conditions when priming will influence social perception.

Disagreement about the impact of sexist language is widespread. Some claim that the generic use of *he* and *man* has detrimental consequences (e.g., Miller & Swift, 1991), whereas others contend that the use of these terms has no negative ramifications. For example, Strunk and White (1979, p. 60) state that "the use of *he* as pronoun for nouns embracing both genders is a simple, practical convention rooted in the beginnings of the English language. *He* has lost all suggestions of maleness in these circumstances. . . . It has no pejorative connotations; it is never incorrect."

Although numerous studies have investigated the use of the pronoun *he* (for a review, see Gastil, 1990), less attention has been given to the implications of the generic use of *man*. Perhaps the most notable exception was a study conducted by J. W. Schneider and Hacker (1973). Participants were told that the authors of an introductory textbook in sociology had recently completed their book and wanted to use student-created collages as artwork at the beginning of each chapter. Participants were asked to select photographs for several chapter titles. In actuality, there was no such book. Rather, students were randomly assigned to construct collages either for chapters that featured *man* in the title (such as "Economic Man" and "Political Man") or for chapters with the same themes without *man* in the title (such as "Economic Behavior" and "Political Behavior"). Schneider and Hacker found that participants assigned to create collages for man-titled chapters selected more photographs of males than participants assigned to create collages without man-titled chapters.

Similarly, Wilson and Ng (1988) found that use of masculine generics (*he* and *man*) can influence judgments in a visual discrimination task. In their experiment, participants read sentences that featured masculine constructions (*men* and *he*) or feminine constructions (*feminists* and *she*) and then were shown a subliminal visual image, using a tachistoscope, of either a man's or a woman's face. Participants were asked to

Authors' Note: This work was facilitated by a research fellowship from Indiana University to the first author and by Research Scientist Development Award MH 00452 and Grant MH 38832 from the National Institute of Mental Health to the second author. We would like to thank Helen Grant, Kay Lawson, Amy Lieberman, Stacy Urben, Steve Wahn, and Erin Winchester for their help in conducting these experiments. The input of Igor Gavanski is gratefully acknowledged. Portions of this research were presented at the 66th annual meeting of the Midwestern Psychological Association, May 1994, Chicago, and the 67th annual meeting of the Midwestern Psychological Association, May 1995, Chicago. Correspondence concerning this research should be addressed to Allen R. McConnell, Department of Psychology, Pennsylvania State University, 417 Moore Building, University Park, PA 16802-3104.

PSPB, Vol. 22 No. 10, October 1996 1004-1013

indicate whether the face was that of a man or a woman. Those who read statements featuring masculine constructions overreported (relative to the actual presentation base rate) that subsequent faces were men, whereas those who read statements featuring feminine constructions overreported that subsequent faces were women. These findings are consistent with the notion that language can influence imagery.

In a more recent experiment, McConnell and Gavanski (1994) found that occupation titles can have a similar biasing effect on the descriptions people use when visualizing a target. Participants were asked to read an occupation title, imagine the average person in that occupation, and then write a brief description of the individual they visualized. Trained judges scored whether the descriptions (e.g., he has a beard, she wears a dress) were of a male or a female. Although participants responded to many occupations (e.g., real estate agent, airline pilot, nurse), the central ones were part of a between-subjects manipulation of occupation title suffixes. They involved either man-suffix occupation titles such as *city councilman*, no-suffix occupation titles such as *member of city council*, or person-suffix occupation titles such as *city councilperson*. McConnell and Gavanski found that participants who imagined individuals identified by person-suffix occupation titles were less likely to describe a man than participants who responded to no-suffix or man-suffix occupation titles.

Although these findings suggest that gender-marked language has implications for assumptions about the gender of a target person, an important question remains. What impact, if any, does gender-marked language have on perceptions of a target's personal qualities? Consider a member of Congress. Such a person could be called a congressman, congressperson, or just a member of Congress. Would these variations have any implications for the way a perceiver interprets the behaviors of an individual associated with such titles? For instance, do man-suffix occupation titles lead individuals to perceive that a target individual possesses more masculine and less feminine qualities than no-suffix occupation titles? Do person-suffix occupation titles lead individuals to perceive that a target individual possesses more feminine and less masculine qualities than no-suffix occupation titles? Although the choice of title suffix (e.g., *chair* vs. *chairperson*) has centered on esthetic and philosophical considerations (e.g., Goldstein, 1994; Miller & Swift, 1991; Strunk & White, 1979), it has been relatively uninformed by empirical evidence on the psychological implications of these language variations. Experiment 1 provided such a test, and Experiment 2 explored some of the psychological mechanisms responsible for the effects of gender-marked language.

EXPERIMENT 1: GENDER-MARKED LANGUAGE AND BIASED PERSONALITY PERCEPTIONS

The idea that social categories influence the interpretation of target motives and personality characteristics is well established. For example, Darley and Gross (1983) found that participants' perceptions of a child's academic performance were more favorable when the child was pictured in a high (suburban) socioeconomic setting than when she was pictured in a low (urban) socioeconomic setting. In a similar vein, it has been demonstrated that ambiguous behaviors are interpreted as more hostile and more threatening when performed by Black Americans than when performed by White Americans (Duncan, 1976; Sagar & Schofield, 1980). Thus the activation of group constructs (e.g., gender, race) can lead to biased interpretations of social target characteristics and intentions.

In Experiment 1, we provided participants with different social targets who were presented in situations where the objective quality of the target's performance was uncertain. As a between-subjects manipulation, these targets were described with either a man-suffix, a no-suffix, or a person-suffix occupation title. After reading each scenario, participants were asked to assess target attributes on a series of questions, some of which were related to gender-stereotyped personality characteristics. The primary purpose of Experiment 1 was to see whether variations in occupation title suffixes would lead to different perceptions about the target's personality characteristics.

In addition to examining whether gender-marked language influences evaluations of target characteristics, Experiment 1 allowed us to examine whether gender-marked language effects would apply only to very ambiguous situations (where target sex was unknown) or whether they would also apply to situations that were less ambiguous (where target sex was made clear). To explore this issue, the effects of gender-marked language were examined within each of three contexts: a gender-ambiguous target (Vignette 1), an explicitly identified female target (Vignette 2), and an explicitly identified male target (Vignette 3). If gender-marked language effects occur only because the suffixes affect people's assumptions about the target's sex, then effects should be observed in Vignette 1, where target sex is left ambiguous, but not in Vignettes 2 and 3, where target sex is made explicit. However, if gender-marked language effects generalize to less ambiguous situations, the effects should be observed in Vignettes 2 and 3 as well.

Participants in Experiment 1 read three vignettes describing business leaders who were associated with either a man-, a person-, or a no-suffix occupation title. Each vignette featured a different target and a different

set of circumstances. In each vignette, the business leader was engaged in a business situation that involved give-and-take to reach a compromise agreement with an opposing party. Thus the quality of the target's performance and the nature of the target's character were made somewhat ambiguous. After reading each vignette, participants offered assessments of the target's personality characteristics along masculine (e.g., assertive) and feminine (e.g., warm) gender-stereotyped dimensions.

To assess potentially important individual differences in gender-marked language effects, we recruited men and women who reported either liberal or traditional attitudes about gender roles in society. Thus participant sex and attitudes about gender roles were considered independent variables to evaluate the possibility that differences in participants' gender constructs moderate the effects of gender-marked language. For example, one might predict that males (relative to females) or participants with traditional gender beliefs (compared with participants with liberal gender beliefs) might be especially influenced by gender-marked language.

In sum, the key issue was whether gender-marked language would influence perceptions of target personality characteristics in a gender-stereotypical fashion. It was predicted that we would observe the weakest feminine stereotypes and strongest masculine stereotypes for man-suffix targets and the strongest feminine stereotypes and weakest masculine stereotypes for person-suffix targets.

Method

Participants and design. A sample of 135 Indiana University undergraduates, 67 women and 68 men, participated in return for research experience credit in introductory psychology courses. They were recruited on the basis of their sex and their responses to the Attitudes toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973), which they completed at the beginning of the semester in a mass screening session.

The AWS measures participants' endorsements, on a 4-point scale from *strongly disagree* to *strongly agree*, of statements concerning the role of women in society (e.g., a man should pay for a first date). The 25-item AWS instrument was scored (theoretical range between 25 and 100) such that higher values reflected more traditional beliefs about women (i.e., high-sexist individuals). Participants who scored at either extreme of the scale were telephoned and invited to participate in a second experiment on business decision judgments.[1] Those who participated in the second session were randomly assigned to one of the three occupation title conditions. Thus the design was a 2 (Participant Sex) × 2 (Sexism Level: low vs. high) × 3 (Title Condition: man, no, or person suffix) between-subjects factorial.[2]

Procedure. Participants were run at individual computer workstations. They were told that the purpose of the experiment was to study how everyday individuals assess the quality of decisions made by professionals in the business world. Before reading the first vignette, participants were told that they would be reading written descriptions of actual business situations (e.g., negotiating a labor contract with a workers' union) faced by real business leaders. They were told that they would assess the business leader's performance and qualities after reading each transcript.

All participants read the same three vignettes (see Appendix for Vignette 1, which is presented for illustrative purposes). The only difference between title conditions was whether the target was referred to as "Chairman of the Board of Directors" (man-suffix condition), "Chair of the Board of Directors" (no-suffix condition), or "Chairperson of the Board of Directors" (person-suffix condition). For Vignette 1, a gender-neutral name (Chris Simmons) was associated with the target. At no time was Simmons's sex identified in the passage. In contrast, the targets in Vignettes 2 and 3 were identified as women and men (respectively) at the beginning of the passages.[3]

After reading each vignette, participants indicated their responses on the keyboard to a series of questions about aspects of the target's personality. After participants completed the third vignette, they were debriefed and dismissed. During debriefing, no participant expressed any concerns about the validity of the cover story or the authenticity of the vignettes.

Dependent measures. After reading each vignette, participants made ratings on 7-point scales to 21 questions. On the basis of previously identified stereotypes in the literature (Ashmore, 1981; Spence, Helmreich, & Stapp, 1974), five feminine qualities (caring, emotional, warm, compassionate, cheerful) were assessed for a feminine stereotype index (one quality was assessed per question; e.g., how emotional do you think the target is in general), and five masculine qualities (rational, assertive, independent, analytical, intelligent) were assessed for a masculine stereotype index (again, one quality was assessed per question).[4] The remaining 11 questions (e.g., assessing loyalty, punctuality) were fillers. Questions were presented in a random order with the exception that questions from a gender stereotype category could not appear consecutively.

Results

COMPUTATION OF INDEXES

First, it was important to establish that the items constituting the feminine and masculine indexes demonstrated an acceptable degree of interitem reliability. Across the three vignettes, analyses of the feminine index (Cronbach's alphas = .89 for Vignette 1, .93 for Vignette 2, .91 for Vignette 3) and masculine index (Cronbach's alphas = .77 for Vignette 1, .82 for Vignette 2, .79 for Vignette 3) revealed good interitem reliability.

Our goal was to produce a single dependent measure that would reflect the relative degree of masculine stereotype strength associated with target personality ratings for each of the three targets (Vignettes 1-3). To accomplish this end, we first computed the mean of the responses to items within each stereotype index (masculine and feminine) for each vignette to produce dependent measures where larger indexes reflected perceiving either that the target possessed strong feminine characteristics (feminine index) or that the target possessed strong masculine characteristics (masculine index). To produce a relative measure of masculine stereotype strength, a difference score was computed by subtracting the feminine index from the masculine index for each vignette. Thus, for each vignette, a participant produced a relative masculine stereotype index where positive scores indicated endorsement of relatively strong masculine and weak feminine stereotypes and negative scores indicated endorsement of relatively strong feminine and weak masculine stereotypes.

RELATIVE MASCULINE STEREOTYPE INDEX ANALYSES

Because the three vignettes (gender-ambiguous target, explicitly identified female target, and explicitly identified male target) differed in thematic content, they were analyzed in separate analyses of variance (ANOVAs) to examine the impact of gender-marked language within each scenario. Our primary goals in these analyses were to determine whether gender-marked language influences target personality perceptions and whether such effects might hold only in ambiguous situations (Vignette 1) or might also be observed in situations where target sex was made explicitly clear (Vignettes 2 and 3).

Vignette 1. The relative masculine stereotype index for Vignette 1, where target sex was ambiguous, was submitted to a 3 (Title Condition: man, no, or person suffix) × 2 (Participant sex) × 2 (Sexism Level: low vs. high) between-subjects ANOVA. A main effect of title condition, $F(2,123) = 9.77, p < .001$, revealed that participants in the person-suffix condition perceived the target as possessing relatively more feminine personality attributes ($M = 0.26$) than participants in the man-suffix ($M = 1.56$) or no-suffix ($M = 0.96$) condition. However, as Table 1 illustrates, this title condition main effect was qualified by an interaction with sexism level, $F(2,123) = 5.81$, $p < .01$. Low-sexist participants reported that all targets, regardless of occupation title suffix, possessed an equivalent amount of masculinity. However, high-sexist participants perceived person-suffix targets as possessing the weakest masculine qualities and man-suffix targets as possessing the strongest masculine qualities.[5] No other effects were significant.

TABLE 1: Relative Masculine Stereotype Indexes as a Function of Suffix Condition and Participant Sexism, Experiment 1

Target/Suffix Condition	*Low Sexism*	*High Sexism*
Ambiguous (Vignette 1)		
Man suffix	1.18_a	1.96_b
No suffix	0.96_a	0.95_a
Person suffix	0.86_a	-0.35_c
Female (Vignette 2)		
Man suffix	1.13_a	2.37_b
No suffix	1.01_a	0.99_a
Person suffix	1.13_a	-1.17_c
Male (Vignette 3)		
Man suffix	0.33_a	1.31_b
No suffix	0.32_a	0.00_a
Person suffix	-0.08_a	-0.13_a

NOTE: Positive values indicate stronger masculine (and weaker feminine) personality assessments than negative values. Within each vignette, means with the same subscript do not differ significantly ($p \geq .05$).

Vignette 2. The relative masculine stereotype index for Vignette 2, where the target was female, was submitted to a title condition by participant sex by sexism level ANOVA. A main effect of title condition, $F(2,123) = 23.49$, $p < .001$, found that participants perceived man-suffix targets ($M = 1.74$) as possessing more masculine personality attributes than no-suffix targets ($M = 1.00$), which were perceived as possessing more masculine personality attributes than person-suffix targets ($M = -0.02$). Further, as shown in Table 1, an interaction between occupation title condition and sexism level was observed, $F(2,123) = 23.05$, $p < .001$, which showed that high-sexist participants were strongly influenced by occupation titles in Vignette 2 (perceiving a chairman as more masculine and a chairperson as less masculine), whereas low-sexist participants did not vary in their assessments of target personality characteristics as a function of occupation title suffix.[6] This pattern of results (main effect and the pattern of the interaction) is consistent with the findings of Vignette 1, where target sex was not revealed.

Vignette 3. Finally, the relative masculine stereotype index for Vignette 3, where the target was male, was submitted to a title condition by participant sex by sexism level ANOVA. A main effect of title condition, $F(2,123) = 7.85$, $p < .001$, revealed that participants perceived man-suffix targets as possessing more masculine personality attributes ($M = 0.81$) than no-suffix targets ($M = 0.17$) or person-suffix targets ($M = -0.11$). As found in the previous two vignettes, there was also an interaction between occupation title condition and sexism level, $F(2,123) = 3.87$, $p < .03$. As Table 1 shows, participants typically reported similar perceptions (in terms of gender-related stereotypes) in all conditions except for high-sexist participants, who saw male man-suffix business leaders as especially masculine.[7] The general pattern of results observed for Vignette 3 is consistent with those observed for Vignettes 1 and 2.

Discussion

Experiment 1 provided clear evidence that occupation title suffixes can influence evaluations of targets' personality characteristics. Specifically, it was shown that man-suffix titles result in assessments consistent with masculine stereotypes (and less consistent with feminine stereotypes) and person-suffix titles result in assessments consistent with feminine stereotypes (and less consistent with masculine stereotypes). Moreover, participants' beliefs about gender roles proved to be an important moderator of this effect, with stronger stereotype-consistent judgments (for man-suffix and person-suffix targets) reported by participants who possessed more traditional gender role beliefs. Participant sex was unrelated to differential perceptions of occupation title suffixes.

It is also important to note that the pattern of results was consistent across all three vignettes. Thus it appears that gender-marked language is influential not only in very ambiguous situations (where target sex is unknown) but even in less ambiguous situations (where target sex is known).

Although Experiment 1 provides strong evidence that gender-marked language can influence assessments of target personality characteristics, the question remains of what processes are responsible for such effects. Although some studies, including Experiment 1, have demonstrated that sexist language influences perceivers' judgments (McConnell & Gavanski, 1994; Wilson & Ng, 1988) and behaviors (Bem & Bem, 1973; J. W. Schneider & Hacker, 1973), little consideration has been given to the cognitive underpinnings of these effects. Experiment 2 was designed to test possible process accounts for these outcomes.

Three explanations seem possible. The first possibility involves the perceiver's use of *implicit personality theories* about individuals who are associated with man- or person-suffix occupation titles. As D. J. Schneider (1973) noted, perceivers may use target-relevant schemata to fill the gaps in impression formation. Hence a perceiver who encounters a "Chairperson of the Board of Directors" might think that this individual is making a left-of-center statement concerning politically correct language and might make additional target assumptions (e.g., voted for the Democratic candidate in the last presidential election) not supported by specific evidence. Consistent with the findings of Experiment 1, the implicit personality theory account would predict that occupation title suffixes should produce biases regardless of whether the target's sex is known. These effects, as found in Experiment 1, should be stronger for perceivers with more traditional gender role beliefs, because such perceivers should assume that a meaningful constellation of gender-related personality attributes exists, relative to perceivers who believe that gender-related personality attributes are largely uncorrelated (i.e., those with less traditional gender role beliefs). However, the implicit personality theory account would predict that such effects should be observed only in situations where perceivers can assume that the occupation title says something meaningful about the target.

A second possibility, a *priming account*, posits that occupation title suffixes can serve as primes, making gender-related cognitive representations more accessible at the time of encounter and thus more likely to influence subsequent judgments (Bruner, 1957; Higgins, Rholes, & Jones, 1977). For instance, after a perceiver encounters the term *chairman* several times, concepts associated with *man* (e.g., independence, aggression) may become more accessible. The increased accessibility of masculine constructs could bias perceivers' interpretation of targets' personality characteristics in masculine-congruent ways. In contrast, person-suffix titles might serve as a language marker for perceivers to consider the possibility that the target may not be male (similar to the "consider the opposite" strategy discussed by Lord, Lepper, & Preston, 1984). Thus repeated exposure to the person suffix may lead to greater accessibility of feminine constructs (relative to masculine constructs), which would bias target perception in feminine-congruent ways.

The notion that priming can influence interpretation in line with stereotype-related constructs is not new. For example, Devine (1989) found that participants who were subliminally primed with many Black-associated terms (e.g., *slavery, jazz*) interpreted the ambiguous behaviors of a target person (using the Donald paragraph paradigm) in a more hostile fashion (i.e., consistent with a Black stereotype) than participants who were subliminally primed with fewer Black-associated terms. Simi-

larly, Dovidio, Evans, and Tyler (1986) found that participants were faster at judging negatively valenced adjectives when preceded by the prime *black*, and faster at judging positively valenced adjectives when preceded by the prime *white*, in comparison with the neutral prime *house*. Consistent with the findings of Experiment 1, this priming account would predict personality biases regardless of whether the perceiver had explicit knowledge about the target's sex. Also consistent with the findings of Experiment 1, people who possess more rigid (i.e., traditional) gender role beliefs should demonstrate stronger occupation title suffix biases than those who have weaker gender role beliefs, because rigid (as opposed to diffuse) stereotypes should result in stronger activation of gender-related constructs.

A third process possibility, an *applicable priming account*, combines the implicit personality and priming accounts. Although frequent encounter of man- and person-suffix titles may prime masculine and feminine constructs, respectively, the repeated activation of gender-related constructs may influence target evaluations only when the titles are perceived as applicable to the target's personality. Higgins (1996; Higgins & Brendl, 1995) has noted that priming effects will bias judgments only in cases where the primes are seen as applicable to the target to be judged. For example, Banaji, Hardin, and Rothman (1993) found that primes such as *dependence* and *aggression* did not produce assimilation biases in judgments for all targets but, rather, only for targets where these gender-related stereotypes were applicable (women and men, respectively). For example, participants primed with the concept "dependence" revealed assimilated judgments (i.e., perceiving the target as more dependent) for a target named Donna but not for a target named Donald who performed identical behaviors. Similarly, participants primed with the concept "aggression" displayed assimilated judgments (i.e., perceiving the target as more aggressive) for a target named Donald but not for a target named Donna. Therefore, there must be a match between the priming events and the target such that the prime seems applicable to the target (see also Bodenhausen & Wyer, 1985). This reasoning would suggest that a priming mechanism may lead to gender-marked language biases, but only when the occupation title suffix is perceived as applicable to the target's personality.

EXPERIMENT 2: COGNITIVE UNDERPINNINGS OF GENDER-MARKED LANGUAGE EFFECTS

Experiment 2 was designed to pit these three accounts against one another. Participants read Vignette 1 from Experiment 1 and made the same judgments about the target. The primary difference in Experiment 2 was the inclusion of between-subject manipulations relevant to the alternative process accounts. The implicit personality theory account was tested by manipulating whether the target (as participants in Experiment 1 may have very well assumed) or someone else chose the occupation title suffix associated with the target's position. If implicit personality theories contribute to gender-marked language effects, occupation title suffix manipulations should matter only when perceivers believe that the target, not someone else, chose the title. Thus this account predicts an interaction between occupation title suffix and title chooser.

The priming account was tested by manipulating the frequency with which the occupation title was presented (once vs. several times in the course of the vignette, as in Experiment 1). Research has shown that repeated presentation of primes leads to greater accessibility of related constructs in memory (e.g., Higgins et al., 1977; Srull & Wyer, 1979). If priming is an important ingredient in gender-marked language effects, occupation title suffix differences should be accentuated when the occupation title appears several times during the vignette, as it was in Experiment 1. In this case, an interaction between occupation title suffix and priming frequency is predicted.

Lastly, support for the applicable priming account would be found if the priming account effect is supported, but only in conditions where perceivers are told that the target (instead of someone else) chose the occupation title. In other words, the priming effect would obtain only when the suffix appears applicable to the target (i.e., was chosen by the target). Thus, unlike the implicit personality theory and priming accounts, the applicable priming account predicts a three-way interaction between occupation title suffix, priming frequency, and title chooser.

Method

Participants. A sample of 196 Indiana University undergraduates participated in return for research experience credit in introductory psychology courses.[8] They were randomly assigned to experimental conditions.

Procedure. Participants were seated at individual computer workstations and were provided with the same instructions used in Experiment 1. They were told that they would be offering evaluations of several business leaders, but in actuality they were asked to assess only one target (Vignette 1 from Experiment 1). As before, occupation title—*chairman*, *chair*, or *chairperson*—was manipulated between subjects.

In addition to this between-subjects manipulation, two other factors were manipulated to examine the process accounts. Before reading the vignette, participants were given additional background information

(not provided in Experiment 1) about the recent business history of the target's company. A lengthy description told participants that the company had encountered financial difficulties and had been acquired by new owners who wanted to restructure the company to improve its financial health. In addition to a text description, participants were also supplied with a paper chart that illustrated (in flowchart form) the organization of the company before and after the restructuring. At the top of the chart was Simmons (the target in Vignette 1), and it was shown that Simmons's title before the restructuring (*President of the Company*) had been changed to either *Chairman*, *Chair*, or *Chairperson of the Board of Directors* (the appropriate title was displayed depending on assigned condition).

The critical manipulation was whether participants were told that the owners had made Simmons responsible for the new organization (Simmons-chose condition) or that outside consultants (consultants-chose condition) had been hired and thus were responsible for the new organization; this information was presented in the computer-delivered text instructions and was repeated on the flowchart as well. In the former condition but not the latter condition, Simmons should be perceived as responsible for the occupation title suffix change. As a result, the implicit personality theory account would predict strong occupation title suffix effects only in the Simmons-chose condition. Participants were required to spend a minimum of 60 s studying the flowchart to ensure that they attended to Simmons's title change and whom the owners had chosen to reorganize the company (Simmons or the consultants).

A second between-subjects manipulation was used to test the priming account. The frequency with which the occupation title was presented in the vignette that participants read was manipulated so that it appeared six times, as in Experiment 1, or only once, at the beginning of the vignette. In the infrequent prime condition, only Simmons's last name (without title) was presented in the five other places where occupation titles had previously appeared. The priming account would predict strong occupation title suffix effects only in the frequently primed condition, and the applicable priming account would predict that occupation title suffix effects would occur only in the frequently primed, Simmons-chose condition.

Design. The design of the study was a 3 (Occupation Title: man, no, or person suffix) × 2 (Reorganization Choice: Simmons vs. consultants) × 2 (Priming Frequency: repeated vs. once) between-subjects factorial. In summary, the implicit personality account and priming accounts predict two-way interactions (Title × Reorganization Choice and Title × Priming Frequency, respectively), whereas the applicable priming account predicts a three-way interaction between reorganization choice, priming frequency, and occupation title suffix.

Dependent measures. After reading the vignette, participants responded to the same 21 questions about the target as in Experiment 1. After participants completed their judgments, they were asked to assess (on a 7-point scale) "To what extent did Simmons choose the new title?" This item served as a check to ensure that the reorganization manipulation was effective. Indeed, participants in the Simmons-chose condition believed that Simmons was more responsible for choosing the occupation title ($M = 4.08$) than participants in the consultants-chose condition ($M = 3.44$), $F(1,194) = 9.49$, $p < .01$.

Results

Computation of indexes. Again, interitem reliability was assessed before computing the feminine and masculine indexes. Both the feminine index (Cronbach's $\alpha = .88$) and the masculine index (Cronbach's $\alpha = .84$) revealed good interitem reliability. Accordingly, feminine stereotype and masculine stereotype indexes were produced by computing the mean of the five responses corresponding to each gender stereotype. Following Experiment 1, a single dependent measure reflecting the relative degree of masculine stereotype strength was developed by subtracting the feminine stereotype index from the masculine stereotype index. Positive difference scores indicated endorsement of relatively strong masculine and weak feminine stereotypes, and negative scores indicated endorsement of relatively strong feminine and weak masculine stereotypes.

Relative masculine stereotype index analysis. The relative masculine stereotype index was analyzed by a 3 (Occupation Title: man, no, or person suffix) × 2 (Reorganization Choice: Simmons vs. consultants) × 2 (Priming Frequency: repeated vs. once) between-subjects ANOVA. Replicating Experiment 1, a main effect of occupation suffix was observed, $F(2,184) = 4.28$, $p < .02$, revealing that participants perceived the man-suffix target as possessing relatively more masculine personality attributes ($M = 0.98$) than the no-suffix target ($M = 0.47$), who was perceived as possessing relatively more masculine personality attributes than the person-suffix target ($M = 0.37$).

This effect, however, was qualified by a suffix by priming frequency interaction, $F(2,184) = 7.76$, $p < .001$. This interaction revealed that frequent (compared with infrequent) priming produced relatively more masculine judgments of man-suffix ($Ms = 1.28$ vs. 0.66) and no-suffix ($Ms = 0.62$ vs. 0.30) targets but relatively less masculine assessments of person-suffix targets ($Ms =$

TABLE 2: Relative Masculine Stereotype Indexes as a Function of Suffix Condition, Reorganization Choice, and Priming Frequency, Experiment 2

	Simmons Chose		*Consultants Chose*	
Suffix Condition	*Frequent Primes*	*One Prime*	*Frequent Primes*	*One Prime*
Man suffix	1.97_{a}	0.36_{bc}	0.61_{b}	0.95_{b}
No suffix	0.73_{b}	0.11_{bc}	0.51_{bc}	0.49_{bc}
Person suffix	-0.31_{cd}	0.92_{b}	0.75_{bc}	0.84_{b}

NOTE: Positive values indicate stronger masculine (and weaker feminine) personality assessments than negative values. Means with a common subscript do not differ significantly ($p \geq .05$).

−0.12 vs. 0.88). Thus more frequent priming led to stronger masculine personality ascription biases for man- and no-suffix targets but more feminine personality ascriptions for person-suffix targets. In other words, more frequent use of the occupation title led to stronger occupation title suffix effects, in line with the predictions of the priming account.

Most important, all the aforementioned effects were qualified by the three-way interaction between occupation title, reorganization choice, and priming frequency, $F(2,184) = 3.80$, $p < .03$. As Table 2 illustrates, strong support for the applicable priming account was found. The priming frequency by occupation title interaction noted above held when the prime was applicable (i.e., when Simmons was known to have selected the occupation title), $F(2,93) = 11.80$, $p < .001$, but not when the title was imposed on Simmons, $F < 1$. That is, the only condition where strong occupation title suffix effects were observed was the frequent-priming, Simmons-chose condition (see Table 2).[9]

Discussion

Experiment 2 replicated the findings of Experiment 1 by illustrating that gender-marked language can influence perceivers' judgments about a target's personality characteristics. More important, it also tested three accounts for why these effects occur. The results of Experiment 2 clearly support the applicable priming explanation for gender-marked language effects. Although evidence consistent with a simple priming explanation was found, it is clear that this effect occurred only when participants believed that the target, not someone else, chose the occupation title.

GENERAL DISCUSSION

Many have argued that gender-marked language can have an impact on perceivers' appraisals of social targets. Despite a great deal of anecdotal evidence, empirical demonstrations of such effects are few. Moreover, very little consideration has been given to the psychological processes that might underlie such effects. These experiments attempt to address these issues.

In Experiment 1, the role of gender-marked language on target personality assessments was explored, and it was found that man-suffix targets were associated with relatively masculine stereotyped personality characteristics and that person-suffix targets were associated with relatively feminine stereotyped personality characteristics. Moreover, participants with more traditional gender role beliefs were more influenced by gender-marked language than those with more liberal gender beliefs. These biases existed when the target's sex was unknown and persisted in less ambiguous situations where the targets were known to be women or men. In terms of practical implications, it appears that a concern for the consequences of gender-marked language is grounded in more than either esthetic or philosophical considerations but reflects psychological impact as well.

Experiment 2 replicated the findings of Experiment 1 and tested explanations for these effects. Although implicit personality theory and simple priming account explanations were examined, the applicable priming mechanism was most consistent with the data. As with the findings of others regarding priming effects (e.g., Banaji et al., 1993; Bodenhausen & Wyer, 1985), it appears that the priming consequences of gender-marked language will occur only in cases where target applicability exists. Thus these experiments not only demonstrate that gender-marked language can color the perception of target personality characteristics but also provide a process-oriented explanation for why these effects occur. It appears that the enhanced accessibility of masculine and feminine attributes brought about by frequent exposure to occupation title suffixes influences the inferences drawn about the target person—provided that the occupation title is perceived as informative about the target's character. Thus the applicable priming explanation is consistent with our evolving understanding of the intricacies of priming effects and construct accessibility.

APPENDIX
Vignette 1, Experiment 1

Chris Simmons is the Chair/man/person of the Board of Directors for Birchmont Industries of Wolfeboro, New Hampshire. Simmons is 58 years old and has been with Birchmont for 20 years. Birchmont makes a variety of paper clip products. Recently, a governmental agency asked for bids from several paper clip manufacturers to supply their agency with paper clips. The government required that the paper clips be low in cost, and delivered to the agency within a month. Chair/man/person Simmons submitted a bid for Birchmont to this government agency. Of the several companies that submitted

APPENDIX Continued

bids, Birchmont's bid was the lowest in terms of costs. However, because of Birchmont's smaller production facilities, it could not supply the paper clips on time to the governmental agency unless Chair/man/person Simmons had Birchmont's employees work overtime. The additional overtime hours, however, would raise the costs of the paper clips and make Birchmont's bid less competitive. Simmons had a couple of discussions with the governmental agency and a compromise was achieved. To meet the government's requirement of getting the paper clips within a month, Chair/man/person Simmons agreed to use overtime labor to get the job done on time. Also, Simmons agreed to not increase the costs of Birchmont's paper clips to the government. Thus Birchmont would win the contract, but not make any profit on the deal because of the necessity of using overtime labor. However, the government promised Chair/man/person Simmons that they would give Birchmont consideration in the future when they needed paper clips and time constraints were not an important factor. Chair/man/person Simmons believes that such possible future contracts could bring in considerable revenues to Birchmont in the future.

NOTES

1. At all times (during telephone recruitment and experimental sessions), experimenters were unaware of participants' AWS scores. Of the participants in Experiment 1, those classified as high-sexist individuals ($M = 53.3$) did have significantly greater AWS scores than those classified as low-sexist individuals ($M = 32.5$), $F(1,133) = 325.77$, $p < .001$.

2. Cell sizes varied as a function of condition. For low-sexist females, there were 13 man-suffix, 12 no-suffix, and 12 person-suffix participants. For high-sexist females, there were 11 man-suffix, 9 no-suffix, and 10 person-suffix participants. For low-sexist males, there were 11 man-suffix, 12 no-suffix, and 10 person-suffix participants. For high-sexist males, there were 12 man-suffix, 11 no-suffix, and 12 person-suffix participants.

3. Presentation of the vignettes was not counterbalanced so as to ensure that vignette circumstances were held constant for any given target (ambiguous, explicitly female, explicitly male). Our intent is not to compare across vignettes but to examine the effects of suffix within each vignette.

4. Pretesting established that gender-ambiguous targets (not associated with any occupation title suffix) described in each of the vignettes were not viewed in a strongly masculine or strongly feminine fashion.

5. Although our primary focus is on how gender-marked language influences the *relative* strength of masculine (vs. feminine) stereotypes, it should be noted that title condition by participant sex by sexism level ANOVAs conducted on the separate stereotype indexes (feminine and masculine) revealed the same occupation title suffix by sexism level interaction for the feminine, $F(2,123) = 3.06$, $p < .06$, and masculine, $F(2,123) = 3.26$, $p < .05$, indexes. For ease of comprehension and because the two indexes showed the same interactive pattern, only the difference scores are reported in Table 1.

6. Separate title condition by participant sex by sexism level ANOVAs found that both the feminine, $F(2,123) = 4.61$, $p < .02$, and masculine, $F(2,123) = 18.23$, $p < .001$, stereotype indexes revealed the occupation title suffix by sexism level interaction.

7. Title condition by participant sex by sexism level ANOVAs revealed marginal occupation title suffix by sexism level interactions for both the feminine, $F(2,123) = 2.30$, $p < .11$, and masculine, $F(2,123) = 2.11$, $p < .13$, stereotype indexes.

8. The computer program in Experiment 2 did not inquire about the participant's sex, and this information was therefore unavailable for analysis. We note, however, that Experiment 1 and similar prior work (e.g., McConnell & Gavanski, 1994) found no participant sex effects.

9. Separate title condition by reorganization choice by priming frequency ANOVAs found that the feminine, $F(2,184) = 4.76$, $p < .01$, but not the masculine, $F(2,184) = 1.20$, n.s., stereotype index showed the three-way interaction.

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Received July 6, 1995
Revision accepted October 17, 1995