ABSTRACT

Many linguists have maintained that the pronouns "he," "his," and "him" and the noun "man," when used in the generic sense, legitimately refer to both males and females and effectively cue readers to think of both. Others have argued, however, that the generic terms cause readers to "filter out" or dismiss females from consideration. If generic terms do function to exclude females from consideration, they might also influence memory for facts— that is, subjects who have a greater interest in the material they read are likely to recall more information than those who are less interested.

A study was designed to examine the effects of generic versus female-inclusive written language on memory for factual material in male and female subjects. Twenty-eight male and 50 female college students read one of two versions of a 400-word essay, one using generic terms and the other using female inclusive terms ("he or she," "men and women," and "they"). Two days later, they completed a recall and recognition task. The results indicated that the female subjects displayed better recall of facts from their reading when the referent pronouns were female inclusive, while males showed better recall with generic masculine pronouns. (FL)
Sex Differences in Recall as a Function of "Generic" vs. Female-Inclusive Contexts

Mary Crawford

and

Linda English

West Chester State College

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mary Crawford

Linda English

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Presented at 52nd Annual Meeting
of the Eastern Psychological Association

April 24, 1981
Traditionally, many linguists have maintained that the pronouns "he", "his", and "him" and the noun "man" are adequate in their generic sense in the English language— that is, when used in the generic sense in written prose or speech they legitimately refer to both men and women and effectively cue the reader or listener to think of both male and female people. Recently, however, some linguists and some feminists have argued for a move away from use of the "generic" on several grounds. One argument is that "generic" terms result in, to quote Henley (1977), women being "dismissed or ignored." There is not a great deal of empirical evidence on whether women are "filtered out," or dismissed from consideration by generic terms. If I may use the linguists' technique of analyzing an example from everyday discourse, I think I can demonstrate that the "filtering out" idea has intuitive appeal. While serving on a search committee for an academic dean recently, I participated in a discussion of the job description for the dean. One of the other committee members remarked of the new dean that "he must be capable of going to the mat with the provost." It seemed to me that the use of "he" combined with the vivid sports metaphor made it subsequently much more difficult to visualize the possibility that the new dean might be a woman. (Note that changing the "he" alone would not solve the problem but add a sexual connotation.)

A second example of possible exclusion of women by generic terms can be found in the October 24, 1980 issue of Science (Culliton, 1980). In a news article on the nomination of Frank Press as president of the National Academy of Sciences, the qualifications for the job are described thusly:
"Inasmuch as the president is the chief spokesman for the scientific community nationally, he should have what one person called a 'profound understanding of the nature of the scientific process.' If possible, he should be articulate, a man with what one member calls 'presence.' I would submit that this language tends to narrow the conceptual field to males.

Empirical evidence for a "filtering out" effect is limited to a study by Schneider and Hacker (1973). College students were asked to submit pictures from newspapers and magazines to illustrate chapter headings in a sociology text. Such generic titles of chapters as "Urban Man" and "Industrial Man" and sex-inclusive titles such as "Society" and "Urban Life" were given to the subjects. Of subjects asked to illustrate "generic" titles, sixty-four percent submitted pictures that contained males only. Of those subjects who were given sex-inclusive titles, fifty percent submitted all-male illustrations. Schneider and Hacker concluded that generic titles and the use of the generic term "man" indeed represent a masculine image much more often than their intended representation of both sexes.

A related argument is that generic terms result in ambiguity. Eakins and Eakins (1978) maintain that because they are sometimes interpreted generically and sometimes literally so-called "generic" terms are always a potential source of linguistic confusion. For example, regard the sentence, (a) "Man is by nature a rational being." It could logically be followed by either, for example (b) "Today's science teachers are thus the bearers of a proud tradition," or (c) "Woman, on the other hand, is intuitive by nature." Sentence (b) forces a generic interpretation, while (c) forces a literal one. We must compensate for the ambiguity of (a) by deciding on a literal or generic interpretation based on context.
If so-called generic terms do function to exclude women from consideration or to make written prose and speech somewhat ambiguous, we might expect that they could also influence memory for facts. A great deal of recent research on constructive and reconstructive processes in memory (for example, Bransford, 1979) indicates that subjects' interpretation of textual material can affect recall. Also, the personal relevance or interest of the topic can be a factor influencing memory. That is, subjects who have a greater interest in the material are likely to recall more information than those who are less interested. This view of memory predicts that if people tend to interpret "generic" masculine terms literally, "generic" constructions will be more meaningful to males and sex-inclusive constructions such as "he or she" will be more meaningful to females. However, if people typically interpret "generic" terms to include both sexes, there should be no difference in personal relevance and therefore no difference in memory for passages using "generic" versus female-inclusive terms. The purpose of this experiment was to examine the effects of "generic" versus female-inclusive written language on memory for factual material in male and female subjects.

We began by selecting an essay topic. We wanted one that would be suitable for conveying objective facts for later memory testing, that would be of a moderate interest level to college students, and that would allow us to use generic vs. specifically female-inclusive constructions in a natural, nonobtrusive way. We settled on a 400-word essay giving facts about psychology as a profession. Two forms of the essay were prepared. The Generic form, titled "The Psychologist and His Work" began as follows:
The data on psychologists presents a rather narrow view of who psychologists are and what they do. A person working as a psychologist may not have a doctoral degree. Particularly in such important areas of applied psychology as school psychology, counseling, and industrial and clinical psychology, he often does not have training beyond the master's degree.

As we have seen, the psychologist can be categorized in many ways—according to his level of training (doctoral or master's), and where he works (universities, colleges, with schools, hospitals, private practices, government agencies etc.). Perhaps the most significant distinction is based on what he does.

The Female-Inclusive form is typified by this sort of pronoun use:

"The data on psychologists present a somewhat narrow view of who psychologists are and what they do. A person working as a psychologist may not have a doctoral degree. Particularly in such important areas of applied psychology as school psychology, counseling, and industrial and clinical psychology, he or she often does not have training beyond the master's degree.

As we have seen, psychologists can be categorized in many ways—according to their level of training (doctoral or master's), and where they work (universities, college, high school, hospitals, private practice, government agency, etc.). Perhaps the most significant distinction is based on what psychologists do."

Except for the use of "men", "he", "his", etc., versus "he or she," "men and women," "they," etc. the essays were identical. That the
language used was unobtrusive rather than glaringly gender-focused is substantiated by the finding that, at debriefing, very few students could specify which form they had read.

**Methods**

Twenty-eight male and fifty female West Chester State College freshmen volunteered to serve as subjects. Seventeen males and 20 females read the Generic form of the essay; eleven males and 30 females read the Female-Inclusive form. Subjects were given eight minutes to read and study the essay. Forty-eight hours later, a recall and a multiple-choice recognition test, each consisting of 10 items, were administered.

**Results**

A 2 x 2 ANOVA was performed for each of the memory measures. For the recall measure, the main effects for sex of subject, F(1,74) = .75 and essay form, F(1,74) = 1.30 were not significant. The important result is that a significant interaction of sex X essay form was found, F(1,74) = 4.32, p = .04. Male subjects had higher recall scores with the "generic" form, while females had higher scores with the female-inclusive form.

For the recognition measure, a main effect for sex occurred, F(1,74) = 5.79, p < .01, but there was no effect for essay form, F(1,74) = .74. The sex of subject effect stemmed from overall higher recognition scores by female subjects. Though the predicted interaction between sex of subject and essay form did not reach an acceptable level of significance for the recognition measure, F(1,74) = 2.61, p = .11, it did indicate a trend similar to that of the significant interaction found with the recall measure. That is, female subjects had higher recognition scores with the female-inclusive essay form, while male subjects had higher scores with the "generic" masculine form.
Discussion

This experiment provided the first direct evidence for an effect of generic versus female-inclusive language on recall of factual material. Female subjects recall information better when it is presented in a context that specifically includes females; male subjects recall better when "generic" constructions are used. One implication is obvious: texts and teaching materials written in the generic style have unwittingly facilitated recall for males and impeded it for females.

Many people feel that recent responses to feminists' concern over the issue of sexism in language have resulted in widespread changes that make the problem of generic pronouns obsolete. The American Psychological Association, for example, has published guidelines for the elimination of sexist language in graduate education (APA Task Force 1975) and in APA publications (APA Publication Manual Task Force, 1977). My impression is that beyond the narrow boundaries of APA publications, however, large numbers of students are still being taught with materials using "generic" terms.

One example was provided to me by a student who found it in a personality text currently in use in her undergraduate class (Diggins & Huber, 1976):

"When a professor in a class of yours walks into the room for the first time, chances are you will spend some time trying to analyze him. You will undoubtedly observe him carefully, and then you will tag him with classifications related to the goals you have in relation to him--making a good grade, remaining interested throughout the term, learning
whatever it is you want to learn. Is he an easy grader, or a tough grader? Is he interesting or boring? Is he bright or dull? How you classify him will in turn lead to your plans of action and your predictions about him."

We have since confirmed our basic results with a totally different essay, and are currently developing testing materials suitable for younger students. We hope to follow this up by developing teaching modules for actual classroom use, to provide further verification of these gender differences in memory.
References


Culliton, B. J. Frank Press to be nominated for NAS. Science, 1980, 210, 405-406.


Table 1

Scores on a ten-item free recall test as a function of sex of subject and language used to indicate gender.

Number of subjects per cell is provided in parentheses.

ANOVA Summary:

- Sex of subject: \( F(1, 74) = 0.75 \), n.s.
- Essay form: \( F(1, 74) = 1.30 \), n.s.
- Sex X Essay form: \( F(1, 74) = 4.32, p = 0.04 \)