Generic Pronouns and Sexist Language:
The Oxymoronic Character of Masculine Generics[1]

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This experiment investigated the propensity of the generic he *to evoke images of males relative to* he/she *and the plural* they. *Undergraduates read sentences aloud and verbally described the images that came to mind. The results provide strong support for the hypothesis that the generic* he *evokes a disproportionate number of male images. Results also suggest that while the plural* they *functions as a generic pronoun for both males and females, males may comprehend* he/she *in a manner similar to* he. *Theoretical implications for a critique of sexist language and prescribing generic pronoun usage are considered.*

> 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 suggestion of maleness in these circumstances.... It has no pejorative connotations; it is never incorrect.
>
> (Strunk & White, *The Elements of Style,* 1979, p. 60)

When Professor Strunk first wrote his "little book," his advice went largely unquestioned. Half a century later, Strunk's view represents the minority position in an ongoing public debate. Claiming that *he* fails to function as a generic pronoun, many individuals and organizations, including the American Psychological Association (1977), have chosen to use *he or she* or *they* in place of the "generic" *he.*

Many other authors, however, continue to use *he* or use alternatives only begrudgingly. Critics have offered persuasive rebuttals to these authors'

arguments in defense of the generic *he* (see Martyna, 1978; Bendix, 1979; Blaubergs, 1980; MacKay, 1983), but the work of Cole, Hill, and Dayley (1983) reintroduced one of the central issues in the debate. The results of their experiments support the argument that the generic *he* does not evoke images in readers' minds any different from those brought to mind by *he/she* or *they*. They argue that by itself, the generic *he* does not lead to thoughts of men. The following study reexamines the question raised by Cole et al. Specifically, I provide evidence for the hypothesis that the generic *he* elicits more images of males than *he/she* and *they*. Before presenting this evidence, however, I locate the issue this study addresses in the larger debate surrounding the use of the generic *he*.

A substantial body of research supports the hypothesis that the generic *he* possesses a male bias. Regarding the origin of the term, Bodine (1975) found that the generic use of *he* derived from the androcentric worldview prevailing among 18th-century grammarians: "human beings were to be considered male unless proven otherwise" (p. 133). One would expect such a view in a patriarchal society that, until recently, has afforded women only a minor role in shaping the English language (Kramarae, 1981).

Some authors acknowledge the sexist origins of the generic *he* yet deny its contemporary perniciousness (see Strunk & White, 1979, p. 60). Feminist scholars, however, maintain that the generic *he* and similar words "not only reflect a history of male domination" but also "actively encourage its perpetuation" (Sniezek & Jazwinski, 1986, p. 643). For example, the ostensibly generic use of *he* has permitted varying legal interpretations that often exclude women but always include men (Ritchie, 1975; Collins, 1977; Hill, 1986).

In addition, critics contended that the generic *he* has reinforced sexist attitudes and behaviors in a more subtle, psychological manner. This argument finds its foundation in the Sapir–Whorf hypothesis: our grammar shapes our thought (Whorf, 1956). Blaubergs (1980) applies this hypothesis to sexist words and phrases in the English language, including the generic *he*. She maintains that regardless of its origins, "Sexist language by its existence reinforces and socializes sexist thinking and practices" (p. 137). If Blaubergs and the scholars who share her view are correct, research should demonstrate both (1) the linguistic bias of the generic *he* and (2) the pronoun's detrimental social and psychological effects on language users.

Many investigators have found that the generic *he* possesses a male bias, at least in the case of high school and college students (Kidd, 1971; MacKay, 1980a; MacKay & Fulkerson, 1979; Moulton, Robinson, & Elias, 1978; Soto, 1976; Switzer, 1990).[2] Researchers have obtained parallel results in similar

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[2]Since the vast majority of students in the above studies had a working knowledge of the grammar rule regarding the generic *he,* one should not dismiss their understanding of the word as

studies of sexist generics (Bem & Bem, 1973; Briere & Lanktree, 1983; Brooks, 1983; Harrison & Passero, 1975; Pincus & Pincus, 1980; Schneider & Hacker, 1973; Shepelak, Ogden, & Bennett, 1976; Sniezek & Jazwinski, 1986; Stericker, 1981).

In addition to finding a male-bias, researchers have demonstrated how the generic *he,* like other generic masculine language conventions, reinforces sexist attitudes and behaviors (Nilsen, 1977; Silveira, 1980). For instance, Martyna (1978) reasoned that the effects of the male-biased generic pronoun and other forms of sexist language accumulate over time. By the time girls become women,

> ...that natural process of imagining oneself to be the subject of a neutral human reference has somehow been short-circuited. Ninety percent of the women in my study reported no imagery at all in response to a sentence about a general human being, and the 10 percent who did reported seeing pictures of males. (p. 137)

Relatedly, researchers have found that females almost seem to disappear from the population of "generic" persons in males' minds (Martyna, 1978; Sniezek & Jazwinski, 1986; Switzer, 1990).

The above findings offer strong support for the general hypothesis that the generic *he* reinforces sexist thought and action through a linguistic bias in favor of male interpretation. It is at this point in the debate that the aforementioned work of Cole et al. (1983) becomes relevant. Their methodological criticisms bring previous studies regarding the linguistic bias of the generic *he* into question, and their findings appear to break the vital linguistic link in the critique of the generic *he* that I have summarized above.

Cole et al. (1983) identified three deficiencies in preexisting research on the comprehension of the generic *he*: studying something other than the

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the result of an unusually poor education. On the contrary, college students are a relatively well-educated sample of the population. Despite the best intentions of grammarians and individual speakers, it appears that college-educated listeners simply do not consistently understand *he* in the generic sense. This confusion is more understandable when one remembers that 80–95% of the time that people hear the word *he,* it explicitly denotes a male referent (Graham, 1973; Faggen-Steckler, McCarthy, & Tittle, 1974).

To make sure that the students in this study were familiar with the generic use of *he,* I informally administered a questionnaire and interview to the last 44 students after they completed all other parts of the experiment. The questionnaire asked whether sentences with the generic *he* could refer to (a) males, (b) females, (c) either, or (d) neither. After they completed the questionnaire, I asked them about their answers. One third clearly understood the grammar rule allows *he* to serve as a generic pronoun. A quarter thought the grammar rule was outdated and/or "dumb." Another quarter were not sure they understood it at all, and the rest of the respondents did not provide clear answers. The questionnaire's results are somewhat suspect, because the students often asked themselves if they "could picture" men, women, either, or neither; the interview, however, corrected for this to an extent. Many mentioned that their teachers/professors had suggested *he or she* as the generic pronoun, making *he* seem antiquated or unfamiliar. Perhaps the contemporaneous use of *he or she* along with the generic *he* exacerbates the inherent male bias in the latter pronoun.

effect of pronoun usage, using procedures that made students aware of the issue being studied, and employing dependent measures that "may not have tapped 'mental images of maleness'" (p. 739).

The experimenters presented the results of six experiments that attempted to avoid these three pitfalls. In five of these experiments, students read job descriptions from which they visualized a hypothetical person. The students then completed a 25-item Sex Stereotype Scale (SSS), rating the femininity/masculinity of the hypothesized people. The first experiment validated the SSS; students rated a "flight attendant" as very feminine and a "chemical engineer" as very masculine. Using the pronoun (either *he, he/she,* or *they*) as the independent variable and the SSS as the dependent measure, their second and third experiments found no significant correlation between pronoun condition and SSS score. This proved true regardless of whether the job description alluded to stereotypical or neutral occupations. The results of their fourth experiment suggested that Kidd's study (1971) was biased due to her generic use of *man* in conjunction with *he*. The fifth replicated Moulton et al.'s (1975) findings, then repeated their experiment using the SSS and found no significant pronoun effect. Their sixth experiment rebutted Creech and Wilson (1979), whose findings had implied that occupation type was determining SSS score attenuating any possible pronoun effect.

The methodological critique that Cole et al. (1983) put forward should be taken seriously, yet their criticisms apply equally well to their own method of investigation. Their experiments do directly address the question of pronoun effect, but their procedures seem somewhat transparent and their dependent measure does not directly tap mental images.

First, the SSS asks students to rate hypothetical individuals on a scale representing stereotypical masculine/feminine dualisms. Many college students might recognize these dualisms, even when camouflaged by nine filler items. (Note that the two examples of filler items Cole et al. mention — "formal/informal" and "resting/busy" — could easily be construed as similar dualisms by a suspicious student.) In addition, each job description students read included pronouns and asked them to imagine a person; the experimenters did not use any filler descriptions. Compared with previous experiments, the purpose of Cole et al.'s study appears no less opaque to the perceptive student.

Second, Cole et al. (1983) use a problematic dependent measure. They require students to create and describe detailed hypothesized images. Forcing students to construct images probably resulted in some "false" images; thus, students might have completed the SSS with no image or only a contrived one in mind. In addition, the SSS does not perfectly correlate with the sex of the images, since people's sex role stereotypes are not consistent. This dilutes any existing pronoun effect. Also, since each of Cole et al.'s experiments uses only one or two job descriptions, there is inevitably an occupa-

tional dilution effect. This is particularly important with regard to their second experiment, wherein they intended to use a "sex-neutral context" to obtain a "pure pronoun effect" (p. 741). Notably, the difference between average student ratings of the two "neutral" occupations used in the experiment was statically significant. The above complications combine to reduce substantially the reliability of Cole et al.'s dependent measure.

One could expect these confounding factors—transparency of procedure, forced imaging, and dilution effects—to make the results of Cole et al.'s experiments somewhat random. Such randomness could explain the otherwise bizarre finding that the experimenters report but do not attempt to explain in their second experiment; the use of *he/she* tended to elicit more masculine ratings by both sexes than the use of the generic *he* (p. 742).

In this study of generic pronoun effects, I attempt to mitigate the methodological difficulties that Cole et al. identify yet fail to overcome. To make the purpose of my study opaque, students were informed that the experiment studied "imaging." Only half of the 12 sentences the students read contained a generic pronoun or, for that matter, direct references to human beings. In addition, the students were not asked to construct images that necessarily contained people, nor were they asked to identify the genders of the people they visualized until they had visualized and described images for all twelve sentences.

To directly tap mental images and obtain a relatively "pure" pronoun effect, students' responses were coded simply by recording their verbal descriptions of their visualizations and their answers to a subsequent question regarding the content of their images. They were not required to construct mental images, increasing the likelihood that they described actual visualizations. Finally, the nouns and contexts used in the target sentences were relatively neutral (e.g., "person").

METHOD

Subjects

Forty-eight women and 45 men attending a large Midwestern university participated in the experiment, receiving nominal extra credit for their participation.

Procedure

After reading instructions and practicing the procedure with the student, the experimenter left the room. The student then read 12 randomly

ordered sentences written on note cards, including 6 target and 6 filler sentences. The 6 target sentences included one of the three generic pronouns that referred to neutral subjects such as "person" and "pedestrian"; no student saw more than one type of generic pronoun. (See Appendix One for the list of the 12 sentences.)

After reading a sentence aloud, the student verbally described any image that came to mind, speaking into a tape recorder. For example, one student read aloud the sentence, "The average American believes he watches too much TV." The student then said, "I see a fat guy sitting on a couch with a remote control. T.V.'s sitting in front of him. . . ."

After reading and visualizing the 12th sentence, the student answered four increasingly specific questions, the last of which directly asked the student to review the 12 sentences and recall whether the visualized subjects of the sentences were male, female, mixed (male and female), or neither (e.g., no humans in the image). Afterward, the student turned off the tape recorder, notified the experimenter, and completed Dillard's (1989) questionnaire, assessing imaging ability, and Heilbrun's Adjective Checklist (1981), providing masculinity and femininity ratings.

The recordings of student image descriptions were transcribed and coded according to whether the referents imagined were male, female, mixed, or neither. It was also noted whether or not the student reported seeing her/himself as the subject of the image. When the original image described and the image recalled in response to the question regarding the image's gender were not clearly identical, six decision rules were employed.[3] Only one of these rules applied to more than six of the 1116 images recorded; this rule simply stipulated that the original image would be coded by itself if for some reason the student failed to answer the question requesting the recall of an image. Each student received a score for the number of target sentences that evoked male images, female images, mixed images, and

[3]First, the utterance of *he* in the original description of the image does not necessarily mean that the visualized person is male. Second, when no answer is given to the question regarding recalled images, the original image is coded. Third, if no original image is given, any recalled image is ignored. Conversely, when people are explicitly seen in the original image and the recalled image is "neither," the original image is coded. Note that if the gender of the person(s) in the original is/are not specified the code "both" is entered. Fourth, when the original image — but not the recalled image — explicitly includes the speaker, then a code including "self" was recorded. This rule reflects the fact that the recall question asked only for the gender of the images. Fifth, when the recalled image appears to refer to an emphasized person in the original image, the code corresponding to the emphasized person is entered. For example, if the original is, "I see a couple dancing, and the man looks especially young, with a fancy hairdo; he's in great shape," and the recalled image is "male," the code "male" is entered. Sixth, when the original and recalled images are in direct contradiction and none of the previous rules applies, the original image is relied upon.

neither male nor female images. Thus, for each student, the sum of these four scores was six — six being the total number of target sentences.

RESULTS

Preliminary Analyses

The data were analyzed using pronoun condition, gender, imaging ability, and masculinity/femininity as independent variables and image scores as dependent variables. Reliability scores for the questionnaires assessing imaging ability were low (alpha = .50), and the Adjective Check List's reliability scores for masculinity (alpha = .74) and femininity (alpha = .79) were adequate. Statistically significant correlations were found between the dependent variables and femininity, gender, and pronoun condition. (For a full table of correlations, see Appendix Two.) A hierarchical multiple regression found significant effects for pronoun condition and gender, but not for femininity, suggesting that femininity's correlation with the dependent variables derived from its correlation with gender. Therefore, the main analyses use only pronoun condition and gender as the independent variables, examining their propensity to elicit male, female, mixed, and self images.

Main Analyses

To examine the interrelationships between the genders of the students, the different pronoun conditions, and the genders of the images brought to mind, the data were analyzed using a 2 (gender) × 3 (pronoun condition) analysis of variance (ANOVA) for each dependent variable. Then, t tests were used for more careful analysis of effects within and between pronoun conditions and gender groupings. Unless otherwise noted, differences in means reported below were statistically significant at $p < .05$.

Male Images. Table I shows the mean number of male images, standard deviation, and number of subjects for each pairing of gender and pronoun condition; susbscripts in the table denote statistically significant relationships. For male images, the ANOVA found significant effects for pronoun condition [$F(2, 87) = 31.65, p < .001$], gender [$F(1, 87) = 14.07, p < .001$], and the pronoun–gender interaction [$F(2, 87) = 11.89, p < .001$]. Overall pronoun effects were highly significant; *he* evoked more male images ($M = 3.75$) than either *he/she* ($M = 2.00$) or *they* ($M = 1.86$). Pronoun effects were also significant within each gender grouping. For women *he*

Table I. Male Images: Means, Standard Deviations (in Parentheses), and Numbers of Subjects[a]

Subjects	Pronoun condition		
	He	*He/she*	*They*
Female students	3.94_{ax}	$.94_{bx}$	1.50_{cx}
	(1.39)	(.90)	(1.02)
	$n = 17$	$n = 17$	$n = 14$
Male students	3.53_{ax}	3.20_{ay}	2.20_{by}
	(1.25)	(1.08)	(.41)
	$n = 15$	$n = 15$	$n = 15$

[a]Contrasts made row-wise (between genders) are indicated by subscripts a, b, and c. Contrasts made column-wise (between pronoun conditions) are indicated by subscripts x and y. For all contrasts, common subscripts indicate the absence of a significant difference at $p < .05$.

evoked more male images ($M = 3.94$) than either *he/she* ($M = .94$) or *they* ($M = 1.50$). More male images came to mind for men when reading *he* ($M = 3.53$) and *he/she* ($M = 3.20$) than when reading *they* ($M = 2.20$).

Comparing overall effects for gender, women saw fewer male images ($M = 2.17$) than men ($M = 2.98$). Gender also significantly affected the propensity of individual pronouns to elicit male images. Women saw fewer male images than men when reading *he/she* ($M = .94$; $M = 3.20$) and when reading *they* ($M = 1.50$; $M = 2.20$).

Female Images. Table II shows the mean number of female images, standard deviation, and number of subjects for each pairing of gender and pronoun condition. For female images, the ANOVA found significant effects for pronoun condition [$F(1, 87) = 40.95, p < .001$] and gender [$F(2, 87) = 7.45, p < .001$], but not for the pronoun–gender interaction. Comparing pronoun conditions, *he* produced fewer female images ($M = .66$) than *he/she* ($M = 1.38$). Within gender groupings, *he* evoked fewer female images for women ($M = 1.00$) than *he/she* ($M = 2.06$). Due to the relatively small number of female images, however, no other differences between means within gender groups were statistically significant.

Regarding gender effects, women saw more female images overall ($M = 1.54$) than men ($M = .49$). Within pronoun conditions, women saw more female images than men when reading *he* ($M = 1.00$; $M = .27$), *he/she* ($M = 2.06$; $M = .60$), and *they* ($M = 1.57$; $M = .60$).

Mixed Images. Table III shows the mean number of mixed images, standard deviation, and number of subjects for each pairing of gender and pronoun condition; subscripts in the table denote statistically significant relationships. For mixed images, the ANOVA found significant effects for

Table II. Female Images: Means, Standard Deviations (in Parentheses), and Numbers of Subjects[a]

	Pronoun condition		
Subjects	*He*	*He/she*	*They*
Female students	1.00_{ax}	2.06_{bx}	1.57_{abx}
	(.87)	(.90)	(.85)
	$n = 17$	$n = 17$	$n = 14$
Male students	$.27_{ay}$	$.60_{ay}$	$.60_{ay}$
	(.46)	(.63)	(.83)
	$n = 15$	$n = 15$	$n = 15$

[a]Contrasts made row-wise (between genders) are indicated by subscripts a, b, and c. Contrasts made column-wise (between pronoun conditions) are indicated by subscripts x and y. For all contrasts, common subscripts indicate the absence of a significant difference at $p < .05$.

pronoun condition [$F(1, 87) = 13.00, p < .001$] and the pronoun–gender interaction [$F(2, 87) = 4.06, p < .021$], but not for gender itself. Regarding overall pronoun effects, *he* brought to mind fewer mixed images ($M = 1.38$) than either *he/she* ($M = 2.31$) or *they* ($M = 2.79$). Comparing pronoun effects for women, *he* evoked fewer mixed images ($M = 1.06$) than either *he/she* ($M = 2.82$) or *they* ($M = 2.79$). For men, fewer mixed images came to mind when reading *he* ($M = 1.73$) or *he/she* ($M = 1.73$) than when reading *they* ($M = 2.80$).

As stated above, the overall difference in the mean number of mixed images between genders was not statistically significant. Nevertheless, there were significant differences within pronoun conditions. When reading *he*,

Table III. Mixed Images: Means, Standard Deviations (in Parentheses), and Numbers of Subjects[a]

	Pronoun condition		
Subjects	*He*	*He/she*	*They*
Female students	1.06_{ax}	2.82_{bx}	2.79_{bx}
	(.90)	(1.24)	(1.48)
	$n = 17$	$n = 17$	$n = 14$
Male students	1.73_{ay}	1.73_{ay}	2.80_{bx}
	(.96)	(1.33)	(1.26)
	$n = 15$	$n = 15$	$n = 15$

[a]Contrasts made row-wise (between genders) are indicated by subscripts a, b, and c. Contrasts made column-wise (between pronoun conditions) are indicated by subscripts x and y. For all contrasts, common subscripts indicate the absence of a significant difference at $p < .05$.

women saw fewer mixed images (M = 1.06) than men (M = 1.73); when reading *he/she,* women saw more mixed images (M = 2.82) than men (M = 1.73). Women and men saw an almost identical number of mixed images when reading *they.*

Images of Oneself. Although never asked to do so, students explicitly noted when the images they saw referred to themselves. For images of oneself, the ANOVA found no significant effects, but subsequent *t* tests found underlying significant and near-significant effects. Comparing overall pronoun effects, *they* elicited more self-images (.65) than *he* [.28, $t(59)$ = 2.01, $p < .049$]. *He/she* also tended to bring to mind more self-images (.68) than *he* (.28), but this result was not statistically significant [$t(62)$ = 1.90, $p < .062$]. For women, *they* evoked more self-images (M = .79) than *he* [.23; $t(29)$ = 2.09, $p < .045$]. For men, there were no statistically significant differences in the number of self-images the pronouns evoked, although he/she tended to bring to mind more self-images (M = 1.07) than *he* [.33; $t(28)$ = 1.93, $p < .064$]. Comparing gender effects within pronoun conditions, *he/she* produced more self-images for men (M = 1.07) than for women [M = .35; $t(30)$ = 2.13, $p < .041$].

DISCUSSION

Summarizing the essential differences between pronoun conditions, for both men and women, *he* produces mostly male images with a few mixed images, scant female images, and few images of themselves. On the average, *he/she* is generic, producing a roughly even amount of female, male, and mixed images, but women and men understand *he/she* very differently. Women see mostly mixed and female images, with relatively few male images. For men, it is not significantlly different from *he,* producing mostly male images, including many of themselves, a few mixed images, and very few female images. Overall, *they* produces mostly mixed images, with some male images and a few female images. For women, it is generic, producing mostly mixed images and an equal number of female and male images; also, it appears to give women the greatest opportunity to see themselves. For men, *they* is more generic than *he/she,* producing as many mixed images as male images; however, when reading *they,* men continue to see very few female images.

These findings suggest that for the Midwestern, predominantly European-American, undergraduate population studied herein, *he* is the least generic pronoun of the three considered. Overall, *he/she* and *they* appear equally generic, but for men, *they* turns out to be far more generic than *he/she.* The findings also support Sniezek and Jazwinski's (1986) suspicion

that undergraduate males have a difficult time reading any generic term as gender neutral.

In addition to finding highly significant pronoun and gender effects, this study also appears to have mitigated the methodological dangers identified by Cole et al. (1983). The students appear to have been unaware of the purpose of the study. After reading through the sentences, the students answered the question, "Did you find the experiment interesting, difficult, or fun?" This question prompted many students to mention that they had no idea what was being studied. When debriefed after the experiment, students who were upset by "the sexist use of *he*" thought this usage was simply an error on the part of the experimenter, whom they presumed was studying something unrelated.

The experiment also appears to have tapped directly into the students' mental images, rather than forcing them to construct artificial images or answer questions *as if* they had images in mind. The flexibility of the instructions allowed some persons to report "no image" and resulted in wide variations in reported detail. In answering the question as to the gender of the humans in their images, students readily replied "I saw no people" when there were none in their original image. Similarly, the question did not force students to report a gender for every human imagined, and a few students reported that the gender of the person in their image was unclear — could be female or male (coded as mixed). Thus, the final question did not force students to add false detail to their images.

In retrospect, it seems plausible that Cole et al. (1983) found no significant pronoun effects due to the aforementioned complications in their procedures. Methodological differences explain the discrepancy between the results of their experiments and the results presented above.

CONCLUSION

This study restores the vital linguistic link in the argument against the generic *he* outlined in the introduction. The generic *he* appears to bias the reader twoard imagining male referents, clearly suggesting that even when read in passing, the generic *he* contains a male bias. That this bias could reinforce itself in sexist thought and behavior seems eminently plausible, as previous feminist scholarship has shown.

The results of this study also have implications for prescribing language usages. MacKay (1980b) provides the relevant criterion:

> A [language] usage should be prescriptively recommended if and only if the benefits of the usage outweigh the costs, where benefits facilitate communication (i.e., the comprehension, learning, and production of the language) and costs make com-

munication more difficult (relative to all other means of expressing the same concept). (p. 352)

This study and the vast majority of relevant research suggest that for the undergraduate population, the use of *he* biases the listener toward predominantly male images (see Todd-Mancillas, 1981; MacKay, 1983). Thus, using the generic *he* interferes with effective communication, and viable alternative pronouns exist — even the most obscure of which (e.g., *tey*) students readily comprehend (MacKay, 1980b; Todd-Mancillas & Meyers, 1980). Using MacKay's criterion, therefore, grammarians (and readers) should recommend the use of an alternative generic pronoun. Of course, if one acknowledges that language use has an effect on society, the harmful effects of the generic *he* mentioned above provide another argument for discouraging its usage.[4]

An interesting question that this study raises is which alternative pronouns function most effectively as generics. If *he* must go, which pronouns might replace it? Recall that for the college student population studied herein, *they* appears the most generic of the three pronouns listed above. Using *they* as a generic, however, does not solve the problem of males producing very few female images under any pronoun condition. Future research might compare the effects of *he/she* and *they* with more promising alternatives. Reversing *he/she,* writing it as *she/he,* might cause males to imagine more women. (A preliminary investigation, using a method similar to this study's suggests that *she/he* does evoke significantly more images of women than *he, he/she,* and *they* for both female and male European-American, Midwestern undergraduates.) One might use *she* to refer to some individuals and *he* in reference to others. Or one might simply use *she* as a generic, counterbalancing the persistence of male bias. Even Strunk and White (1979), read literally, endorse this final suggestion: "If you think *she* is a handy substitute for *he,* try it and see what happens" (p. 61).

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[4]Note that Cole et al. explicitly state that even if no pronoun effect exists, "There are valid objections to use the masculine pronoun generically" (1983, p. 749). Many of the sources referenced herein offer alternative arguments against the use of the generic *he*; among these are Blaubergs (1980), Goldsmith (1980), Martyna (1983), and MacKay (1983).

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APPENDIX ONE

The following were the 12 sentences used. They are written in the *he* pronoun condition. For the *he/she condition,* the *he* was simply replaced by *he/she.* For the *they* condition, the subject was pluralized and the pronoun was replaced by *they.*

Target

1. The average American believes *he* watches too much TV.
2. After a patient eats, *he* needs to rest.
3. A pedestrian must be careful when he crosses the street.
4. A person is only as old as *he* feels.
5. If a person is very poor, *he* has to live in the city.
6. A teenager often daydreams while *he* does chores.

Filler

7. The apartment building was always a mess.
8. The birds perched themselves on the statue.
9. In the corner sat a box of worn-out shoes.
10. Fire hydrants should be opened on hot days.
11. The tropical rainforests of Brazil are a natural wonder.
12. You wouldn't believe what can be found under a car seat!

APPENDIX TWO

The table below provides correlations between the number of male images, female images, mixed images, imaging ability, femininity, masculinity, gender, and *he* compared with the combination of *he/she* and *they, he/she* compared with the combination of *he* and *they,* and *they* compared with the combination of *he* and *he/she*. Means and standard deviations are included for each variable to facilitate future meta-analyses. The number of cases is 93.

Variable[a]	Correlations[a]									
	MIM	FIM	MXM	IMABIL	FEM	MASC	GEN	HE	H/S	THEY
MIM	—									
FIM	−.49[e]	—								
MXM	−.74[e]	−.09	—							
IMGABIL	−.22	.21	.22	—						
FEM	−.27[d]	.25[d]	.22	.18	—					
MASC	.01	−.13	.13	.10	−.15	—				
GEN[b]	.27[e]	−.54[e]	−.04	−.29[d]	−.34[e]	.26	—			
HE and OTH[c]	.57[e]	−.28[d]	−.41[e]	−.13	−.06	−.15	−.02	—		
H/S and OTH	−.27[d]	.25[d]	.09	−.01	−.07	.05	−.02	.53[e]	—	
THEY and OTH	−.31[d]	.03	.32[e]	.14	.14	.10	.05	.49[e]	−.49[e]	—
M	2.56	1.03	2.14	23.52	12.69	6.98	.48	.34	.34	—
SD	1.52	.98	1.36	2.33	4.43	4.33	.50	.47	.47	—

[a]Abbreviations: MIM: number of male images; FIM: number of female images; MXM: number of mixed images; IMABIL: imaging ability; FEM: femininity; MAS: masculinity; GEN: gender; HE: he; H/S: he/she; THEY: they; and OTH: other pronoun conditions.
[b]For gender, female = 0, male = 1.
[c]For pronoun comparisons, the pronoun singled out (HE, H/S, THEY) = 1 and the others (OTH) = 0.
[d]One-tailed significance: $p < .01$.
[e]One-tailed significance: $p < .001$.