

Alternating Between Masculine and Feminine Pronouns: Does Essay Topic Affect Readers' Perceptions?

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Authors are routinely advised to avoid using masculine pronouns to refer to both men and women. Some style guides recommend alternating between masculine and feminine pronouns instead. Unfortunately, previous research with gender-neutral text indicates that readers perceive alternating pronouns to be biased in favor of women. We tested readers' perceptions of alternating pronouns in an essay on a traditionally feminine topic, on a traditionally masculine topic, and on a gender-neutral topic. There were four versions of each essay. One version alternated between masculine and feminine pronouns, a second version used paired masculine and feminine pronouns throughout the passage (e.g., "he or she"), and the remaining two versions used exclusively masculine pronouns or feminine pronouns. Readers overestimated the frequency of feminine pronouns in alternating text except when they occurred in an essay on a traditionally feminine topic. Readers also thought alternating pronouns were gender-biased and low in overall quality.

KEY WORDS: sexist language; alternating pronouns; generic masculine pronouns.

It has been 30 years since research began to demonstrate that masculine constructions such as "he" and "man" are perceived as male-biased or as referring exclusively to men and boys (S. L. Bem & D. Bem, 1973; Fisk, 1985; Gastil, 1990; Hamilton, 1988; Kidd, 1971; MacKay, 1980; MacKay & Fulkerson, 1979; McConnell & Fazio, 1996; McConnell & Gavanski, 1994; Moulton, Robinson, & Elias, 1978; Murdock & Forsyth, 1985; Schneider & Hacker, 1973; Stericker, 1981; Switzer, 1990; Wilson & Ng, 1988). Academic and professional organizations such as the American Psychological Association (APA, 2001), the Modern Language Association (Gibaldi & Lindenberg, 1998), and the American Medical Association (AMA, 1998) now explicitly instruct authors to avoid the generic use of masculine constructions. The dilemma writers face is what they should do instead.

Style guides recommend a number of techniques to help writers avoid generic use of masculine pronouns. Unfortunately, most of the recommended alternatives fall short of the "invisible gender neutrality" writers need (University of Chicago Press Staff, 2003, p. 233). For example, many style guides discourage the use of paired pronouns such as "he or she" because they can be stylistically awkward especially when used repetitively in text (AMA, 1998; APA, 2001; Dumond, 1990; Gibaldi & Lindenberg, 1998; Miller & Swift, 1988; Spencer, 1978). Sometimes authors can rephrase a sentence to allow the use of plural pronouns (e.g., from "A golfer must choose *his* clubs carefully" to "*Golfers* must choose *their* clubs carefully"). However, pluralization can change the meaning of text that refers exclusively to a singular referent or introduce ambiguity when a sentence contains more than one plural noun (e.g., "Although golf magazines recommend a number of techniques to avoid hooking or slicing, they each have disadvantages"). It is becoming more acceptable to use "they" and "theirs" as singular constructions (e.g., "To avoid slicing, a golfer must

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be mindful of their stroke"; Cooper, 1984; Meyers, 1990; Miller & Swift, 1988; Sklar, 1988; Valian, 1977), although some data suggest readers think this technique is grammatically incorrect (Madson & Hessling, 2001; see also University of Chicago Press Staff, 2003). Gender-neutral constructions (e.g., chairperson, police officer) and other ways of rephrasing text can be an effective way to avoid the generic use of masculine constructions (e.g., rephrasing "When a golfer chooses a club, *he* often underestimates the effect of wind" to "Underestimating the role of wind can cause *a golfer* to select the wrong club"). Unfortunately, rephrasing can also require considerable thought and effort, which makes it cumbersome for writers to use frequently (University of Chicago Press Staff, 2003).

Some authors recommend alternating between masculine and feminine singular pronouns (Addison Wesley Longman, 1998; Conkright, Flannagan, & Dykes, 2000; Frank & Treichler, 1989; McConnell-Ginet, 1989; Schwartz & the Task Force on Bias-Free Language of the Association of American University Presses, 1995) because it offers a number of advantages over other recommended techniques. It is stylistically less awkward than paired pronouns such as "he or she," and it avoids the grammatical problems and quantitative imprecision associated with the singular "they." It allows writers to use pronouns as they naturally occur in written and spoken text, including all of the case forms (e.g., "he," "she," "him," "her," "his," and "hers"), and requires far less effort than techniques that involve rephrasing text. In short, alternating between masculine and feminine pronouns allows writers to concentrate more on *what* they want to say than on *how* they need to say it.

Despite the advantages, readers seem to have negative perceptions of alternating text. Previous research indicates that readers overestimate the frequency of feminine pronouns in alternating text and perceive the text to be low in overall quality (Madson & Hessling, 1999, 2001). There is also reason to believe that alternating pronouns fails to overcome the underlying problem with generic masculine pronouns, namely perceived gender bias. It is tempting to assume that readers will perceive text that alternates between masculine and feminine pronouns to be unbiased (as long as there are an equal number of masculine and feminine pronouns). Unfortunately, research suggests that readers perceive alternating text to be gender-biased, albeit in favor of women rather than in favor of men.

There are a number of possible explanatory mechanisms for readers' negative perceptions of alternating text. Readers may overestimate the frequency of feminine pronouns and perceive the text to be biased in favor of women because feminine pronouns are relatively novel (at least compared to masculine pronouns). Readers may assume that the author used feminine pronouns to make a political statement.³ Readers may also be responding to the marked nature of feminine pronouns. According to grammatical conventions, "she" and other feminine pronouns may be used only in reference to women and girls (H. Clark & E. Clark, 1977; Moulton et al., 1978; Spencer, 1978). In other words, describing a person as "she" (e.g., "A writer must choose her words carefully") implies that the referent is female. Historically, this was not true of masculine pronouns in that it was permissible to use them to refer specifically to men and boys and generically to refer to men and women, boys and girls (never mind that readers' perceptions indicate that masculine pronouns are marked; Hyde, 1984; Lyons, 1968; MacKay, 1983).

Regardless of whether the greater salience of feminine pronouns is due to novelty, perceived political intent, or the marked nature of feminine pronouns, any manipulation that reduces the salience of feminine pronouns should also reduce readers' tendency to overestimate their frequency and perhaps reduce the perceived gender-bias of alternating text. One way to reduce the salience of feminine pronouns may be to manipulate the content of the text in which they occur. For example, it seems reasonable to expect that feminine pronouns would be less salient in the context of a traditionally feminine topic than in the context of a traditionally masculine topic. Consequently, readers who encounter alternating pronouns in an essay on a feminine topic may be less likely to overestimate the frequency of feminine pronouns and perceive the text as gender-biased than readers who encounter alternating pronouns in an essay on a gender-neutral or a masculine topic.

On the other hand, feminine pronouns may be more salient than masculine pronouns even when they are used to discuss traditionally feminine topics. Put another way, the marked nature of feminine pronouns may persist regardless of the topic of the text. Previous research indicates that male-biased perceptions of language persist despite the topic of text. For example, Merritt and Kok (1995) found that readers were likely to assume a gender-unspecified person

³We thank Joan C. Chrisler for this suggestion.

(i.e., Chris) was a man regardless of whether the person was discussing a feminine topic, a gender-neutral topic, or a masculine topic. Adults and children are also likely to assume that both gender-neutral and feminine stuffed animals are male (Lambdin, Greer, Jibotian, Wood, & Hamilton, 2003). Similarly, readers in the present study may perceive alternating text as gender-biased and overestimate the frequency of feminine pronouns even when the topic is traditionally feminine.

In this study we tested two competing hypotheses. Given an essay that alternates between masculine and feminine pronouns, are readers less likely to overestimate the frequency of feminine pronouns and perceive the text as gender-biased in an essay on a traditionally feminine topic or do readers overestimate the frequency of feminine pronouns and perceive the text as gender-biased regardless of whether the topic is feminine, masculine, or gender-neutral? We also tested whether the topic of the text affects readers' tendency to perceive alternating text as low in overall quality (Madson & Hessling, 1999, 2001).

STUDY 1

Method

Participants

Two hundred seventy-seven psychology students (125 men and 151 women; 1 participant did not specify gender) participated in partial fulfillment of a course requirement. The sample was young (71% of participants were between 18 and 20 years old) and largely Hispanic or European American (45% Hispanic and 40% European American).

Procedure

Participants read a two-page essay on a stereotypically masculine (i.e., how to change the oil in a car) or feminine topic (i.e., how to weave a basket), or a gender-neutral topic (i.e., how to improve study skills; see Conkright et al., 2000, and Merritt & Kok, 1995, for similar manipulations).⁴ A pilot

⁴One might reasonably wonder whether basket-weaving is an appropriate topic given its stereotypically negative associations. On the other hand, research by Lambdin et al. (2003) suggests that a stuffed animal must be "super-feminine" before people are reasonably likely to refer to it using feminine pronouns rather than masculine pronouns. Consequently, the hyper-feminine nature of

test was conducted with 94 introductory psychology students to ensure that the essay topics were perceived as intended. Participants rated all three topics in terms of their masculinity and femininity on two separate 7-point Likert-type scales with 1, *not at all masculine/feminine*, and 7, *very masculine/feminine* (for a total of six items). The order of topics was fully counterbalanced. No significant order effects were obtained. The masculine topic was indeed considered more masculine than feminine ($M = 5.63$ and 3.01), $t(93) = 15.00$, $p < .001$, $d = 2.26$, and the feminine topic was considered more feminine than masculine ($M = 5.48$ and 2.31), $t(93) = 17.61$, $p < .001$, $d = 2.70$. Masculinity and femininity ratings of the gender-neutral topic were similar ($M = 3.87$ and 4.08 , $d = 0.13$), $t(93) = -1.90$, $p = .06$.⁵

In addition to the topic manipulation, pronoun type was manipulated. Each essay included one of four types of pronouns. One version used masculine or feminine pronouns in every other paragraph such that there were an approximately equal number of masculine and feminine pronouns (hereafter referred to as the alternating condition). A second version used paired masculine and feminine pronouns throughout the passage, such that the masculine pronouns always appeared first in the pair (e.g., "he or she"; hereafter referred to as the paired condition). The remaining versions used exclusively masculine pronouns or exclusively feminine pronouns.

Measures

The 11 dependent measures were contained in a single questionnaire completed by all participants after they had read the essay. To reduce demand characteristics, the questionnaire contained 16 other evaluation questions that were not relevant

basket-weaving may constitute a stronger test of the hypotheses than another feminine topic. In other words, if readers overestimate the frequency of feminine pronouns in alternating text and perceive it to be gender-biased in the context of basket-weaving, they might be even more likely to do so in the context of less stereotypically feminine topic.

⁵Although the difference between the masculinity and femininity ratings of the gender-neutral topic was almost significant, the small effect size indicates that the difference may have been primarily attributable to large sample size. The effect size for the gender-neutral topic was also much smaller than those for the masculine and feminine topics. It is also unclear why study skills would be considered masculine or feminine, especially by a sample of college students. Consequently, we decided that the gender-neutral topic was perceived as neutral enough to justify using it in these studies.

to this study (e.g., items that assessed students' recall of the information in the essay). The filler items were interspersed with the dependent measures, and the order of dependent measures was random.

Perceived Pronoun Frequency. Participants rated the perceived frequency of masculine and feminine pronouns separately. Participants responded to the item "How often were masculine/feminine pronouns (she, her, hers)/(he, him, his) used in the text?" on a 5-item Likert-type scale; higher scores indicated greater perceived frequency (1: *rarely*, 2: *occasionally*, 3: *about half the time*, 4: *frequently*, and 5: *nearly all the time*).

Perceived Gender Bias. Perceived gender bias was assessed with two items that were combined into a single scale ($\alpha = .99$). Participants indicated their level of agreement with the statement "The essay was biased in favor of one gender" on a 7-point Likert-type scale that ranged from 1 (*not at all*) to 7 (*strongly*). Participants also indicated "To what degree were the pronouns chosen by the author effective in eliminating a bias toward one gender?" on a 7-point Likert-type scale that ranged from 1 (*not at all*) to 7 (*very*). This item was reverse-coded prior to being combined with the other measure of bias such that larger numbers on both items indicated more perceived gender bias.

Ratings of Text Quality. Seven different measures were combined into an overall quality index that assessed participants' perceptions of the essay's quality ($\alpha = .83$). Items were scored such that higher numbers indicate higher perceived quality. Participants rated the overall quality of the essay on a 7-point Likert-type scale that ranged from 1 (*very poor quality*) to 7 (*very high quality*). Participants gave the essay a letter grade where an A was coded as a 4.0, a B was coded as a 3.0, etc. They also indicated on a dichotomous, forced-choice response scale (i.e., yes or no) whether they thought the essay was grammatically correct. In addition, participants indicated their agreement with the following four items: "The essay was awkward to read," "The essay was confusing," "The pronouns were distracting from the content of the essay," and "The pronouns disrupted the flow of the essay" on a 7-point Likert-type scale that ranged from 1 (*not at all agree*) to 7 (*strongly agree*). These four items were reverse-coded prior to being combined with the other measures such that larger values indicate higher perceived quality on all seven items.

Results and Discussion

Unless otherwise noted, the data were analyzed using a 3 (essay topic) \times 4 (pronoun type) ANOVA.

Perceived Frequency of Pronoun Use

Recall that one purpose of the study was to ascertain whether readers' tendency to overestimate the frequency of feminine pronouns in alternating text would be affected by the topic of the text. Although there were four pronoun conditions, the appropriate comparison here is between the alternating and paired pronoun conditions (i.e., because these two conditions contained roughly equal proportions of masculine and feminine pronouns, whereas the remaining conditions tested masculine and feminine pronouns exclusively). Readers thought that feminine pronouns were used more often in the alternating condition than in the paired condition when the data were collapsed across essay condition ($M = 3.49$ and 2.69), $F(3, 265) = 90.41$, $p < .001$, Tukey HSD $p < .001$. Keep in mind that readers' perceptions directly contradict reality because the paired condition contained approximately twice as many feminine pronouns as the alternating condition did. One might reasonably ask whether there is something about alternating pronouns that leads readers to overestimate the frequency of any type of pronoun. The data did not support this interpretation, however, as the analogous effect was not found for masculine pronouns. Readers reported that masculine pronouns were used with approximately equal frequency in the alternating and paired conditions ($M = 2.23$ and 2.35 , Tukey HSD $p = ns$).

Essay topic did moderate readers' tendency to overestimate the frequency of feminine pronouns in alternating text, $F(6, 265) = 2.54$, $p = .02$. Participants who read the masculine essay thought that feminine pronouns were used significantly more often in the alternating condition than in the paired condition ($M = 4.08$ and 2.63 , Tukey HSD $p = .002$). Participants who read the gender-neutral essay reported that feminine pronouns were used with greater frequency in the alternating condition than in the paired condition, although the effect was not statistically significant ($M = 3.18$ and 2.22 , Tukey HSD $p = .08$). Those who read the feminine essay thought that feminine pronouns were used about as often in the alternating and paired conditions ($M = 3.29$ and 3.21 , Tukey HSD $p = ns$). In short, the feminine and

Table I. Regression of Perceived Frequency of Feminine Pronouns to Predict Perceived Gender Bias

Variable	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Perceived frequency of feminine pronouns	0.80	.14	.34	5.64	.001
Perceived frequency of masculine pronouns	0.45	.17	.16	2.61	.01

gender-neutral essay topics appeared to reduce the salience of the feminine pronouns when they alternated with masculine pronouns.

Perceived Gender Bias

We also tested whether essay topic modified readers’ perceptions of alternating pronouns as gender-biased. In this case, we compared the perceived bias of all four pronoun conditions. The essay topic did not significantly affect readers’ perceptions of gender bias nor was there a significant interaction between essay topic and pronoun condition. There was, however, a significant main effect of pronoun condition, $F(3, 262) = 38.39, p < .001$. Paired pronouns were rated as the least gender-biased, $M = 4.07$, Tukey LSD $p < .001$, whereas feminine pronouns were rated as the most gender-biased, $M = 9.91$, Tukey LSD $p < .002$. Readers perceived masculine and alternating pronouns to be roughly equal in terms of gender bias, $M = 8.18$ and 7.67 , Tukey LSD $p = .33$. It may be reassuring that participants perceived the generic use of masculine pronouns as sexist. On the other hand, readers perceived alternating pronouns to be just as biased, which indicates that it is not a satisfactory alternative to masculine pronouns. Further, readers perceived the generic use of feminine pronouns to be the most gender-biased. In other words, there is a clear double standard in readers’ perceptions of generic pronouns; readers find the generic use of feminine pronouns more objectionable than the generic use of masculine pronouns.

Could the tendency to perceive alternating and feminine pronouns as gender-biased be related to readers’ tendency to overestimate the frequency of feminine pronouns? We conducted a regression analysis to test whether perceptions of gender bias were

predicted by the perceived frequency of feminine and masculine pronouns. The perceived frequency of feminine pronouns was a better predictor of perceived gender bias than the perceived frequency of masculine pronouns, although both variables were significant predictors, $F(2, 271) = 16.28, p < .001$ (see Table I). Given that readers perceived the feminine pronoun condition to be the most gender-biased, we repeated the analysis including only the alternating and feminine pronoun conditions in case the relation between perceived frequency and perceived bias was attributable primarily to the feminine pronoun condition. In this analysis, only the perceived frequency of feminine pronouns predicted perceived gender bias, $F(2, 133) = 26.45, p < .001$ (see Table II). In other words, given an essay with alternating or paired pronouns, readers who thought that feminine pronouns were used with greater frequency than masculine pronouns also rated the essay as more biased in favor of one gender, regardless of the topic of the essay.

Ratings of Text Quality

On the basis of previous research (Madson & Hessling, 1999, 2001), we expected readers to perceive text that included alternating pronouns to be lower in overall quality than text that included other types of pronouns. Consistent with our expectations, readers rated the text with alternating pronouns as the lowest in quality, $F(3, 265) = 9.86, p < .001$ ($M = 27.18$). Readers’ perceptions of text quality did not differ in the masculine, feminine, and paired pronoun conditions ($M = 31.84, 31.74,$ and 33.24 , respectively). Despite decades of proscriptions against the use of masculine generics, these readers did not perceive their appearance in text as a mark of poor

Table II. Regression of Perceived Frequency of Feminine Pronouns to Predict Perceived Gender Bias in the Alternating and Feminine Pronoun Conditions

Variable	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Perceived frequency of feminine pronouns	1.20	.19	.49	6.37	.001
Perceived frequency of masculine pronouns	-0.36	.27	-.11	-1.36	.18

quality any more so than usage of paired pronouns (see also Swim, Mallett, & Stangor, 2004, for another example of readers' insensitivity to sexist language).

We also wondered how essay topic would influence perceptions of text quality. Readers rated the essay about the feminine topic as lowest in overall quality ($M = 27.09$) and the gender-neutral essay as the highest in quality ($M = 34.10$); perceptions of the masculine essay fell in between these two, $F(2, 265) = 20.29$, $p < .001$ ($M = 31.43$, all three pairwise comparisons are significant Tukey HSD $p < .03$). A pronoun \times topic interaction indicated several moderating effects of essay topic, $F(6, 265) = 2.63$, $p = .02$. Although readers generally rated the masculine essay as high in quality, the inclusion of alternating pronouns lowered its perceived quality to be comparable with the perceived quality of the feminine essay (Tukey HSD $p = .99$). Put another way, when alternating pronouns were included, participants perceived both the masculine and the feminine essays to be lower in quality than the gender-neutral essay (Tukey HSD $p = .003$ for masculine and neutral comparison, Tukey HSD $p = .001$ for feminine and neutral comparison). Alternating pronouns also reduced readers' perceptions of the quality of the masculine essay compared to paired pronouns (Tukey HSD $p < .001$).

In summary, Study 1 replicated the negative perceptions of alternating pronouns that have been found in previous research. Readers overestimated the frequency of feminine pronouns in alternating text, although the feminine essay topic mitigated the effect. Also, readers who perceived that feminine pronouns were used with greater frequency were more likely to rate alternating text as gender-biased. Although readers did perceive the generic use of masculine pronouns to be sexist, they rated alternating pronouns as equally sexist, which suggests that alternating pronouns should not be considered a satisfactory replacement for generic masculine pronouns. Readers also thought that the alternating text was lowest in overall quality, although they did not significantly derogate the quality of text that included masculine or feminine generic pronouns.

Unfortunately, Study 1 had flaws that created possible alternative explanations for the results. In particular, we did not counterbalance the order of the dependent variables. The individual items were scattered throughout the instrument (i.e., all the measures of text quality did not occur together), but this technique may not have controlled adequately for any possible order effects. Also, the wording of the

response scale for the measure of pronoun frequency introduced ambiguity that merited correction (i.e., what is "the time" in "half of the time?").⁶ We conducted Study 2 to address these flaws.

STUDY 2

Method

Participants

Two hundred twenty-three psychology students (88 men and 130 women; 5 participants did not specify gender) participated as part of an in-class activity. The sample was young (82% of participants were between 18 and 20 years old) and largely Hispanic and European American (47% Hispanic and 43% European American).

Procedure

We used the same three essays and four pronoun conditions as in Study 1.

Measures

Dependent measures were contained in a single questionnaire completed by all participants after they had read the essay. The order of the three types of measures (i.e., measures of pronoun frequency, perceived gender bias, and perceived text quality) was fully counterbalanced. To reduce demand characteristics, the instrument began with five other evaluation questions that were not relevant to this study (e.g., "How much did you know about the topic before reading the essay today?").

All dependent measures were the same as in Study 1 except for the measures of pronoun frequency. We revised the item used in Study 1 and added a second item of perceived frequency. The revised item was "Roughly how many of the pronouns used in the essay were masculine pronouns (e.g., he, him, his)?" Participants responded on a 7-item Likert-type scale; higher scores indicate greater perceived usage of masculine pronouns (1: *none*, 2: *a few*, 3: *less than half*, 4: *about half*, 5: *more than half*, 6: *most*, and 7: *all*). Participants also responded on the

⁶We thank an anonymous reviewer for this observation.

same scale to an analogous item for feminine pronouns. We also added a second measure of perceived frequency: “Of all the pronouns in the essay, about —% were masculine pronouns.” Participants also responded to an analogous item for feminine pronouns.

Results and Discussion

There were no significant main effects or interactions with the order of the dependent variables, therefore this factor was dropped from the analyses. Unless otherwise noted, the data were analyzed using a 3 (essay topic) × 4 (pronoun type) ANOVA.

Perceived Frequency of Pronoun Use

The two measures of perceived frequency (i.e., the Likert-type scale and the percentage estimate) were strongly and significantly correlated for both masculine pronouns, $r = .90, p < .001$, and feminine pronouns, $r = .97, p < .001$. Consequently, we combined the measures into two composite scales: one for the perceived frequency of masculine pronouns, and the other for the perceived frequency of feminine pronouns.

Again, the theoretically interesting comparison was the perceived frequency of feminine and masculine pronouns in the alternating and paired conditions (Table III). As in Study 1, readers in the alternating condition thought that there were more feminine pronouns in the essay than did readers in the paired condition ($M = 53.21$ and 43.00 , respectively), $F(3, 209) = 120.50, p < .001$, Tukey LSD $p = .03$. The analogous effect was not found for masculine pronouns. Readers reported that masculine pronouns were used with approximately equal frequency in the alternating and paired conditions ($M = 44.50$ and 48.60 , Tukey LSD $p = .44$). As in Study 1, readers tended to overestimate the number of feminine pronouns (but not the number of masculine pronouns) when the text included alternating pronouns.

Table III. Mean Ratings of Text Quality by Pronoun and Topic Conditions

	He	She	Alternating	Paired
Masculine	33.78	31.68	24.91 ^A	35.21 ^B
Feminine	27.70	29.92	25.00 ^A	28.13
Gender-neutral	34.04	32.74	33.05 ^B	36.52

Note. Means with different superscripts are significantly different (Tukey HSD $p < .05$).

There was also a significant pronoun × topic interaction, which indicates that essay topic moderated readers’ tendency to overestimate the frequency of feminine pronouns, $F(6, 209) = 2.23, p = .04$. Consistent with Study 1, the feminine essay topic eliminated readers’ tendency to overestimate the frequency of feminine pronouns in the alternating condition compared to the paired condition ($M = 41.35$ and 48.05 , Tukey LSD $p = .41$). Results for the masculine essay were similar ($M = 53.68$ and 43.53 , Tukey LSD $p = .19$). Participants who read the gender-neutral essay did overestimate the frequency of feminine pronouns in the alternating condition as compared to the paired condition ($M = 69.25$ and 36.76 , Tukey LSD $p < .001$).

Perceived Gender Bias

As in Study 1, the two measures of perceived gender bias were combined into a single index. Although the correlation between the two individual measures was statistically significant, it was not especially large, $r = .45, p < .001$, and the composite index had relatively poor internal consistency ($\alpha = .61$). Consequently, we analyzed the data in two ways: both measures separately and the composite index. The theoretically interesting results were identical in these analyses. For the sake of consistency with Study 1, the results reported next are based on the composite index.

As in Study 1, only the pronoun manipulation influenced readers’ perceptions of gender bias, $F(3, 210) = 44.05, p < .001$. Paired pronouns were perceived as the least gender-biased ($M = 4.22$, Tukey LSD $p < .001$), and the feminine pronoun condition was perceived as the most gender-biased of the pronoun conditions ($M = 10.51$, Tukey LSD $p < .009$). Readers did not significantly differentiate between the perceived bias of masculine and alternating pronouns ($M = 9.02$ and 8.17 , respectively, Tukey LSD $p = .15$). Again, the means indicate that participants perceived both masculine and alternating pronouns to be relatively gender-biased.

We also tested whether the perceived frequency of feminine pronouns predicted perceived gender bias. The composite measure of perceived frequency of feminine pronouns was the predictor variable. The perceived frequency of feminine pronouns significantly predicted perceived gender bias across all essay topics, $F(1, 219) = 9.49, p = .002$ (see Table IV). In contrast, the perceived frequency of masculine

Table IV. Regression of Perceived Frequency of Feminine Pronouns to Predict Perceived Gender Bias

Variable	<i>B</i>	<i>SE(B)</i>	β	<i>t</i>	<i>p</i>
Perceived frequency of feminine pronouns	0.012	.01	.20	3.08	.002
Perceived frequency of masculine pronouns	-0.006	.007	-.06	-0.85	.40

pronouns was unrelated to perceived gender bias, $F(1, 220) = 0.72$, $p = .40$. In other words, readers who thought that there were more feminine pronouns in the text also tended to rate the text as more gender-biased, whereas their perceptions of the number of masculine pronouns was unrelated to their ratings of gender bias. This is consistent with readers' apparent double standard in their reactions to the generic use of masculine and feminine pronouns. As in Study 1, readers perceived the generic use of feminine pronouns to be more gender-biased than the generic use of masculine pronouns, and the perceived frequency of feminine pronouns (but not masculine pronouns) predicted readers' perceptions of gender-bias.

Ratings of Text Quality

A composite perceived quality scale was constructed as described in Study 1. Unfortunately, this scale had poor reliability ($\alpha = .51$). Internal consistency of the scale improved when two of the seven items were dropped (i.e., overall quality of the essay and letter grade; $\alpha = .82$). Because these data were intended to replicate Study 1, we conducted the analyses with both the 7-item composite scale from Study 1 and with the improved 5-item scale. The theoretically interesting results were identical in both analyses. Again, for the sake of consistency, the analyses below are based on the same scale composition as in Study 1.

As in Study 1, readers were unimpressed with text that included alternating pronouns. Readers rated essays that included alternating pronouns as lower in quality than essays with masculine and paired pronouns ($M = 24.67$, 30.33, and 30.11, respectively), $F(3, 265) = 9.86$, $p < .001$, Tukey HSD $p = .001$ for the masculine comparison, Tukey HSD $p = .003$ for the paired comparison. Ratings of text quality were equally low in the alternating and feminine pronouns conditions ($M = 24.67$ and 27.49, respectively, Tukey HSD $p = .25$).

Readers' perceptions of the quality of the three essay topics were also similar to Study 1. Readers thought that the feminine essay was lower in quality

than both the masculine and neutral essay ($M = 23.82$, 29.67, and 31.90, respectively), $F(2, 265) = 20.29$, $p < .001$, Tukey HSD $p < .001$. Unlike in Study 1, there was no perceived difference in the quality of the masculine and neutral essays, although the means were in the same direction (Tukey HSD $p = .16$).

These patterns were qualified by a significant pronoun condition \times essay topic interaction, $F(6, 265) = 2.63$, $p = .02$. First, alternating pronouns made readers derogate the quality of the masculine essay. Readers thought the masculine essay was lower in quality when it contained alternating pronouns than when it contained masculine or paired pronouns (Tukey HSD $p < .01$; see Table V). In fact, alternating pronouns made readers rate the quality of the masculine essay as roughly equal to the quality of the feminine essay, which readers uniformly disliked. Second, readers' perceptions of the gender-neutral essay were largely unaffected by the pronoun manipulation (all comparisons Tukey HSD $p = ns$).

GENERAL DISCUSSION

Clearly, alternating between masculine and feminine pronouns is not a satisfactory alternative to generic masculine pronouns. Readers perceive alternating pronouns to be just as gender-biased as masculine pronouns, perhaps because they tend to overestimate the frequency of feminine pronouns in alternating text. Alternating text is also consistently rated as lower in overall quality than text with generic masculine pronouns.

The context in which alternating pronouns appear moderates two of these patterns, albeit not in

Table V. Mean Ratings of Text Quality by Pronoun and Topic Conditions

	He	She	Alternating	Paired
Masculine	32.94 ^A	28.83	23.95 ^B	33.26 ^A
Feminine	26.91	22.42	21.53	23.53
Gender-neutral	31.95 ^A	31.10 ^A	30.25 ^A	33.94 ^A

Note. Within each row, means with different superscripts are significantly different (Tukey HSD $p < .05$).

the same direction. Although the data are mixed regarding masculine and gender-neutral essays, readers are consistently less likely to overestimate the frequency of feminine pronouns in alternating text in the context of a feminine topic. In other words, the feminine topic appears to reduce the salience of the feminine pronouns in alternating text (although the relation between perceived frequency of feminine pronouns and perceived gender bias persists regardless of essay topic).

On the other hand, readers' perceptions of the perceived quality of an essay decrease when the essay includes alternating pronouns. Readers generally had positive perceptions of the masculine essay, except when it included alternating pronouns. In that condition, perceptions of quality decreased to the level of the feminine essay (which readers consistently rated as low in quality).

Why do readers find alternating text objectionable? Readers' perceptions may be a result of the marked nature of feminine pronouns. Although masculine pronouns are perceived as male-biased, grammatical convention has allowed them to be used in reference to people of both sexes for centuries. Because it has not been allowable to use feminine pronouns generically, their relative novelty may attract readers' attention more than masculine pronouns (see Conkright et al., 2000). The reader may then be left with the (incorrect) impression that the text contains more feminine pronouns than masculine pronouns. Presumably, this is one reason readers rate the text as gender-biased; the more feminine pronouns readers notice in the text, the more sexist they rate it.⁷

Other factors may also contribute to readers' negative perceptions of alternating pronouns. One possibility is that alternating between masculine and feminine pronouns may be jarring to the reader. When readers encounter masculine and feminine pronouns in isolation (as they occur in the alternating condition), readers may attempt to maintain two mental images (i.e., one of a man and one of a woman) or to repeatedly change the gender of the

person in their mental image. For example, children who were told a story that alternated between masculine and feminine pronouns tended to imagine that the story had two main characters (one man and one woman) despite the clearly singular nature of the character in the story (Conkright et al., 2000). Maintaining two mental images or repeatedly changing the gender of the image both require more cognitive resources than maintaining a single, unchanging image, and readers may react to the additional cognitive load by denigrating the text. Another possibility is that the majority of students who participated in these studies were first- and second-year students who may have more sexist attitudes than the older students or adults have (Bryant, 2003). Consistent with this possibility, participants in both studies had negative perceptions of the feminine essay, perhaps because they have negative attitudes toward stereotypically feminine topics and activities. Alternatively, readers' negative perceptions of the feminine essay may be tied to stereotypical associations with the specific topic (i.e., basket weaving) and might not generalize to other feminine topics.

Regardless of the mechanism behind readers' perceptions, the *perceived* frequency of feminine pronouns seems to be a function of at least two unrelated factors: the actual number of feminine pronouns and how they are used. For example, compare readers' perceptions of alternating and paired pronouns. When feminine pronouns stand alone in an alternating pattern with masculine pronouns, readers rate the text as sexist and poorly written. When feminine pronouns are paired with masculine pronouns, readers rate the text as unbiased and well-written. This pattern emerges despite the fact that both conditions contain roughly equal proportions of masculine and feminine pronouns. These data suggest that readers do not inherently dislike feminine pronouns; rather readers' perceptions of feminine pronouns are tied to whether they are explicitly paired with masculine pronouns.

However, readers' perceptions of masculine pronouns are not tied to their usage. Whereas the perceived frequency of feminine pronouns was much higher in the alternating condition than in the paired condition, the perceived frequency of masculine pronouns did not differ between these conditions. Also, perceived gender bias was a function of the perceived frequency of feminine pronouns, but was largely unrelated to the perceived frequency of masculine pronouns. In other words, readers' perceptions of the text do not change much regardless of whether

⁷One might reasonably wonder whether participants' perceptions were influenced by their relative religiosity or conservatism. Feminists' objections to androcentric language have been the subject of many jokes in the last three decades. Given that participants were randomly assigned to conditions in these studies, there is no reason to expect that there were systematic differences in participants' attitudes between conditions. As such, religiosity and political conservatism are not likely alternative explanations for the findings.

masculine pronouns stand alone in the alternating condition or whether they are explicitly paired with feminine pronouns. However, readers' perceptions of feminine pronouns differ considerably depending on their presentation.

Although the results of Study 2 allowed us to eliminate the alternative explanation that readers' perceptions in Study 1 were related to the order of the dependent variables, important limitations remain. Future researchers should use different stimulus material to assure that readers' perceptions of alternating pronouns are not limited to these particular essays. In particular, different feminine topics should be tested to ascertain whether the readers' negative perceptions are specific to the topic of basket weaving. Readers' apparent preference for paired pronouns also warrants additional investigation. Perhaps readers consistently prefer paired pronouns in these studies because they are perceived as neither feminine nor masculine. Paired pronouns may not compare as favorably to other pronoun conditions if different dimensions are measured (e.g., ease of use).

There may also be important individual differences in readers' perceptions of alternating pronouns. Future researchers should use a more diverse sample of participants, particularly with respect to age and ethnicity. It is entirely likely that adults and African Americans (populations that were greatly underrepresented in the current samples) might have different perceptions of alternating pronouns than European American and Hispanic college students. Future researchers should also investigate whether scores on the Ambivalent Sexism Inventory (Glick & Fiske, 1997) or endorsement of modern sexist beliefs (Swim, Aikin, Hall, & Hunter, 1995) predict readers' overestimation of feminine pronouns or the perceptions that alternating text is biased in favor of women (see also Swim et al., 2004).⁸ Another topic for future research is individual differences in attitudes toward inclusive language and the effectiveness of different interventions to instruct people in the use of inclusive language (cf. Lambdin et al., 2003; Parks & Robertson, 2002).

Despite these limitations, the results regarding readers' perceptions of alternating pronouns appear to be fairly robust. Taken together, these studies suggest two surprising implications. First, despite 30 years of sanctions against the use of generic masculine pronouns, readers rated alternating pronouns

(and not generic masculine pronouns) as the worst on a composite measure of quality and readability. Readers do perceive generic masculine pronouns to be gender-biased but they perceive alternating pronouns to be just as biased. Second, readers do not seem to share the intuition of style guides and grammarians. Some style guides recommend alternating pronouns as a straightforward alternative to generic masculine pronouns and advise authors not to use paired pronouns because they are stylistically awkward and repetitive. In contrast, readers strongly dislike text that uses alternating pronouns and perceive paired pronouns as the best of the available alternatives on a number of measures.

The best recommendation for authors may be the standard "be mindful of the audience and the purpose of the message," even with respect to pronouns. If the author is trying to persuade a conservative audience, paired pronouns may be his or her best option. If, on the other hand, the author is at least as interested in changing the world as in persuading the audience, alternating pronouns may be used precisely because they are jarring to the reader.⁹ Alternating pronouns might make readers' perceptions of the text somewhat less positive, but they might also motivate readers' to think differently about sexism in language and in general. The authors need to decide whether they are willing to take this risk.

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⁹We thank Tara Gray for this suggestion.

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