Two studies were conducted to (1) discover how often and in what contexts preschool children might hear generic male pronouns, and (2) gauge the extent to which young children have assimilated the idea that the general case of biological being is male. In order to determine when children hear generic male pronouns, regular observations of teacher-centered circle time sessions were made for a one-year period. Generic male pronouns were used most often when lessons focused on animals; when other topics were discussed, generic pronouns were seldom used. Teachers also used specific male pronouns for animals whose gender was unknown. In addition, it was found that male pronouns were used much more often than female pronouns in traditional stories, fingerplays, and songs. In the second study, 80 children from three and one-half to five years of age were asked to make up stories about drawings of a baby, a rabbit, and a dinosaur of indeterminate gender. Both boys and girls overwhelmingly attributed maleness to each of the pictures. Results from these studies point to the need to train teachers to consciously work to eliminate sexism in early childhood education. (PCB)
Generic Pronouns in Early Childhood Education:
Were There Female Dinosaurs, Too?

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Since the early 1970's a great deal has been written on the issue of sexism in language (Thorne, Kramarae & Henley, 1983). Despite the opposition that these pieces have sometimes generated, institutionalized changes to eliminate bias in language have been made in the textbook publishing industry and in the editorial policies of publishers of scholarly journals (Weston & Stein, 1978). These changes have not been mirrored, however, by similar institutional changes in the training of teachers in the use of language. The elimination of sexist language, along with other important topics in sex equity, is inadequately treated in teacher training institutions when it is touched upon at all (Sadker and Sadker, 1984).

One change that the textbook publishers and scholarly journals have recommended is eliminating the use of generic male nouns and pronouns, for example, 'man' to refer to 'humanity', or 'he', when 'he and she' is actually meant. There is a strong empirical rationale for this change. The generic use of male forms is often understood in a specific (referring to males only), rather than in a generic sense, and it often creates unintentional ambiguity (Harrison, 1975; Harrison & Passero, 1975; Kidd, 1971; Mackay, 1980; Mackay & Fulkerson, 1979; Martyna, 1978; Moulton, Robinson & Elias, 1978; Schneider & Hacker, 1974).

Generic language is of special concern in early childhood settings because young children are unlikely to even be aware of
the grammatical rule that male nouns and pronouns can be used in a generic sense. Hyde (1984) found that only 28 percent of first graders, compared with 84 percent of college students, understood this rule. And it is important to remember that the literature already cited indicates that even those with understanding of the rule frequently misinterpret generic language. It is likely, therefore, that preschool children interpret most, if not all, of their teachers' generic language usage as referring specifically to males and rather than to both males and females.

This problem must be understood in the context of young children's exposure to the medium of television, to children's literature and to classroom curricular materials. Despite the attention generated by the women's movement in the seventies, young children's experiences in media and literature are still male focused (Huston, 1983). As Stanley (1977) put it "semantic space is dominated by males" (p. 74). The combined effect of these experiences may be to facilitate the development of the idea in children that maleness is the general case of biological existence and that femaleness is, in comparison, only of peripheral importance.

Generic pronouns are so common in university texts that Mackay (1980b) estimated that the average educated person's exposure to prescriptive 'he' would be 10⁶ over the course of a lifetime. With the help of a computer that searched through five million words in school texts, Graham (1973) documented a four to one ratio of male pronouns compared to female ones. This finding
was not due to male generic pronouns, however. Of 940 citations to 'he', only 32, or about 3 and 1/2 percent were used generically.

The present paper reports two sets of observations related to these issues. The first describes teachers' use of generic pronouns in two different university affiliated preschool programs serving 3 and 1/2 to 5 year old children. The observations were made to get an idea of how often and in what contexts, preschool children might hear generic male pronouns. The second set of observations assessed children's sex attributions of sex indeterminate drawings of a baby, a rabbit, and a dinosaur. This was an attempt to gauge the extent to which young children have assimilated the notion that the general case of biological being is male.

Teachers Use of Generic Pronouns

Regular observations of teacher centered circle time sessions made over a one year period indicated that generic pronouns were used most often when lessons focused on animals. When lessons centered on other topics generic pronouns were seldom used unless animals were brought in for illustration. For example, a lesson on the letter "W" included the teacher's statements that "...a whale in the ocean, he starts with a 'W' and a walrus, he walks around like this." In contrast, the lessons on animals were sprinkled with more male generic references. During a unit on pets, a visitor from the local
humane society presented a flannel board dog to the children named "Patches", and then spoke about dogs in general as male:

How do you show your dog that you love him?...
Your dog likes to be brushed too, that keeps the tics and fleas away from him...Why not throw a ball to him and play with him?...He could get run over by a car....If you lose him where could you go to look for him?

A lesson on squirrels and another on raccoons followed the same pattern.

Can a squirrel put on his winter coat and winter hat?...Could he go to the grocery store?...He gathers the nuts. He stores them for winter...He's a member of the rodent family...How can a squirrel protect himself?...[remember] the deer protected himself because he can run fast.

[Raccoon]: When it's dark outside, because his fur is dark it's hard to see him...when you're camping sometimes you can hear him outside your tent looking for food...then he crawls in his den and he lays down.

In addition to using male pronouns generically, teachers also used male specific pronouns for live or stuffed animals whose sex was unknown. In one class teachers declared a "stuffed animal week" and invited children to bring in stuffed animals from home. These were placed together in one corner of the room
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and continually referred to, by the adults in the room, as if all were male.

On another occasion a child brought in a hamster from home and the following conversation took place.

Teacher: Does he have a name?...I remember his name: 'Nosey.' Is it a boy or a girl hamster?
Child: A boy.

Here the teacher used the specific male pronoun prior to thinking about the animal's sex. Thus, the tendency to assume maleness asserts itself even when illogical. During a lesson on birds, a teacher asked the children to look out the window and "see the little dove, he's sitting on his eggs."(!)

The children in these classes also heard many more specific male pronouns than female ones in finger plays, songs and stories. Finger plays, used frequently by early childhood teachers, incorporate hand movements with rhymes. When traditional finger plays use a pronoun it is almost always a male one. The same is true for early childhood songs.

Five little monkeys jumping on the bed
One fell off and broke his head

Here is a bunny with ears so funny
And here is his hole in the ground

There was a farmer who had a dog and Bingo was his name—oh.
Because children's books feature more male than female characters, story sessions also reinforce the male centeredness of the typical early childhood curriculum. When observers counted pronouns used by teachers for five sessions of teaching and for five story sessions in each classroom, far more male than female pronouns were recorded. Pronouns were counted as either male specific, male generic, female specific or female generic. As expected no examples of female generic pronouns were recorded. The numbers of pronouns counted in each category are shown in Table 1.

Although no generic pronouns were recorded in the Head Start sessions three male specific male pronouns were used in reference to animals whose sex was indeterminate. Although many more sessions of observation in each classroom would be necessary to get a reliable portrait of the number of generic pronouns that children might hear during the course of a year, the sample of language observed here supports the idea that preschool teachers' language is male-centered. The ratio of male pronouns to female pronouns in one class was 3 to 1, and almost 5 to 1 in the other.

The observations indicate that unless teachers are consciously working to achieve equity in early childhood settings their socialization and the materials available to them will create the male-dominated semantic space described by Stanley (1977).

Documenting the male-centeredness of teachers' language in early childhood education is fairly simple. Assessing its
effects of on child development is not as easy. Hyde (1984) showed that elementary children used "he" in gender neutral contexts even though they usually did not know the grammatical rule that "he" can refer to males and to females. She concluded that elementary children are likely to believe that "the typical person is a male" (704).

Nilsen (1977) asked 4 to 12 year olds to describe to other children pictures of gender indeterminate animals photographed from story books. The children chose masculine or neuter ("it") pronouns with almost equal frequency, but rarely used female pronouns. This indicates that children do not usually think of femaleness as applying to gender indeterminate entities. Nilsen did not indicate whether there was a difference in girls' and boys' sex attributions of the pictures.

Method

Eighty children enrolled in three different university affiliated preschool programs serving children from three and one-half to five and one-half years of age were used in the study. Forty four of the subjects were girls and 36 were boys. Half of each group of girls and boys were assigned to be tested by a male and the other half by a female.

Children were asked to make up stories about three laminated black and white drawings (9 inches by 6 inches) of a baby, a rabbit, and a dinosaur, that were intentionally gender indeterminate (see Figure 1). Examiners wrote down the stories the children dictated word for word. Pictures were presented in
random order determined by a roll of die by each child. The children’s attributions of the pictures’ sex was determined by the pronouns used in each story dictated. When children produced neuter pronouns or none at all, they were asked to choose a name for the baby, rabbit, or dinosaur. Obvious male or female names were used to code the child’s response as male or female. In the case of gender ambiguous names (for example, “Curly”), and in cases in which the child would not give a name, the response was tabulated into the data. Sixty four children provided non-ambiguous responses to all three pictures (80%), eleven children provided two usable responses (13.75%), and five provided only one response (6.25%). A rate of .98 for independent interobserver agreement on the coding of the children’s stories or names was obtained.

Results

Both girls and boys overwhelmingly attributed maleness to each of the three pictures (see Table 2). Overall, 88.1 percent of the responses were male ones. Boys had a higher percentage of male responses, 97 percent compared with 81.1 percent for girls. Of the 97 responses made to the pictures by boys, only 3 were female attributions. Moreover, not a single boy identified the dinosaur as being female.

The low frequency of female responses made hypothesis testing difficult because one or more cells in Chi-square tests had expected frequencies of less than five. To create a test in which every cell would have an expected frequency of sufficient
magnitude to produce a valid result, a score of 'maleness of response' ranging from 0 to 3 was computed for each of the 64 children who made a gendered response to all three pictures; a score of 0 meant no male responses to any of the pictures, while 3 indicated all responses were male ones. Using these scores children were divided into two groups, those whose score was 3 (n=49) and those who scored 2 or below (n=15). Boys were significantly more likely to be in the group choosing all male responses than were girls, Chi-squared (1, N = 64) = 8.1, p = .004. Similar Chi-square tests for the program of children and the sex of the tester were not significant.

Discussion

The results obtained here support other findings about the socialization of young children to see maleness as more important than femaleness. The children's male-dominated responses to gender ambiguous pictures indicate that they have internalized the invisibility of females (McConnell-Ginet, 1979) that is reflected in media, books and the language of their teachers. Simply put, they view the average person or animal as a male.

This is an educational problem for several reasons. The first is that it indicates that young children are developing a skewed and nonscientific view of life, since in reality, the two sexes are of equal importance in nature. That boys cannot imagine a dinosaur whose sex is female indicates a basic flaw in their cognitive construction of reality.
Secondly, there is evidence that the invisibility of females extends to children's creativity in addition to biasing their perception. Trepanier and Romatowski (1985) found that elementary school children of both sexes write stories with a preponderance of male characters and that these are assigned more attributes and roles than are the smaller number of female characters. In addition, males are far less likely than females to include female characters in their stories.

Other psychological effects on the development of boys and girls are only speculations at this point. At the very least, however, these results support Blaubergs's (1978) argument that sexism, particularly male chauvinism, is supported by language and materials in which females are invisible. The tendency to view people and animals as males that was exhibited by children in this study, especially boys, is an impediment standing in the way of the achievement of sex equity in society.

This and other studies raise some interesting questions. It might be useful to work with even younger children to discover the age at which the tendency to see ambiguous entities as male manifests itself. It would also be useful to study older individual's to see if more exposure to generic language and sexist media strengthen the tendency beyond the observations made here. One might predict that the youngest child would be most likely to see the possibility of an ambiguous entity being a female but that older children and adults would almost always tend to see a male.
Another question is whether the girls who view gender neutral entities as female differ in other ways, say in self-esteem or general cognitive development, from the majority of girls who view them as male. It may be that these girls are just less socialized than their peers.

Finally, it is not known how resistant to change this cognitive tendency might be. It would be worth seeing if a change in teachers' language could affect children's assumptions about gender indeterminate entities. It seems certain that a change in the male generic repetition of pronouns will get children's attention. One preschool teacher reported to the author that her children argued with her when she referred to some dinosaurs as female; they maintained that dinosaurs had to be 'boys.'

One cannot say that the male generic language of preschool teachers is solely or even primarily responsible for the results observed here. It is likely that teachers' language is one of many influences in the lives of young children that foster the psychological invisibility of females. However, the rationale that influenced textbook publishers and editors of scholarly publications to eliminate sexist language is even more compelling as an argument for training early childhood teachers to use non-biased language. After all, most young children are not even aware of the existence of generic forms (Hyde, 1984). Their teachers' lessons about generic male animals are understood by
children to be about specific male animals. It is therefore logical for them to conclude that all dinosaurs were males.

Training teachers to use nonsexist language may be the best place to start in eliminating sexism from early childhood education. Can a teacher capable of conceptualizing a Tyrannosaurus Rex as a female miss patterns of sexism in instructional materials and lesson plans?
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References


Table 1

Male and Female Generic and Specific Pronoun Use In Two Preschool Classes During Teaching and Story Sessions

<table>
<thead>
<tr>
<th>Program</th>
<th>Nursery</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>G(^a)</td>
<td>S(^b)</td>
</tr>
<tr>
<td>Teaching</td>
<td>7</td>
<td>60</td>
</tr>
<tr>
<td>Story</td>
<td>0</td>
<td>259</td>
</tr>
<tr>
<td>Totals</td>
<td>7</td>
<td>319</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>106</td>
</tr>
</tbody>
</table>

\(^a\) G refers to generic pronouns.

\(^b\) S refers to specific pronouns.
Table 2

Sex Attributions of Drawings by Sex of Subjects

<table>
<thead>
<tr>
<th>Picture Attributions</th>
<th>Girls</th>
<th>Boys</th>
<th>All Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5 (12.2)*</td>
<td>1 (2.9)</td>
<td>6 (6.8)</td>
</tr>
<tr>
<td>Male</td>
<td>36 (87.8)</td>
<td>33 (97.1)</td>
<td>69 (93.2)</td>
</tr>
<tr>
<td>Rabbit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11 (25.6)</td>
<td>2 (6.5)</td>
<td>13 (17.6)</td>
</tr>
<tr>
<td>Male</td>
<td>32 (74.4)</td>
<td>29 (93.5)</td>
<td>61 (82.4)</td>
</tr>
<tr>
<td>Dinosaur</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>7 (18.4)</td>
<td>0 (0)</td>
<td>7 (10)</td>
</tr>
<tr>
<td>Male</td>
<td>31 (81.6)</td>
<td>32 (100)</td>
<td>63 (90)</td>
</tr>
<tr>
<td>All Pictures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>23 (18.9)</td>
<td>3 (3)</td>
<td>26 (11.9)</td>
</tr>
<tr>
<td>Male</td>
<td>99 (81.1)</td>
<td>94 (97)</td>
<td>193 (88.1)</td>
</tr>
</tbody>
</table>

* Numbers in parenthesis are percentages.
Figure 1  Gender Indeterminate Drawings