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PRESCHOOLERS' GENDER ASSIGNMENT TO AN ANDROGYNOUS STORYBOOK CHARACTER

An Abstract of a Thesis

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Mara C. Loeb

University of Northern Iowa

May 1985

ABSTRACT

Preschoolers' Gender Assignment to an Androgynous Storybook Character

Tests designed to identify sexual preference, and administered to 8th grade through college-age subjects, have revealed a strong male bias in the responses by both sexes. Perceived similarity to a character (identification) increases attention to, and memory of, sex stereotyped information. Thus, a preference for the male gender would increase the effectiveness of information for males but not for females, since identification is not possible.

This study examined preschoolers' identification with an androgynous storybook character. Eighty three- and four-year-old boys and girls from randomly chosen preschools were read a storybook prepared for this study. The storybook controlled for three gender clues. Language clues controlled were pronouns, language style, and oral reading. Illustration clues controlled were possible color associations and physical traits. Activities portrayed were gender-neutral and controlled for the active/passive activity ratio. A stratified sample, based upon gender, received a suggestion of similarity to the character by the phrase "This is a story about a child just like you." The three stages of gender awareness, identity, stability, and constancy, were determined using questions with the subject as referent.

This study tested three null hypotheses. There is no significant difference in gender identification by female or male subjects of a gender-neutral character. There is no significant difference in same

gender assignment where similarity to character is suggested. There is no significant difference between higher stages of gender awareness and identification of character gender where no suggestion of similarity to subject has been made.

An ANOVA analyzed the results of the gender awareness questions for the influence of age and sex. Only age shows a significant ($p < .006$, 3 df.) influence on the acquisition of gender awareness.

A Chi Square analysis of the gender assigned to the character shows a significant ($p < .04$, 3 df.) influence for sex and age in perceived similarity (same-sex gender assignment). Boys in the study have higher identification at both age levels than do the girls. Three-year-olds of both sexes have higher identification than the four-year-olds.

A Chi Square analysis of the gender assigned the character shows a significant ($p < .01$, 3 df.) influence for the suggestion of similarity and the subjects' sex. The influence is traced to the opposite effect the suggestion of similarity had on the sexes. The boys in the study increase in same-sex gender assignment to the character when similarity is suggested while girls in the study decrease.

The population in the gender stability stage was too small to test the final null hypothesis.

Others may wish to investigate the cause of the identification imbalance using a larger population. The suggestion of similarity exerted an opposite influence on the sexes, suggesting different experience for girls with the phrase "This is a story about a child just like you." Studies might also investigate sex-role stereotyped behavior patterns and gender assignment.

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This Study by: Mara C. Loeb

Entitled: Preschoolers' Gender Assignment to an Androgynous Storybook Character

has been approved as meeting the thesis requirement for the

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April 3, 1985
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Chapter 1

Introductory Remarks

Preliminary Comments

The status of women in our culture has been changing throughout this century. The battle for the Equal Rights Amendment divided women into camps, pitting traditional values against the desire for social equality. Evident in the ensuing arguments was the different way each group defined its gender. Gender is basically a physiological difference with differentiation of genitals as the obvious markers. The way a culture describes a gender, however, can determine one's career, behaviors, even one's self-esteem. This study is directed to a possible cultural/linguistic practice which helps create and maintain difference in a cultural/sexual hierarchy. The culture multiplies the differences between the sexes by emphasizing them. The culture gives one sex dominance and uses the language to help maintain this dominance as part of the tacit knowledge system. The resulting self-effacement of the other gender stifles potential and, at its worst, creates a servant class.

Rationale for This Study

Any new idea, invention, or creative fancy must start in the mind of its inventor as a new relationship between objects or concepts. An inclusion of the self in the world of imagination and an understanding of one's potential are therefore vital starting points for creative

activity. A potentially damaging identification anomaly exists in our culture which appears when one gender projects itself into this realm.

Gender identification anomaly. A high incidence of male gender identification is demonstrated for children and adults of both sexes in different tests designed to reveal personal preference. Brown and Tolor (1957) report that in the "Draw a Figure" test for children (25 boys, 25 girls, median age 13) 96% of the boys compared to 76% of the girls drew like-sex figures. When the same test was administered to 1207 college subjects (531 male, 676 female), 91% of the men and 63% of the women drew like-sex figures. An application of the test to male homosexuals failed to reveal a reversal. It was therefore not assumed to be a sign of the subjects' sexual identification or sexual inversion.

Brown and Tolor (1957) also report that on a "Verbal Fantasy" test 95% of the 8th grade boys compared to 51% of the girls chose like-sex characters for their stories. When the same test was applied to college students 94% of the men and only 43% of the women chose like-sex characters. These studies, designed to show sexual preference, consistently show a greater percentage of women (24%-57%) drawing and using male models than men (4%-9%) choosing female models.

In 1955 Daniel G. Brown designed the "It" test, which used a gender-unspecified stick figure referred to as "it," to study sex-role preferences. He assumed subjects would project themselves into the figure and thereby reveal sex-role preferences. A strong male gender bias for both sexes emerged when the test was administered. The bias changed for girls when the stimulus figure was given a gender-specific pronoun. When the "It" figure was referred to as "he" in two tests the

mean of the boys' scores changed in the male direction by 2.9 to 5.23 points. When "she" was substituted for "it" with the girls tested, a more dramatic 16.72 to 26.9 point increase in the female direction occurred (Sher & Lansky, 1968; Thompson & McCandles, 1969). This indicates that the males were only slightly influenced by the substitution of a male pronoun but that females made a major shift when female gender was specified. The implication is that "it" was seen to be less inclusive of women.

"Gender identity ('I am a boy' or 'I am a girl') is one of our most basic self-definitions" (Walum, 1977, p. 5). People should use their own gender as a reference point from which to assimilate information and project experience into social reality. This is not the case in our society. These studies (Brown, 1955; Sher & Lansky, 1968; Thompson & McCandless, 1969) show women use less self-referencing or inclusion when asked to draw a figure, write a story, or choose a toy for "it." They assume that "it" applies more directly to men than to themselves. This is a very complex lesson in self-effacement.

The subjects in the aforementioned studies ranged in age from 13 years to college age. This indicates that the male identification bias is in force by 8th grade. If the bias exists in younger subjects (preschoolers) formal schooling can be discounted as a cause.

The Problem

Do preschool age children of both sexes enjoy equal identification with androgynous storybook characters?

The Sub Problems

Is any difference in identification the result of differentiated treatment of the sexes? Is any difference in identification a function of age, experience, language bias, or a combination of these? Does same-sex gender assignment to androgynous storybook characters have a positive relationship to the developmental stages of gender awareness in preschoolers?

Definition of Terms

First the following terms are defined in relation to this study. An androgynous storybook character is a fictional character in a children's book exhibiting traits and behaviors associated with both sexes (from the Greek aner:male and gyne:female, two roots form an antipolarized word)(Miller & Swift, 1977). Identification will be said to occur if the child assigns the storybook character the same gender identified as the child's own. Gender assignment will be determined by the child's use of a gender-linked pronoun (he or she) or term such as boy or girl in the description of the storybook character in conversation. Developmental stages of gender awareness, explained in more detail in Chapter 2, can be briefly defined as follows. Gender awareness is the awareness of adult gender. Gender identity is the awareness that one has a gender and the ability to label the genders. Gender stability is the understanding that gender remains stable over time. Gender constancy includes the knowledge that gender is unchanged by dress or behavior. Preschool age children will be limited to children 3- to 5-years-of-age.

The validity of this study depends on certain assumptions which will now be discussed.

Assumptions

This study assumes that gender assignment will be based on tacit perceptual criteria and not a random function. The cognitive growth in the preschool years bridges many levels of ability and a growing understanding of complex concepts such as conservation of matter.

There have been no studies to identify the source of the male/female identification anomaly. The fact that physical differences exist between the sexes has been documented since prehistory in the earliest art forms, but the basis for behavioral differences is the subject of more recent study.

Basis for Differentiation Between the Sexes

Maccoby and Jacklin (1974), in an overview of some 2,000 books and articles on differences in motivation, social behavior, and intellectual ability, found evidence to support only four true differences. These are verbal ability, visual-spatial ability, mathematical ability, and aggression. Of these, only one (aggression) appears before adolescence. Birns (1976) also asserts that studies which indicate innate differences at birth are over-published and under-replicated.

Theories of Sources of Behavioral Differences

The possible causes of the behavioral differences are the subject of much debate, but can be generalized briefly as follows:

Biological influences. Structural and behavioral sexual differences are observed in human and nonhuman species. Male hormonal experimentation on a variety of female animals has been shown to affect sex differences in mating, maternal, and play behaviors in female offspring (Hamburg & Lunde, 1966). These results are interpreted as an influence on the structure of the central nervous system resulting from gonadal hormone increases prior to birth (Lewis & Weinraub, 1979). The explanation for sex differences based on this information is that they are determined at conception. The evidence of Maccoby and Jacklin (1974) that aggression is the only verifiable difference appearing before adolescence suggests that other explanations be considered.

Social learning theory. Social learning theory presents the argument that appropriate sex-typed behaviors are rewarded while inappropriate behaviors more often elicit punishments. Learning from live and symbolic models (books, film, and TV) inspires imitation of powerful models who give rewards (Mischel, 1966). The child comes to associate the behavior with the reward and generalizes the response-consequence pattern to other appropriate behavior. This is a passive role for the child, absorbing lessons and applying rules assuming a reward or punishment for each acquired bit of information.

Cognitive development. Cognitive-developmental theory assumes the child activly orders the world along sex-role dimensions. Rooted in the concept of one's own and others' bodies, the child organizes social-role concepts in a manner which evolves during experience-linked changes in modes of cognition. "The child's sex-role concepts are the results of the child's active structuring of his (sic) own experience; they are not

the passive products of social training" (Kohlberg, 1966, p. 85). This theory depends on the self-knowledge of gender in order to structure behavioral concepts.

Social cognition. The supporters of social cognition reason that a knowledge of others is developed through interaction which increases self-knowledge. Interaction becomes the "major content of social cognition" (Lewis & Weinraub, 1979, p. 145). The child acquires gender and sex-role information early and prefers and imitates "like" objects with knowledge of self emerging before two years of age and 90% correct labeling of adult gender by children 18 months of age. This is an active role for the child, constructing logical schemas and choosing to be like those with similar labels and characteristics, leading to increased conformity.

This final explanation, social cognition, is consistent with the development of a "self-schemata," or guide to processing self-related information based on cognitive generalizations derived from past social experience (Markus, 1977, p. 64). These schemata function as a selective mechanism determining what information is attended to, given importance, and how this information is structured. A study of the reported sources of self-knowledge of nursery schoolers, first- and third-grade students showed they selected self-observation as their first source but demonstrated better recall for social feedback (Schoeneman, Tabor, & Nash, 1984). The interaction of these sources is the basis for social-cognition.

Preschoolers recognize gender. In a study of preschoolers' concept descrimination abilities, which contrasted recognition based on sex,

race, age, and eyeglasses as variables, the easiest criteria learned were sex (male, then female) and race (black, followed by white). This indicates that gender, especially male (67.6% correct identification compared to 50% for females) is the most easily recognizable variable for this age group (McGraw, Durn, & Patterson, 1983).

To summarize, children demonstrate an awareness of self-observation and the influence of social feedback. They recognize pictures first by sex, preceeding race or age. It is logical that these abilities are related in achieving a self-schemata by which experience is organized and applied to the self.

Purposes of This Study

1. To determine if androgynous-character books appeal equally to male and female readers.

2. To determine if equity exists in preschool age boys' and girls' identification with storybook characters.

3. To determine if there is a relationship between the development from gender awareness to constancy and the gender identified for the character.

Null Hypotheses of This Study

H_1. There is no significant difference in gender identification by female or male subjects of a gender neutral character.

H_2. There is no significant difference in same gender assignment where similarity to character is suggested.

H_3. There is no significant difference between higher stages of

gender awareness and identification of character gender where no suggestion of similarity to subject has been made.

Chapter 2 will present a review of the literature on the development of gender awareness and the influence on behavior and self-concept of sex-role content in society and children's literature.

Chapter 2

Review of Literature

Gender is central to personal identity. It is the most stable and frequently used self descriptor. Because it is part of reality, an understanding and acceptance of one's gender is associated with mental health. Many social requirements are also based on gender (D'Andrade, 1966). For this reason the emergence of gender awareness has far-reaching implications for the child. This chapter will outline the stages of understanding gender through which a child progresses, as well as the influence of sex-roles and stereotypes on behavior and self-concept.

Gender Awareness Stages

Gender identity. There is general agreement that gender awareness emerges in stages. The earliest stage is gender identity which starts with the ability to label the genders and progresses to self-inclusion in a gender group. Lewis and Weinraub (1979) found that, by 18 months-of-age, infants correctly labeled adults on the basis of gender 90% of the time. With the division of people, traits, and behaviors into two groups based on gender so common in our society, this is logically one of the first symbol organizing styles. The style becomes a bipolar schemata for the organization of information into sex-role expectations; Kuhn, Nash, and Brucken (1978) found that 2-year-olds had extensive knowledge of sex role stereotypes.

Children start self-inclusion in a gender group by about 24 months, although 25% mislabeling of other children is not uncommon; by 36 months children are certain of their own and others' gender and able to use nouns and pronouns to label them correctly (Thompson, 1975). Some languages, called "gender-loaded," assign a sex to every noun and require different forms for the genders. In a study of gender-loaded grammars, versus medium and gender-free, the gender-loaded grammar group reached 50% gender identity at 25-27 months versus 34-36 months for the other grammar groups (Guiora, Beit-Hallahmi, Freid, & Yoder, 1982). This indicates that a cultural trait (gender marked grammar) can influence the acquisition of a gender awareness stage. The gender-loading caused earlier perception of gender division.

Gender stability. After gender identity comes gender stability, or the understanding that one's gender remains the same over time. Associated with this is motive: one's gender won't change even if one desires it (Eaton & Von Bargen, 1981). In a study of preschoolers by O'Keefe and Hyde (1983) the boys in the group reached stability at mean age 4 years 0 months and the girls at 3 years 8.6 months. Reis and Wright (1982) determined the bulk of sex role stereotype learning occurs between the ages of 3.5 and 4.5 years.

Studies also have shown an asynchronous development of gender understanding that applies first to the child, then like-sex others, and finally to the other sex (Eaton & Von Bargen, 1981; Gouze & Nadelman, 1980). The construction of a self-schemata (Chapter 1) also applies self-related information first. Children show a gaze preference for same-sex pictures as young as 15 months (Lewis & Brooks, 1975) to 30

months (Thompson, 1975), and this would encourage more attention to gender-matched models and stimuli. The learning of sex-role stereotypes thus preceeds and continues with the developing understanding of the stability of gender, although same-sex preference is evinced as early as 15 months-of-age.

Gender constancy. Gender constancy, or the understanding that gender is invariant despite changes in activity, dress, or appearance, is the final stage of gender awareness. Before this stage the child feels a gender transformation might occur if the games or clothes of the other gender are adopted. This places extra emphasis on the learning of sex-roles. This stage can also be divided into two parts. The pseudo-constant child understands the constancy of gender, but not the genital basis for gender (Marcus & Overton, 1978; Martin & Halverson, 1983).

The genital basis for gender is not understood until age 5-9 (Kohlberg, 1966; McConaghy, 1979). Some of the age variation is attributed to mental age differences (Gouze & Nadelman, 1980; Reis & Wright, 1982), testing mode (doll, modeling, or self-referent [Marcus & Overton, 1978]) and the adoption of a "real" or "pretend" response mode by the child (Martin & Halverson, 1983).

The gender awareness stages are summarized in Table 1.

Sex-Role Stereotypes

Sex-role stereotypes, or "assumed differences, social conventions or norms, learned behavior, attitudes and expectations" (Howe, 1971, p. 77) are divided along gender lines. Aquisition of these stereotypes preceeds the child's understanding that one's gender is a permanent

status (gender constancy). Although children can divide adults into gender groups by 18 months-of-age, the stereotypes are understood at a much earlier age (2 years [Kuhn, Nash, & Brucken, 1978]) than the physiological basis for gender distinction (5-9 years-of-age), and stereotypes become incorporated as facts, not generalizations.

Table 1

Gender Awareness Stages, Age, and Traits

Stage	Approximate Age of Aquisition	Stage Traits
Gender Awareness	15 months of age	Awareness of adult gender.
Gender Identity	18 months of age	Awareness of and ability to label genders.
	24 months of age	Self-inclusion in a gender group.
Gender Stability	44 to 48 months of age	The understanding that gender remains the same over time.
Gender Constancy	60 to 84 months of age	Gender is unchanged by dress or behavior.
	60 to 108 months of age	The genital basis for gender is understood.

Sex-role stereotyped toy choices were made by 3- and 4-year-olds 92.4% of the time (Eisenberg, Murray, & Hite, 1982). Sex-role appropriate toy choices (especially for boys) steadily increase from age 4 (DeLucia, 1971; Eaton, Von Bargen, & Keats, 1981; Liebert, McCall, & Hanratty, 1971). Thus social expectations and knowledge of one's own gender, are used to limit and self-direct behavior into what are perceived as socially sanctioned areas.

Sex-role and self concept. The impact that sex-roles have on self concept is not equal between the sexes. A study of preschoolers (Burge, 1982) found a correlation between age and sex-role identity which was higher for boys ($p < .007$ compared to $p < .087$ for girls). Also related to age were increases in self-concept, but only for boys did increased self-concept relate to higher sex-role identity scores.

Preschool-age boys who made sex-role appropriate choices generally felt better about themselves, but girls' self-concepts (slightly higher than boys' at this age) were not related to sex-role identity scores. This is consistent with experimental results finding male attributes are established earlier with a higher consensus by males on what is "just for girls" than by girls themselves (Hartley & Hardesty, 1964). This information is more valuable to the males, whose self-concept is tied to limiting their behaviors to what is appropriate for their own gender.

Stereotypes influence personal experience. In a study of 86 3- and 4-year-olds' toy choices, Eisenberg, Murray, and Hite (1982) found the children made extensive use of stereotypes to explain toy choices for others' dislikes, especially boys'. The children were applying the

content of sex-role stereotypes to their own and others' behavior as rules for proper behavior.

Albert and Porter (1982) found that children from 4-6 years of age had increasing perceptions of parental expectations of sex-role stereotyped behavior. The sex-role stereotypes were determining and limiting the children's actual experience. Perloff (1982) found that gender constant children chose sex-role stereotyped activities, but Eaton, Von Bargen, and Keats (1981) found sex-role stereotyped choices occurred even earlier with gender stability.

O'Keefe and Hyde (1983) put sex-role stereotyped activity choice before gender stability (which starts at approximately 44 months), with boys showing the highest level. This is consistent with the greater pressure on boys to avoid female activities in our culture (DeLucia, 1963; Eisenberg et al., 1982; Flerx, Fidler, & Rogers, 1976; Hartley & Hardesty, 1964; Langolis & Downs, 1980; Liebert et al. 1971; O'Keefe & Hyde, 1983; Williams, Bennett, & Best, 1975). The fact that the number of like-sex choices for girls drops from childhood rates on the first two tests (Draw a Figure and Verbal Fantasy) suggests that age might be a factor. Other possible factors to be considered with age are IQ and language influence.

Age Influence

Self-esteem and age. A study of kindergarten to 2nd-grade-age students by Soule, Drummond, and McIntire (1981) found self-appraisal scores to be equal between the sexes in this age group. However scores for self-acceptance, role expectancy, and total self-concept were higher

for boys (Elrod & Crase, 1980). Another study by Tryon (1980) found that girls' opinions of girls' competencies decrease from age 8 to 15 while boys have an increasingly higher opinion of their own competence and a lowering opinion of girls'. Thus we see self-esteem changes with age in opposite directions for the sexes.

Sex-role stereotypes and age. Opinions on the age of acquisition of sex-role stereotypes are not in agreement. Kuhn et al. (1978) found extensive knowledge of sex-role stereotypes in 2- and 3-year-olds. Suter, Seegmiller, and Dunivant (1980) contend that preschoolers' sex-role stereotypes do not increase consistently with age. Reis and Wright (1982), in a study of 3.0- to 5.0-year-olds, found sex-role stereotypes appeared around age 3.5 and increased with age. Cann and Haight (1983) found that subjects from age 5.5 to 9.0 displayed increasing sex-role stereotypes with age. O'Keefe and Hyde (1983) found an increase in sex-role stereotypes between kindergarten and grade six for boys but a decrease for girls.

Though they found a cognitive link for development of the gender constancy concept, Marcus and Overton (1978) found sex-role preferences were situationally influenced. In their study the boys increased sex-role consistent play with age while girls increased sex-neutral game preference. With the eroding of girls' opinions of girls that occurs in this age range, sex-stereotyped activities must hold less allure for girls than the ego-enhancing activities of males. In fact, a large number of studies (Burge, 1982; DeLucia, 1963; Flerx et al., 1976; Hartup & Zook, 1960; McPherson & Spetrino, 1983; O'Keefe & Hyde, 1983)

all assert that males, from age three to college, express stronger sex-role stereotypes than females.

Stereotypes self-perpetuating. Jennings, Geis, and Brown (1980) found that preschoolers view stereotypes as equal to competence in a study that asked children who would be better at sex-role stereotyped jobs. With sex stereotyping of jobs related to the actual base rates of men and women holding those jobs, it has been suggested that stereotyping is perpetuated by a process called "actuarial prejudice" (Kiesler, 1975) by which the probability of success is seen as lower for women because so few women are engaged in the jobs. With what stereotypes are girls presented?

An analysis of T.V. commercials (Dominick & Rauch, 1972) found that 75% of all women were shown in conjunction with bathroom and kitchen products. Seventy percent of the women were presented in subservient positions or defined solely in terms of their relationship to men. Though it is difficult to prove the adverse effect of the trivial and subservient roles of women in commercials, Jennings et al. (1980) used non-stereotyped commercials in an experiment that showed increased independent judgement and self-esteem in the college women exposed to them. The implicit product of the commercials was self-respect.

Girls' accomplishments devalued. By the time they reach adolescence, boys' accomplishments are more highly rated than girls', even when they are equal (Torrance, 1963). Boys also will spend more time on challenging tasks at this age but this is not the case with younger subjects. At age 3.4 girls tried and completed more tasks of

greater difficulty than boys (Molnar & Weisz, 1981), but at later ages girls chose easier tasks and gave up earlier.

IQ and Stereotyping

High IQ has been linked to high sex-role stereotyping in preschoolers and earlier acquisition of gender identity and constancy. This effect is short term as average IQ children match these levels by the third grade. The higher and more rigid sex-role stereotypes are also found in low economic level males (Jennings, 1975) and are not peculiar to high IQ children at this age. Kohlberg (1967) asserts that the IQ effect is different at different ages and should not be viewed as absolute. The final argument against IQ as an explanation for a gender bias is that the influence would be divided between the sexes, not only a female influence.

To summarize, changes in self-esteem, knowledge of stereotypes, and task behavior occur as boys and girls grow older. Boys have increased self-esteem, which is linked to sex-role appropriate behavior. Girls have reduced self-esteem, devalued achievements, and a reduction of attempts to solve difficult tasks.

Both sexes have increased knowledge of sex-role stereotypes, but for girls this includes subservient career models. Girls do show less reliance on sex-role stereotypes as rules for behavior.

The male gender identification in the Draw a Figure, Verbal Fantasy, and "It" test is not in association with specific traits or behaviors, but in self-inclusion. Although negative associations with

their gender reduce the stereotyped behavior for girls, they do not explain the male identification bias.

Language Links to Perception

Another possibility to be explored is the influence of language. "In the process of learning the language, the child learns to think like other members of the society" (Walum, 1977, p. 13). Benjamin Whorf (1956) contends that language shapes perception. We cannot perceive what we cannot name or describe.

One of the ways language influences our perception of the sexes is in emphasizing the differences between them. We speak of the "opposite sex," not the other sex, as if they are opposite ends of the spectrum. This serves to create a "bipolar filing system" or organization schemata for encoding and remembering information about the sexes (Martin & Halverson, 1983). A system based on opposites would tend to assume less commonality exists and actively seek opposite values to maintain equilibrium. This system emerges at the same time that "object relations" allow a symbol to represent an object in its absence (Piaget & Inhelder, 1969, p. 25). Lewis and Weinraub (1979) found 18-month-old children could use gender labels for adults with 90% accuracy but were not including themselves in a gender group until 24 months and then with only 75% accuracy. Thus the gender classification system--bipolar filing--preceeds self-inclusion and any "me versus other" filing system.

Gender classification system influences perception. The information system works well. A study by Martin and Halverson (1983) revealed that children with strong sex-role stereotypes could recall

more sex-role stereotyped information; however, the filing system also influenced perception. The strong sex-role stereotyped child, when presented with sex-role opposite information, substituted sex-role stereotype consistent information in encoding or recall. Their experiment asked children to describe the illustration accompanying the text of a story and, in cases of misreading of the gender of the illustration, 84% of the errors were on sex-role opposite illustrations compared to 16% on sex-role consistent activities. Direct perception was influenced by sex-role stereotyped expectations, the children "saw" the sex they expected to see because the information didn't fit the "filing system." Another effect is in recall where character gender reversals are most often made to bring the story into sex-role consistency (Koblinsky, Cruse, & Sugawara, 1978).

Same-sex preference emerges. When children have reached an awareness of their own gender, the information for their half of the bipolar schemata is attended to, preferred, and applied differently. They will recall more information about a same-sex character and prefer stories with same-sex characters (Deutsch, 1975; Frasher & Frasher, 1978; Kropp & Halverson, 1983; Nadelman, 1974).

Behavior is influenced. After modeling by, or stories about a same-sex character, imitative behavior is increased. Ashton (1983) found toy choice after same-sex stories was influenced in a sex-role stereotyped or sex-role opposite direction by story content, with a greater influence on girls. McArthur and Eisen (1976) found 43-69-month-old boys showed significantly more achievement behavior after a story had a same-sex character demonstrate achievement-oriented

behavior. The effect was present but less significant for girls. Perhaps the scarcity of female achievement models in stories (Hillman, 1976; Kolbe & LaVoie, 1981; McVaigh & Johnson, 1979; St. Peter, 1979; Vukelich, McCarty, & Nanis, 1976; Weitzman, Eifler, Hokada, & Ross, 1972) could explain the ineffectiveness of one exposure to significantly affect girls in the study. Although useful, memory filing using a bipolar schemata influences perception by filing incorrectly (reinforcing sex-role stereotypes). The schemata makes same-sex information most accessible but most achievement modeling would be filed as male information.

Language Contains a Bias

The other influence of language is the bias it contains. Built into the bipolar schemata is a positive/negative bias in the language. English contains a negative bias toward women, a positive bias toward men and a male bias in generic terms (Nilsen, 1972; Schulz, 1975).

Negative bias toward women. The negative bias toward females is expressed in the wealth of derogatory terms found for women, more than for men. For example, Farmer and Henley (cited in Schulz, 1975) found 500 synonyms for prostitute but only 65 for whoremonger. Almost every term used for a woman (girl, miss, lady) has meant whore at one time or another. Female terms such as "sissy" (sister) and "girl" are used to insult males but the male equivalent of "buddy" (brother) has no such usage (Walum, 1977).

Male names (such as Beverly or Shirley) that have been adopted by women are rejected by men afterwards, but women can't lose status by

using male terms (Miller & Swift, 1977). The very idea of a man with a female name is comic in our society and invites ridicule, as in the song "A Boy Named Sue."

Women defined as they relate to men. A reinforcer of women as "less than men" is the practice of defining women in terms of their relationship to men. Women are called "the weaker sex," but the implied reference is "weaker than men." A woman marries and becomes Mrs. Bob Smith, a subordinate identity with nothing in the title to identify who she was before marriage. A family is said to "die out" in an all female generation and what could express the value of women in our culture more succinctly (Miller & Swift, 1977)?

Bias influences self-esteem. By age 2, both boys and girls understand that "boys will be the boss" and it won't do to be better than the boss (Kuhn, Nash, & Brucken, 1978). Not only males, but also females, attribute positive traits and values to their own sex at ages 3 and 4 (Albert & Porter, 1983; Kuhn et al., 1978) but accept more negative views of their own sex by age 5 and 6.

It has been shown that girls will devalue their own accomplishments (Nicholls, 1975; Pollis & Doyle, 1972). This is for good reason as it is considered "unfeminine" to compete. When a man is considered "aggressive" this is part of a spectrum of positive traits, but a woman called "aggressive" knows she has been reprimanded. Women are not less skilled than men; in fact they tend to exceed them scholastically. Despite their abilities, women's successes, from second grade on, are attributed most often to luck, thereby maintaining their lesser status and reducing women's self-esteem (Etaugh, Cooley, & Stern, 1981).

Girls adjust as their statuses become evident. One approach is to become "other directed," that is to be constantly aware of the needs of others in order to fill them. The large number of "service" jobs for women (i.e. nurse, waitress, maid, and secretary) make subservience a way of life. This attitude is reinforced by children's books which show more occupations for men than women in a 263:56 ratio (Hillman, 1976). In order to justify such self-supression, it helps to have internalized a low self-esteem.

Positive bias toward men. Males, on the other hand, have a positive language bias that puts them first in naming pairs. Consider husband and wife, Mr. and Mrs., and man and woman. Research is reported with male data first and most information is "male-standard." In Kohlberg (1966, 1967) masculine choices are charted for subjects of both sexes which causes the reader to see female subjects as "less masculine," not positively feminine. The female is reversed for inclusion as our culture defines her, included as she relates to the male. The norm is male. That is one thing women cannot be.

Mental health is male standard. In 1970, in a study of clinically trained psychologists, psychiatrists, and social workers, Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel found that mental health--defined for the ideal standard adult--was the same as that defined for men. Mental health for women included the qualities of neatness, tact, and gentle behavior, in contrast to the ideal adult, who is aggressive, independent, and direct. As a result, women cannot be included in the catagory of adult and still be considered healthy. Perhaps this explains the higher incidence of tranquilizer prescriptions

for women, 2/3 to 3/4 of all mood altering drug perscriptions, and the preponderance of women in tranquilizer ads in medical journals (Nellis, 1978, 1980). The implied advice of the ads is to drug women into good humor as they are merely neurotic.

Bias of male as norm. One argument against the Broverman et al. study, presented in the American Psychologist in 1977, was that a judge, when asked to rate an adult, would think of a male and thus come up with a male standard (Stricker, 1977). If women aren't included in the term "adult," what is the status of women over age 18? Gender neutral terms such as child, adult, and person, are considered to be "generic," or applicable to either sex. Despite this belief, studies have revealed that these terms aren't truly neutral because they operate in the "male as norm" bias in our language and culture. Thus, when these terms are used, the male is thought of significantly more often than the female (Moulton, Robinson, & Elias, 1978; Wise & Rafferty, 1982).

Male bias in generic terms. The use of the pronoun "he" to refer to persons of unknown gender is a probable contributor to this bias. The concept of having a gender specific term function also as gender neutral is confusing at best, biased at worst. "He" has been estimated to be used in its gender-specific function 4 to 10 times for each neutral use (Martyna, 1978) so one can assume the reference is to a male and be correct 80 to 98.9% of the time. The use of the generic "he" in job advertisments has been shown to indicate a male preference to female applicants and reduce their responses (Bem & Bem, 1973; Briere & Lanktree, 1983).

The use of the term "Man" to identify the species implies that "man" includes women but, as the reverse cannot be stated, the terms are not equivalent. This reinforces the "male as norm, female as exception" rule-of-thumb and the female tends to be excluded unless specifically included.

This problem can be seen in children's nature books where all animals are implied to be male unless they are mothers with their young presenting a 95:1 ratio of males to females in one study (Kolbe & LaVoie, 1978). The child sees the world as male with some female exceptions (Miller & Swift, 1967). Recalling the bipolar mental filing system and preference for same-sex information, this would allow males to easily incorporate "neutral" information more personally and completely. The world applies directly to them, as does the species, and all the vicarious experience and modeling they have to offer. The female would tend to "file" neutral information under male as well and have underextension of the information--that is, failure to apply it to appropriate referants, i.e. themselves (White, 1982). This reduces identification with characters and the opportunity to imagine functioning in any but the nurturing role.

Neutral terms are modified for women. When titles are applied to female referants there is a tendency towards unnecessary modification. Professional terms are adapted as if to warn "This is a Lady Dr., not a real Dr." (i.e. a man). The title of Lady Lawyer has no male equivalent of Gentleman Lawyer, therefore it only serves to remove women from the general class of "lawyers." Another tendency is to remove only the female gender for inclusion. Men continue to be called "chairman" while

women are addressed as "chairperson," thus removing the opportunity to increase female status. Why the quibble over Lady Dr. then? When gender is marked for only one of the sexes it removes the possibility of equivalence for the terms. Some terms that fail to operate "equivalently" in English reinforce a negative = female, positive = male bias. An unmarried person of age 25 can be a bachelor or a spinster but one term is negative. A possessor-possessed dichotomy is consistent with the male language bias in the formerly equivalent terms of master and mistress (Schulz, 1975).

The results of the language bias for women are under-inclusion of women as referants of information and higher association of women with negative values thus devaluing the gender as a whole. The assumption of maleness causes information to be applied to men to serve as vicarious experience and increase their presumed competency while not adding to women's. The impact of this bias is present in the bulk of children's literature.

Children's Literature Contains a Bias

Bias in number of male characters. "Books are instruments of acculturation" (Tibbetts, 1975, p. 5). Children's books reinforce the cultural bias of the male as the norm by the number of male characters and the roles they portray. The preponderance of male to female characters has been thoroughly documented (Hillman, 1976; Kolbe & LaVoie, 1981; McVaigh & Johnson, 1979; St. Peter, 1979; Vukelich et al., 1976; Weitzman et al., 1972). One study (reported in Women on Words and Images, 1972) of 2,760 reading text stories revealed that 823 featured

boys, 319 featured girls, 119 were about adult males and 37 about adult females. Of the 196 biographies, only 27 were about women. Applying the concept of actuarial prejudice here, the hidden curriculum in these texts is the lesson that in fiction, as in biographies, males dominate.

Bias in type of identification models. "Literature in general has the power to evoke an identification with characters, events and settings" (Hillman, 1976, p. 1). Real and vicarious models can produce imitative behavior in children (Frasher & Frasher, 1978) but the majority of these models are male ones.

In the introduction to one reading series (Robinson et al., 1962, quoted in Frasher & Walker, 1972, p.741) is the following statement:

> At the most formative period of children's lives, it would be unfortunate if the power of books to mold character were overlooked or ignored in the reading lesson . . . built into each story is some aspect of social relationship that children can make their own and apply to their behavior.

The publishers proclaim that a behavioral manipulation is included in the text. However the manipulation is inherently different for boys, who are shown as active and capable than it is for girls, who are shown as "passive and in trouble" (Howe, 1971, p. 77). Girls are prepared by story models for marriage and nurturing, "hardly ever for work, and never for independence" (Howe, 1971, p. 92). Plots about girls usually depend on their inability to do something (Howe, 1971).

Bias in career models. This inability is further projected for girls into their adult expectations by books. A study of occupations in 125 children's books portrayed males in 263 occupations and females in

56, a 5:1 ratio (Hillman, 1976). The preschooler equates stereotypes with competence (Cann & Haight, 1983; Jennings et al., 1980) so the children are shown a view of limited competence options for girls and a great variety of options for success for boys.

Rationale for male character books. One justification for featuring males in texts used by both sexes is based on the fact that boys dislike and avoid reading stories about girls (Kujoth, 1970; Tibbetts, 1974). Reading achievement increases for boys and girls when high interest story content is used, but only girls show a tendency to learn from low interest material as well (Asher & Markell, 1974; Bernstein, 1955). This assumes the benefits to boys from using male interest stories outweighs any damage done to girls who have generally higher reading progress (Frasher & Frasher, 1978). This assumption ignores the loss of vicarious models and the experience they afford through the reading of stories primarily focused on boys.

Using the same logic, let us consider the fact that boys' mathematical skills increase faster than girls' skills (Maccoby & Jacklin, 1974). Consistency would recommend that problems of higher interest to girls be used, to improve their ability in an area where they show less skill. In a study (Milton, 1959) using female sex-role appropriate story problems the difference between boys' and girls' scores was reduced significantly ($p < .05$). It was suggested that using role-appropriate stimuli motivated the female subjects to work harder, longer, and perhaps express less "task-anxiety" (Milton, 1959, p. 707). The logical course of action is to utilize female appropriate situations

in story problems, which is not the case. Male characters and situations are the rule, female the exceptions.

In reading texts the girls are shown lacking competence, needing help, and giving up on problems while boys show leadership, initiative and logical, problem-solving abilities (Frasher & Walker, 1972). Kolbe and LaVoie (1981) and McVaigh and Johnson (1979) both document the emphasis on boys' active and outdoor activities in books compared to the quiet activities for girls. Frasher and Walker (1972) suggest this could contribute to the boys' reading problems. Reading falls into a girl-type activity level, one which is seldom reinforced for boys in reading content.

Children's storybooks can influence behavior. A study of 2.7- to 5.4-year-old children using both sex-role stereotyped and nonstereotyped books showed increased regard and manipulation of female toys by both sexes after depiction in a storybook (Ashton, 1983). The behaviors depicted in most picture books are differentiated by sex. In a study (St. Peter, 1977) 206 picture books for children ages 3 to 6 were analyzed for expressive (sharing feelings) and instrumental (manipulating activity) modeling. Females comprised 79% of the expressive characters and males 21%. Characters participating in instrumental activities were 74% males and 26% females. The influence of these books would be exerted in a sex-role stereotypic direction, with girls observing models for passive, emotionally receptive behaviors while boys have activity and manipulation of their environment reinforced at the cost of emotional expression.

Books can influence self-image. In order to influence self-image, a book must allow the child to identify with the character (Gilpatrick, 1969). In a study of the influence of similarity to character (same sex) and the ability to interpret affective response and interpersonal behavior, a significant ($p < .01$) influence was revealed. More accurate interpretations on all tests emerged for both sexes when same sex characters were used, regardless of the subject's age or mental ability (Deutsch, 1975). The children understood the character better. An investigation into children's identification with a character (one perceived to be most like themselves) showed no significant difference in identification for boys between stereotyped and nonstereotyped characters. Girls, however, identified significantly more often ($p < .001$) with the nontraditional character, who showed courage and physical strength, and girls preferred the nontraditional story significantly ($p < .001$) over a traditional story (Frasher & Frasher, 1978). Unfortunatly, girls are not offered nontraditional models for identification very often. One possibility, which excludes neither sex, is gender-neutral characters. This study will use a gender-neutral character in order to test the following null hypotheses.

Null Hypotheses of the Study

H_1. There is no significant difference in gender identification by female or male subjects of a gender neutral character.

H_2. There is no significant difference in same gender assignment where similarity to character is suggested.

H_3. There is no significant difference between higher stages of gender awareness and identification of character gender where no suggestion of similarity to subject has been made.

Chapter 3

The Design for the Experiment

The problem of testing cultural gender assumptions placed special constraints on experimental design in this study. Also a problem when generalizing about a society was the population selection, as explained in the following section on methodology.

Sample Population

The sample for the study was drawn from the day care facilities in Black Hawk County (Black Hawk County Board of Supervisors list). Using a table of random numbers, 19 of the 27 facilities were drawn. An initial contact letter (Appendix A) and telephone contacts with 12 centers established the initial sample, and the remaining seven were held in reserve, as necessary to complete the study's statistical demands. The study required a minimum population of 80, with equal numbers of boys and girls at 3- and 4-years-of-age. This required the comparison of subjects from preschools to subjects from day care centers, however, type of care facility does not influence children's sex typing and preference in children's stories (Burge, 1982; Jennings, 1975).

All children sampled had consent forms (Appendix B) completed by their parents on file. No further sample screening, other than presence at the facility, was taken.

A pretest conducted with 26 children from one nursery school informed this study. The children were read the book in pairs and

interrupted the story with comments. This influenced the gender assigned by the other child in the pair. The current study was administered to the children singly. The character was seen to function in a gender-neutral fashion in the pretest as both boys and girls assigned both genders to the character.

Generation of the Experimental Book

In order to determine if preschool age (36-50-month-old) children identify equally with an androgynous storybook character it was necessary to employ a book which met that description. In one study of award-winning children's picture books printed since 1922, only seven contained central characters without a sex (Weitzmann, Eifler, Hokada, & Ross, 1972). Since the children might have come into contact with any previously published book, an unpublished work was required. Further, cultural and physical gender cues were omitted or balanced in the book generated (Appendix C). The considerations of character's name, language, activities and illustration style, as they pertain to the book generated, will now be discussed.

Name choice. The name selected was Terry. In the pretest eleven children assigned the character a male gender and fourteen assigned the character a female gender. One child was unable to decide. The option of using alternatives to common names, such as colors, nonsense sounds or attribute descriptions (i.e. happy walker) were suggested but presented disadvantages. In English, names which describe qualities (i.e. Hope, Constance, and Honor) are most often feminine and have no male equivalents (Miller & Swift, 1977). In a study by Paludi (1981),

girls assigned a male gender to words like "that," "a," and "the" because they did not sound pretty. Nonsense sounds could not be controlled for such an influence. Color terms are often associated with gender. Pink is for girls, blue is for boys. ". . . The individual is trained to his sex-role from the moment of birth when girls are placed in pink, boys in blue bassinets" (Seward, 1946, p. 153). The options were rejected as the alternatives failed to avoid gender implications.

Language style. Language style can give gender clues on several levels.

Gender pronouns are omitted. D. G. Brown's "It" test revealed a male bias for both "it" and "somebody" when used with children 4 1/2-years-of-age (Brown, 1962). A 1981 study (Paludi) of the "It" test found that 35 of 40 girls said "it" sounded like a boy's name. A majority of girls included the control words "that," "the," "and," and "or" as boy's names as well. The book used in this study attempted to control for the pronouns. In order to avoid gender clues the text of the book omitted any use of the pronouns "he" or "she" as they can be interpreted as gender specific (Martyna, 1978).

The style of speech was controlled. Lakoff (1976) has documented a women's language style, referred to as powerless speech, which avoids strong statements, using instead a style suggesting triviality of content and the uncertainty of the speaker. Textual gender clues of powerless speech such as "won't you come?" and excessive use of modifiers such as "very," "pretty," and "oh my goodness" have been associated most often with women's speech (Farb, 1974; Lakoff, 1976) and were avoided in the text.

Activities controlled. The activities presented in the book excluded sex-role stereotyped play such as football and doll play. A mixture of 33% active and 67% passive activities were included in the book, based upon a study which found that in children's books the ratio of quiet to active play shown for girls was 46/54% while that for boys was 14/86% (Vukelich et al., 1976). Accordingly, the story's three fantasy episodes describe Terry in one passive and two active situations.

The illustration style was controlled. Illustrations for the book required ambiguity. "Girls are allowed to dress like and look like boys in our culture but not vice versa" (Brown, 1962, p. 477). A one-piece coverall unlike any currently popular design was adopted for the book.

The colors of orange and white were used for Terry's clothing as bright, to catch the eye, but not specifically associated with either gender. Color also can be associated with a personal quality--yellow for cowards, green meaning inexperienced. The book attempted to exclude these unwanted dimensions from association with the main character in the study.

Before the pretest, illustrations were shown to a number of adults and a gender assignment for the character requested. After gender assignment, probes for the gender clue were initiated, and the illustration was modified to eliminate such clues as light eyebrows, considered a feminine characteristic.

Reading Style Controlled

The oral reading of the story may provide gender clues. A normal speaking voice during the lines spoken by the character was used to avoid gender clues. Specifically avoided was any rise in pitch which might accompany an interpretive reading. Higher pitched voices are associated both with children and females in general, and so might be interpreted as a gender clue (Sachs, 1975). Gestures and inflections were repeated at the same point in each reading and only used to improve clarity. For example, on page two of the book the text reads "Today there were dandelion puffs for Terry to blow (gesture holding a stem and blow) and send flying." The gesture was included to clarify the phrase "dandelion puffs." A question to the child such as "Have you ever done that?" would distort the null similarity condition and so was avoided. A recording was made during the pretest which was studied by two graduate students in oral interpretation. They found the readings were consistent in inflection patterns (stress on specific words) tonal variation (pitch), and reading rate (speed).

Control for Experimenter Influence

Sex of experimenter. The same female adult reader was used for each test. All except one of the care personnel at the centers visited were women and the children were accustomed to being read to by females so no novelty effect could be expected. Studies indicate that the sex of the experimenter showed no effect on gender assignment to drawings and toy choices (Eaton et al., 1981; Thompson & McCandless, 1970). In studies on children's toy choices following modeling by adults, the only

significant influence was on boys by male experimenters (Serbin, Connor, & Cition, 1981).

Experimental Procedure

A brief explanation of the procedure was given each subject immediately prior to the reading: "I'm going to read you a story, then we will talk for a while." In order to determine the influence of a suggestion of similarity, in 50% of the cases this sentence was followed by the suggestion of similarity to the character with the sentence "This is a story about a child just like you." In the other 50% no suggestion of similarity was made.

Following the reading, questions were asked to determine the gender assignment. The last picture of the character (on page 8 of the book) was shown, and the child asked what was happening in the picture. The picture shows Terry running out of the park.

A response using the pronoun "he" by the child was recorded as gender specific in its application to the character of Terry. A study comparing grammatical rules learned early in life (preschool age) and those requiring overt, formal instruction (usually in school) included the use of the pronouns "she" and "he." The subjects (from nursery school and grades 1, 3, 5, and 7) used same-sex pronouns for the majority of nonstereotyped activities (eating, talking, etc.). Stereotyped activities evoked stereotyped pronouns ("he" for fighting and winning, "she" for being pretty and crying). The generic use of the pronoun "he" was not present for any of the age groups represented (Labov, 1969 as cited in Nilsen, Bosmajian, Gershuny, & Stanley, 1977).

Gender pronoun usages by 36-month-old subjects are accurate 88% of the time (Thompson, 1975) and for children 3.6- to 3.11-years-of-age a 95% accuracy has been recorded (Scholes, 1981). The Kropp and Halverson (1983) study treated the use of the pronoun "he" as male gender assignment to a storybook character named Jane in a study of 60 to 70 month-old children.

The questions continued with other illustrations until gender verification was made twice. If no gender assignment was determined using this method, the following questions were used:

1. What do you think Terry will grow up to be?
2. What's that? (point to Terry) Is it a car?
3. Will Terry be a mommy or a daddy some day? Which one? (This works only for gender stable stage and older.)
4. Do you know anyone like Terry?
5. If the boys stand over there (point left) and the girls stand over there (point right) where will Terry stand?

Following gender assignment determination the data was entered on a response tally sheet (Appendix D) prepared in advance. The twelve questions developed by Slaby and Frey (1975), later used by many (Eaton & Von Bargen, 1981; Kuhn et al., 1978; McConaghy, 1970) have been proven to differentiate between stages and were used in the study.

In order to prevent an influence on responses due to the sequence of gender references in the questions (i.e., boy or girl, compared to girl or boy), the response sheets were keyed in advance for every possible combination of sequences, as illustrated in Table 2.

After randomizing the questions, the sheets were keyed for the suggestion of similarity in 50% of the population in each age and gender group (20 3-year-old females, 20 males, etc.).

Table 2

Keying Sequence for Response Sheets

	Order of First Gender Reference				
Question number	1	2	3	4	etc.
Subject Number					
Subject 1	F	M	M	M	
Subject 2	F	F	M	M	
Subject 3	F	F	F	M	
etc.					

When a testing session was scheduled, the names of the children participating were penciled on top of a sheet appropriate for the age and gender of the child. The exact age in months was computed from the centers' records and recorded. As each child was tested the correct sheet was used and the name erased to create blind data. Care was taken to avoid anxiety over correct or experimenter desired responses from the child.

Gender awareness stage questions. The first four questions developed by Slaby and Frey (1975) determine the stage gender identity

and call for gender identification of four photos (girl, boy, man, woman). In order to assess their ability to recognize gender from few clues, all of the chosen pictures show people wearing pants (Appendix E). The girl has long, curly pig-tails, and the woman wears make-up and jewelry. In photo identification the figures usually are dressed in stereotyped clothing of dresses for both the girl and woman.

The correct identification by a high percentage of subjects would indicate that a female figure can be readily identified in pants.

The other eight questions used the child as referent and determined the child's awareness of the permanence of gender. In order to be included as being in a particular gender awareness stage all correct answers on that section are required as in the Slaby and Frey (1975) study.

The experiment was conducted over several months until all cell requirements were met. The following chapter gives the results.

Chapter 4

The Results of This Study

Of the 19 preschools and day care centers contacted, nine agreed to participate, but only seven contained the age groups required. Sessions at seven preschools and day care centers over a three month period were conducted until the required population for cell size was achieved. The following chapter gives the results of this study.

Demographics

The sample population consisted of 80 children from two age levels, 36- to 47-months-of-age (mean age 43.1 months) and 48- to 59-months-of-age (mean age 53.5 months). The overall mean age for boys was 48.5 months and that for girls was 48.0 months. The sample contained 20 girls and 20 boys at each age level from seven preschools and day care centers. The majority of the children were white with four exceptions (2 black females, 1 black male, 1 hispanic male).

The majority of parents contacted (123 of 182, or 68%) agreed to participate. All the children for whom consent forms were received were tested until cells filled. As a result, an external self-selection process may have been in operation. Since a study of the sex-role identity and self-concept of preschoolers (Burge, 1982) showed no influence for sibling status (only child, youngest, middle, etc.) or family unit (single or two parent family), most family factors are not seen to influence this area of investigation.

Gender Awareness Results

The gender awareness test contained two sections. The first required the children to identify correctly the gender of a man, woman, boy, and girl from pictures. As all the pictures showed people wearing pants, this was not a simple stereotyped clothing test. The second section used questions with the child as referent to test stages of gender stability and gender constancy. The following sections discuss these results.

Picture identification. Seventy-seven of the eighty subjects (96%) labeled the pictures (Appendix E) of the girl, boy, woman, and man correctly. This indicates that gender can be identified without the presence of stereotyped clothing (dresses) for the pictures of females.

Gender awareness questions. The most frequently missed questions on the gender awareness test (Appendix D) were numbers 6 and 8 (11 and 9 errors respectively). These questions both deal with the concept of gender over time. Question 6 asks if, when they were little babies, the children were baby girls or boys. Eleven children (5 girls and 6 boys) answered incorrectly. Question 9 asks them if they will be a daddy or a mommy when they grow up. Six girls thought they would be a daddy and three boys thought they would be a mommy when they grew up. As conservation of matter is a later cognitive stage which has been related to gender constancy (Martin & Halverson, 1983), these would be expected to be more difficult questions for the children.

Several children said they wouldn't be a daddy or a mommy and offered alternatives such as an artist and "The Incredible Hulk." When pressed for an adult gender, they could supply one; but some children

resisted the idea that they must assume an adult gender some day. One girl in particular said, "I'm never gonna' get married and I'm never having any kids!" The title "mommy" or "daddy" was therefore seen to represent an occupation to some children, rather than a simple gender assignment, although some of the younger children understood these terms more easily than the terms man and woman.

Analysis of Variance of Gender Stages

An ANOVA analysis of the Gender Awareness Stage count by the sex and age of the subjects (Table 3) showed a significant effect for age only ($p < .006$) which replicated Slaby and Frey's results of 1975 when they first developed the questions used in this study.

Table 3

ANOVA Data for Awareness Stage, Comparison by Sex and Age

Source of Variation	Mean of F	Significance of F
Main Effects	4.504	0.014*
Sex	0.901	0.346
Age	8.107	0.006*
2-Way Interactions	0.056	0.813
Sex Age	0.056	0.813
Explained	3.021	0.035**

Note. * = Significant to .01, ** = Significant to .05.

The significance can be traced to the age influence manifesting itself in the cells. The age breakdown by stage is shown in Table 4.

Table 4

Gender Awareness by Stage, Sex, and Age

Stage	Mean Age	Age Range in Months	Total Count	Count by Sex Boys	Girls
Awareness	39.7	36-42	3	2	1
Identity	45.1	36-56	26	11	15
Stability	49.5	41-56	13	5	8
Constancy	50.8	37-59	38	22	16

Although the mean age of all boys (48.5 months) was slightly higher than that for all girls (48.0 months), the mean age of girls in the gender constancy stage was higher than that for boys (girls 51.06 months, boys 50.54 months) indicating that girls in this sample reach gender constancy slightly later than boys.

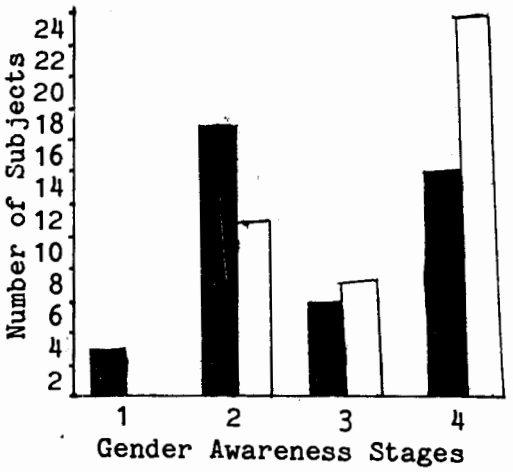
The earlier attainment of gender constancy for boys is consistent with the greater pressure on boys to avoid toys and activities associated with girls (DeLucia, 1963; Eisenberg et al., 1982; Hartley & Hardesty, 1964; Langlois & Downs, 1980). The clear relationship between age and stage is shown in Figure 1.

Figure 1

Gender Awareness Stage by Age

Age 3.0-3.11 = ■

Age 4.0-4.11 = □



Note. No subjects from the age 4.0-4.11 population tested in Stage 1.

Perceived Gender of Storybook Character

The children's gender assignment to the character of Terry was compared by age, sex, stage, and condition of suggestion. The following section will discuss the various influences on same-sex assignment.

Same sex assignment. Both boys and girls assigned the character their own sex most often. Both 3- and 4-year-olds assigned the character their own sex most often.

Some groups had higher levels of same-sex assignment. The 3-year-olds had the highest same-sex identification (65%-75%) and boys at both levels had a higher identification than did the girls, as Table 5 illustrates.

Table 5

Same Sex Assignment by Sex and Age

Age 3	Count	Percent	Age 4	Count	Percent
Girls	13	65%	Girls	11	55%
Boys	15	75%	Boys	14	65%

Same sex identification declines with age. Both age groups show a 10% decline in same-sex identification for the character between age 3 and 4 but, as the girls started with a lower level, this reduces them to an 11:9 chance of identification by age 4.

Chi square analysis of data. A Chi square analysis of these data in a sex (2), by age (2), by character sex (2) relationship revealed a significant effect ($p < .04$, 3 df.). Table 6 gives the data from the Chi Square analysis of the population.

A significant interaction ($p < .04$, 3 df.) was revealed when the sex assigned the character was compared to subject sex and age.

Overall gender assignment was male 44, female 36. Figure 2 shows male and female assignment by subject's age and Figure 3 breaks this down further into subject's sex and age groups.

As Figure 2 illustrates, the two age groups were equal for male/female gender assignment but the Age 4 groups (Figure 3) had more opposite sex assignments for both girls and boys. It is the combination of the sex and age influence which reveals the interaction.

Table 6

Chi Square Analysis of Character Sex by Age and Sex

Subjects by Sex & Age	Male-Sex Character Count	% of all Male Grp	% Male by Age & Sex	Female-Sex Character Count	% of all Female Grp	% Female by Age & Sex
Males						
Age 3	15*	34.1%	75%	5	13.9%	25%
Age 4	13*	29.5	65%	7	19.4%	35%
Females						
Age 3	7	15.9	35%	13*	36.1%	65%
Age 4	9	20.5	45%	11*	30.6%	55%
Totals	44	100.0		36	100.0%	

Note. Raw Chi Square = 8.08081 with 3 degrees of freedom, Significance = 0.0444 *Same sex assignment

Null Hypotheses 1 dealt with the assignment of gender to the character.

H_1. There is no significant difference in gender identification by female or male subjects of a gender neutral character.

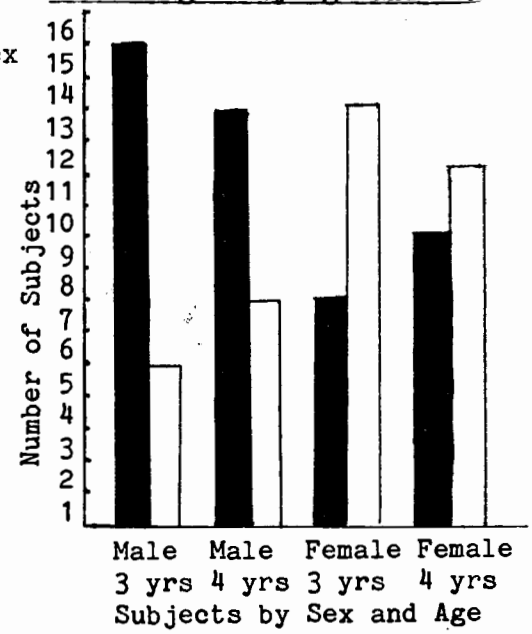
The null hypothesis was rejected. There is a significant difference ($p < .04$) between the sex of subject and the gender chosen for a gender neutral character.

Figure 2

Sex Assigned by Age

Figure 3

Sex Assigned by Age and Sex



Suggestion of Similarity

Half the sample population received a suggestion of similarity to the character just before the story was read to them.

Chi square analysis of gender assignment by suggestion group. The influence of the suggestion of similarity was examined using a complex chi square in a sex (2), by suggestion (2), by character sex (2) relationship. The data from the Chi Square analysis of the condition of the suggestion of similarity are reproduced in Table 7.

The results showed a significant relationship existed ($p < .014$, 3 df.) with the variance due almost entirely to the male/suggestion, female/no suggestion variation in response. Figure 4 illustrates the almost opposite reaction to a suggestion of similarity evinced by boys and girls.

Table 7

Chi Square Analysis of Character Sex by Suggestion

	Male Character Group			Female Character Group		
Subjects by Sex/Suggestion	Count	% of all Male Grp	% Male Sex/Sug	Count	% of all Female Grp	% Female by Sex/Sug
Male						
Suggestion	16*	36.4%	80%	4	11.1%	20%
No Suggestion	12*	27.3%	60%	8	22.2%	40%
Female						
Suggestion	10	22.7%	50%	10*	27.8%	50%
No Suggestion	6	13.6%	30%	14*	38.9%	70%
Totals	44	100.0%		36		100%

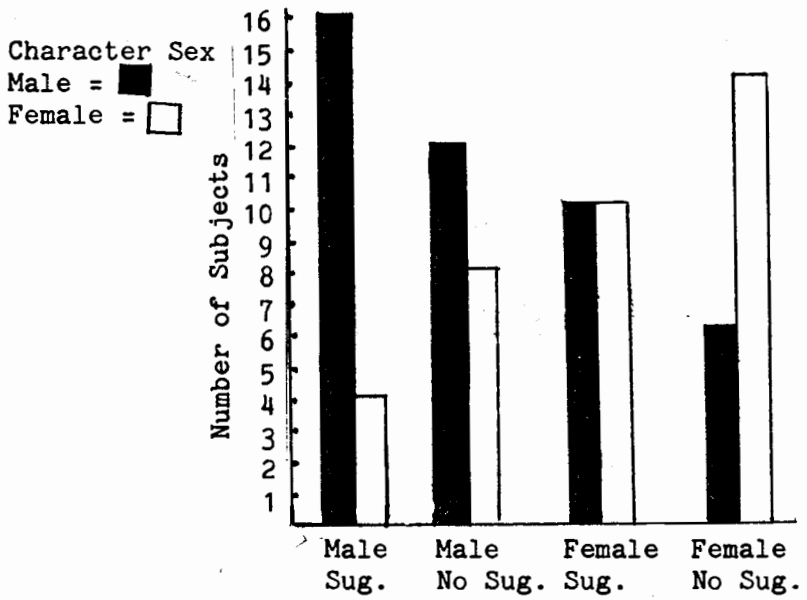
Note. Raw Chi Square = 10.50505, with 3 degrees of freedom
Significance = 0.0147 *Same-sex assignment

When boys received a suggestion of similarity to the character, a 4:1 same-sex identification ratio emerged, compared to a 3:2 ratio when no suggestion was present. Girls, on the other hand, responded to a suggestion of similarity with an even 1:1 same-sex identification but when no suggestion of similarity was made a 7:3 same-sex identification ratio emerged. Thus the suggestion that the character was similar to the girl increased the probability that the character would be perceived as male.

Hypothesis 2 dealt with the suggestion of similarity.

Figure 4

Sex Assigned by Sex and Suggestion of Similarity



H_2. There is no significant difference in same gender assignment where similarity of character is suggested.

The null hypothesis was rejected. There is a significant ($p < .01$, 3 df.) difference in gender assignment when similarity to character is suggested.

Gender assignment when no suggestion is present. Because the condition of no suggestion of similarity had the reverse influence for the girls that it did for the boys, girls showed higher same-sex identification (67%) under this hypothesis than did boys (58%).

The overall gender assignment was higher for same-sex identification for all gender stages and both sexes with the exception of girls in stage 3 and the previously reported female bias in the three children testing at stage 1. Table 8 demonstrates the distribution character gender assignment by sex and stage.

Table 8

Gender Assignment by Sex and Stage

Stage	Subject Sex	Mean Age	Same Sex Count	Same Sex %	Opposite Sex Count	Opposite Sex %	Character Sex Male	Character Sex Female
1	girls	41.0	1	100%	0	0%	0	1
	boys	39.0	0	0%	2	100%	0	2
2	girls	44.9	9	60%	6	40%	6	9
	boys	45.3	9	81%	2	19%	9	2
3	girls	48.8	3	37%	5	63%	5	3
	boys	51.8	4	80%	1	20%	1	4
4	girls	51.1	11	68%	5	32%	5	11
	boys	50.5	15	68%	7	32%	15	7
Totals			52	65%	28	35%	44(55%)	36(45%)

The data resulting from the study indicate that an inequality of identification exists overall between boys (70%) and girls (60%) for an androgynous character. If similarity is suggested for boys and not for girls the identification is increased (boys 80%, girls 70%).

Hypothesis 3 concerned the equality of identification in higher gender awareness stages when no suggestion of similarity was present.

H_3. There is no significant difference between higher stages of gender awareness and identification of character gender where no suggestion of similarity to subject has been made.

The transition from one gender awareness stage to another is not automatic and thus could not be controlled in the population. Only four subjects in the nonsuggestion population tested at stage 3, too few for any meaningful comparison.

The stage 4, nonsuggestion population numbered 23 and their same-sex identification levels resembeled that of the entire nonsuggestion population as indicated in Table 9.

No conclusion is possible due to the limited population.

Table 9

Comparison of Nonsuggestion Group by Sex and Stage 4

Nonsuggestion Group by Sex	Same Sex Character Count	%	Opposite Sex Character Count	%
Males				
Stage 4 Only	8	62%	5	38%
All Males	12	60%	8	40%
Females				
Stage 4 Only	7	67%	3	33%
All Females	14	70%	6	30%

Chapter 5

Implications and Future Applications

The purpose for conducting this study was to examine the equity of preschooler's identification with storybook characters, and to examine their ability to identify equally with an androgynous character, with and without the presence of a suggestion of the character's similarity to the subject.

The identification anomaly discussed in the rationale section in Chapter 1 documented the use of male images, by both sexes, to describe the species (Draw a Figure and It tests) or use the imagination (Verbal Fantasy test). The subjects in these studies (Brown, 1955; Brown & Tolor, 1957) ranged in age from 13 years to college age.

Implications

Relationship between character gender and subject sex and age. This study has shown that a significant ($p < .04$, 3 df.) relationship exists between the perceived similarity (gender) of a character and the subjects' sex and age.

Unequal identification shown for sexes. This study has shown that the identification anomaly appears in this younger population (70% male same-sex identification, 60% female) but not yet in the extreme range reported for adults on the Verbal Fantasy test (94% male same-sex identification, 43% female same-sex identification) or the Draw a Figure test (91% identification for males, 63% for females).

Possibility of a female bias revealed. The appearance of what appears to be a female bias in the stage 1 subjects suggests that this age group (preschoolers) may be in the process of changing from a female dominated world view (infancy) to the male bias view revealed by the previously mentioned studies.

Suggestion of similarity anomaly. This study has shown that a suggestion of similarity to the character had a highly significant ($p < .01$, 3 df.) influence on gender assignment. This influence is in opposite directions for the sexes. Boys, who had a 60% identification without the suggestion, increased same-sex identification by 20% (to 80%) when similarity was suggested. The girls in this study evinced a 70% same-sex identification level without a suggestion of similarity (higher than the boys no-suggestion identification level), but when the identification manipulation was attempted (suggestion) a drop of 20% (to 50%, the lowest for all conditions) occurred. Thus the suggestion that the character was similar increased the probability (by 20% in both groups) that both sexes would perceive the character as male.

Possible role of children's literature. Considering the ratio of male to female storybook characters, this response (reduced female identification) becomes understandable. The character ratios range from a 2:1 male dominance (St. Peter, 1977), male 46%, female 15%, shared 39% (Frasher & Walker, 1977), and a male 68.2%, female 22.7% and shared 9.1% (Vukelich et al., 1976) main character distribution. Assuming that the children are reading representative books from this pool, the girls are most likely to be expected to accept male characters with the suggestion made that they "Really are just like you." This would eventually come

to mean that the characters are just like boys, instead of creating similarity.

This data suggests a hidden curriculum is at work in this age group. Whether this is the result of the custom of using male-character books or a cultural bias of the male as norm, it points to an alienating influence directed at girls. This would cause reduction of identification with all but specifically female characters and the reduced benefits of learning from models of undetermined gender.

As children in this study are too young (under age 5) to have acquired the understanding of the genital basis for gender (Kohlberg, 1966; McConaghy, 1979), it is the behavioral sex markers they see as gender markers, creating a stereotype-perpetuating process. This anomaly requires serious investigation, particularly as it relates to self-esteem, which has also been shown to move in opposite directions for the sexes from kindergarten to age 15 (Elrod & Crase, 1980; Tryon, 1980). In the following passage from Weitzman et al. (1972), the conflict girls have in identification with a storybook character is explained:

> It is easy to see why many little girls prefer to identify with the male role (Hartup 1962, Brown 1956). . . .Girls who wish to be more than placid and pretty are left without an acceptable role alternative. They must choose between alienation from their own sex of assignment, and alienation from their real behavioral and temperamental preferences. (p. 1138)

The association of female gender with helpless, pretty and placid characters leaves the assumption that independent characters,

unconcerned with appearance, are male. It is no wonder that, as they grow older, boys' self esteem, linked to their sex-role identity, increases. Girls, however, with increasing age, choose more sex-neutral games (Marcus & Overton, 1978) and have reduced self-esteem when permanence of gender is understood (Tryon, 1980). This leads to reduced aspirations as defined by symbolic models (Dominick & Rauch, 1972).

Future Applications

Tests for source of identification bias needed. While this study did show that an inequity of identification exists between the sexes, it did little to indicate the source of that influence and further research is needed to determine the cause. There are four possible contributing factors.

One possible factor is that language contains a male bias. The English language contains a male bias with male terms used as generics (he, mankind) contributing to an assumption of male gender. A second factor to consider is the preponderance of male characters in children's literature. The preponderance of male characters in children's literature contributes to the assumption that a gender unspecified character is most probably male. A third possible contributing factor is the standard girls' behavior in books. The standard behavior for girls in picture books is that of helplessness, placidity, and beauty; therefore a character showing independent and active behaviors better fits male models and is most probably male. The final probable contributor is that the culture assumes a male as norm bias. The

culture assumes a male as norm, female as exception rule, and so any character is male until proven female.

Determine cause of gender assignment. An experiment to determine the cause of gender assignment (the subject's reasons for assigning a specific gender) should be designed and performed. This type of experiment would require careful child interviewing and would be unlikely to fit any but the case-study format. If the child is using a perceived gender clue such as the drawing style, the identification assumption is questionable. However, if the gender assigned is the result of a cultural influence (such as the male as norm presumption) the child will be unable to designate this as a gender assignment rationale.

Extended population age needed. This study needs to be extended to include both older and younger subjects and control for self-selection.

Because all the children for whom consent forms were received were tested, an external self-selection process may have been in operation. Since a study of the sex-role identity and self-concept of preschoolers (Burge, 1982) showed no influence for sibling status (only child, youngest, middle, etc.) or family unit (single or two parent family) most family factors are not seen to influence this area of investigation. However, the self-selection process might have an unknown influence on the population due to a variable not included in the previous studies (such as parents' education level). A better method would be to draw subjects, using a random process, from a population pool of those who have returned the forms.

Older subjects need further study, since subjects of both sexes showed a 10% decline in same-sex identification from age three to age four, it would be valuable to extend this experiment to 5-, 6-, and 7-year-olds, to see if this trend continues or bottoms out. The book used in this study, however, might not be appropriate for older children.

Many studies have shown early acquisition of sex-role stereotypes,but girls, as they grow older, show a reduction of stereotypes (Burge, 1982; DeLucia, 1963; Flerx et al., 1976; O'Keefe & Hyde, 1893). An extension of this experiment to older subjects could be correlated to expression of stereotypes to determine if a relationship to identification with a gender-neutral character exists. This seems the most likely population to be influenced.

Younger subjects need further study. The three children who tested pre-gender-identity exhibited a female bias. They identified pictures of males as females and also assigned Terry the female gender. The very small size of this portion of the sample (4%) makes any conclusions based on this data suspect but it is worth further investigation. If proven, this would indicate that a bias reversal occurs between gender awareness stages which might help pinpoint and determine the source of the male bias. An experiment to determine this would require a large population and very young subjects as the oldest child testing in this group was 42 months old while some children as young as 37 months tested in stage 4. As gender awareness stage was shown to be directly related to age ($p < .006$), a younger population would increase subjects at stage 1.

Any experimentation with gender identification at this age level should be advised of a possible problem arising from using pronouns to determine gender assignment. Although studies show an 88-95% accuracy of gender pronoun usage for 36- to 42-month-old children (Scholes, 1981; Thompson, 1975), there has been evidence (Scholes, 1981) that children first learn and use their own pronouns (she for girls, he for boys). One child in this study identified Terry's gender with the statement "He's a girl." This indicates that there may have been subjects in this study whose reported character gender assignment was based on the misuse of a pronoun. Assuming 88% pronoun use accuracy at the 36-42 month age range would project only 2 subjects in pronoun misapplication. One of which was obvious in the just reported case and therefore not misrecorded. However, for more accurate character gender determination, future experimenters should elicit nouns such as girl or boy, or use a picture of the character, as in the gender awareness picture identification test.

Content of sex-role stereotypes as possible identification influence. Knowledge of sex-role stereotypes increases with age and is learned and applied first for one's own gender. The book used in the study controlled for stereotypes. The absence of best known stereotypes (for one's own gender) could signal reduced similarity, and thus an opposite sex gender assignment.

The activity level depicted in the book was higher than that usually portrayed for girls but lower than that for boys. If this is used by children as a gender indicater it would bias towards dissimilarity as one's own gender's attributes are understood best. One

child (a girl) explained Terry's behavior in a passive scene (page 4) as "He's pretending to be a girl." This would also imply that activity modeling is assimilated into sex-role expectations.

Experience may broaden gender interpretations. Another possible explanation for the reduced same sex identification with age is that, as children acquire more social experience with both sexes, they see the attributes of curiosity, imagination, and longing for more experience (all depicted in the story) as common to both sexes.

Studies that showed identification bias should be repeated. The tests cited in the gender anomaly reference were performed from 1955 to 1969. They should be repeated to determine if the results are still representative of the population today. The 10% reduction of same-sex identification for the character at both ages and for both sexes has several possible explanations. The avoidance of most sex-role stereotypes usually present in children's literature is one explanation. Another consideration is the possibility of a cultural trend toward more inclusion of females than was indicated in the 1955-69 tests.

Other androygnous-character books should be generated. The influence in this study could be unique to the book generated. Other androgynous-character books should be generated in order to determine the specificity of the influence of this book.

The use of androgynous characters serves a humanistic purpose as it requires characters to be conceived and perceived first as people, and then as similar or dissimilar. Avoiding the limits of stereotypes, a carefully composed book will permit the child to experience free exploration of potential.

In a population equally divided between the sexes, a conventional storybook will exclude 50% of the children from identification and the enhanced learning this provides (Deutsch, 1975; Frasher & Frasher, 1978; Kropp & Halverson, 1983; Nadelman, 1974). Using an androgynous-character storybook in this experiment a 65% same-sex identification emerged. When the suggestion of similarity is controlled (present for boys, absent for girls), this percentage improves to 75% perceived similarity to character (80% for boys, 70% for girls). Although this is not equal identification, it is higher than a conventional book could provide.

Although female characters displaying positive attributes and behaviors would be the ideal solution, androgynous characters were suggested in this study in order to prevent the same abuse to boys and document any identification bias. They do provide a unique solution to reading situations when groups of boys and girls are together.

Final Comment

Androgynous characters are one, egalitarian option to be explored. The impact of limited same-sex modeling for half of the population demands more extensive investigation. Limiting achievement models in children's literature to the male sex, limiting the portrayal of women to predominantly nurturing roles, and the almost invisible role of female characters all serve to deny girls the opportunities for vicarious success. The image of the "the woman's place" must be extended to include the world outside the kitchen and bathroom (Dominick & Rauch, 1972).

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Appendix A

Contact Letter

University of Northern Iowa
Department of Communication and Theatre Arts
Cedar Falls, Iowa 50614
(319) 273-2217

Mara C. Loeb
104½ East 9th Street, Apt. 3E
Cedar Falls, Iowa 50613
January 18, 1985

Ms. Karen Brown
Director
Playschool Day Care Center
109 First Street
Cedar Falls, Iowa 50613

Dear Ms. Brown:

I am a graduate student in Speech Communication, specializing in children's literature, at the University of Northern Iowa. As part of my degree work I'm studying how children react to storybook characters. As a person who works with preschool age children I'm sure you are aware of their rapid mental growth in this time period and the impact in later life of concepts acquired at this time.

My study is on the preschooler's identification of the storybook character's gender. I am requesting the participation of this area's day care centers and preschools. I would visit your school for one day. Children, chosen at random from your class list, would have a story read to them and then answer a few related questions.

I will supply the storybook and will need only a quiet place where I can read the story to the children singly. In my pretest the children liked my story and responded positively. I will supply information for the parents in advance.

I will be contacting you by phone in the next few days to discuss this with you. I hope you can help me.

Thank you,

Mara C. Loeb

Mara C. Loeb

P. S. A summary of the results of this study will be sent to interested centers.

Appendix B

Consent Forms

Informed Consent Statement

In order to determine if preschool boys and girls enjoy equal identification with storybook characters, a storybook has been prepared that omits gender clues.

The children in this study will have this story read to them and will then be asked to answer questions about the story.

The children will then be asked a series of 12 questions (such as "Are you a boy or a girl?") developed by Ronal G. Slaby and Karin S. Frey (Child Development, 1975, 46, pps. 849-856) and since used by many other researchers (Eaton and Von Bargen, 1981; Kuhn, Nash, and Brucken, 1978; McConaghy, 1970; and others). These questions determine the stage of gender awareness and cognitive development of the child to determine if this influences gender perception.

As this study will take place in an environment familiar to the child, and reading and questions are a regular part of the curriculum, no risk or discomfort to the child is expected. No records will identify the children with their responses and participation is voluntary. The child will also be asked if she/he wishes to participate and may cease participation at any time.

The anticipated benefits are a greater understanding of vicarious experience through literature for preschoolers.

Please take a few minutes to complete the attached form for return to the day care center.

Thank you,

Mara C. Loeb

Mara C. Loeb
University of Northern Iowa

Mara Loeb
Department of Communication and Theatre Arts
University of Northern Iowa
273-6305 or 273-2217 or 266-2003

I am fully aware of the nature and extent of my daughter's/son's participation in this project as stated on the previous page. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement.

_____
(signature of responsible agent) (date)

_____
(printed name of subject)

Mara Loeb
_____
(signature of investigator)

You may contact the Graduate College, University of Northern Iowa, 273-2748, for answers to any questions concerning this research or the rights of research subjects.

If you are interested in the results of this study, please list your name, address, and the name of your day care center below and a summary of the results will be sent to you at a later date.

Thank you,

Mara Loeb
Mara Loeb

_____

_____

_____

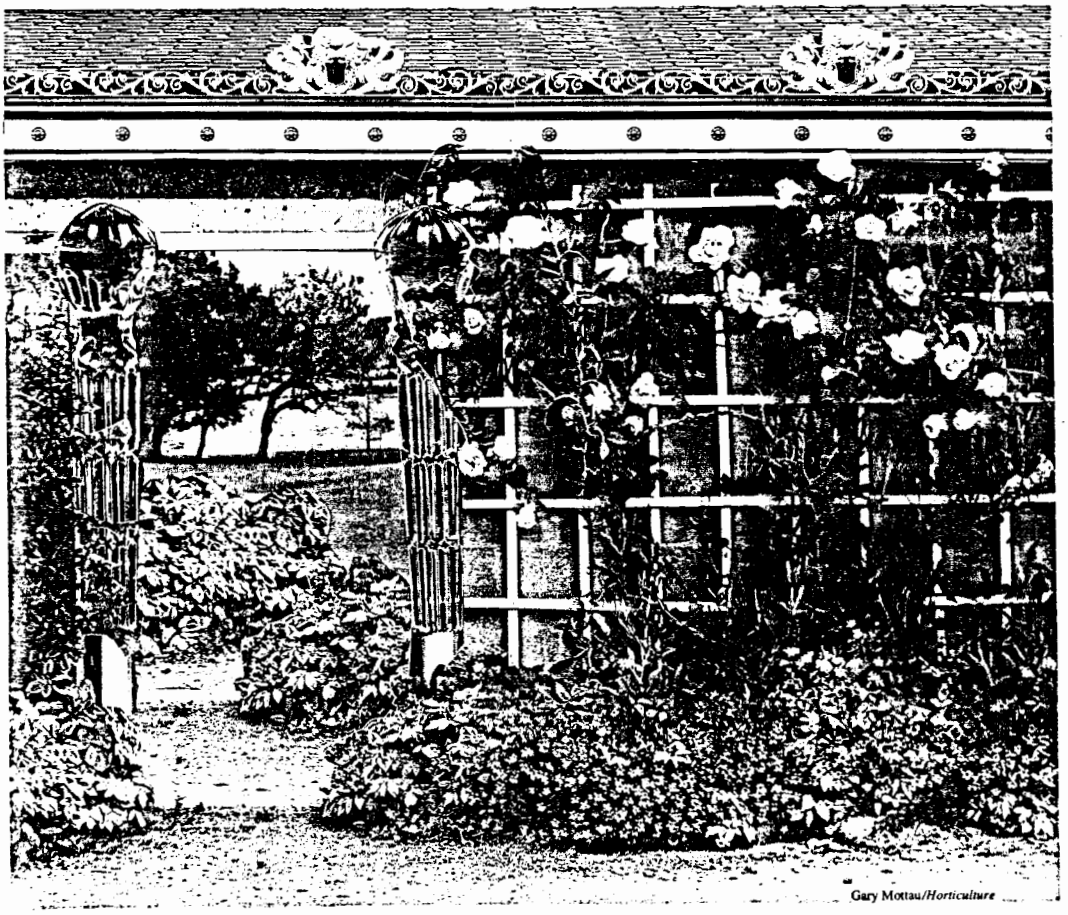
_____

Appendix C

Androgynous Character Storybook

by

Mara Loeb



Gary Mottau/*Horticulture*

Terry decided to take a short-cut to school today by walking through the City Park instead of going around it. At this time of day very few people would be in the park. Most grownups were busy doing, making, running things. Terry was walking, looking and thinking, and the park was Terry's favorite place to do all these things.

The park wasn't like any other place Terry ever went. At home you always knew what you would find, that's what made it so cozy. But in the park you could be anywhere, anything, anyone.

Near the gate grew many kinds of flowers. Different flowers bloomed at different times of the year and no two flowers were ever exactly alike. Today there were dandelion puffs for Terry to blow and send flying. They drifted higher and danced in the air. What would it be like, Terry wondered, to float like that, high above the ground, drifting with the breeze?

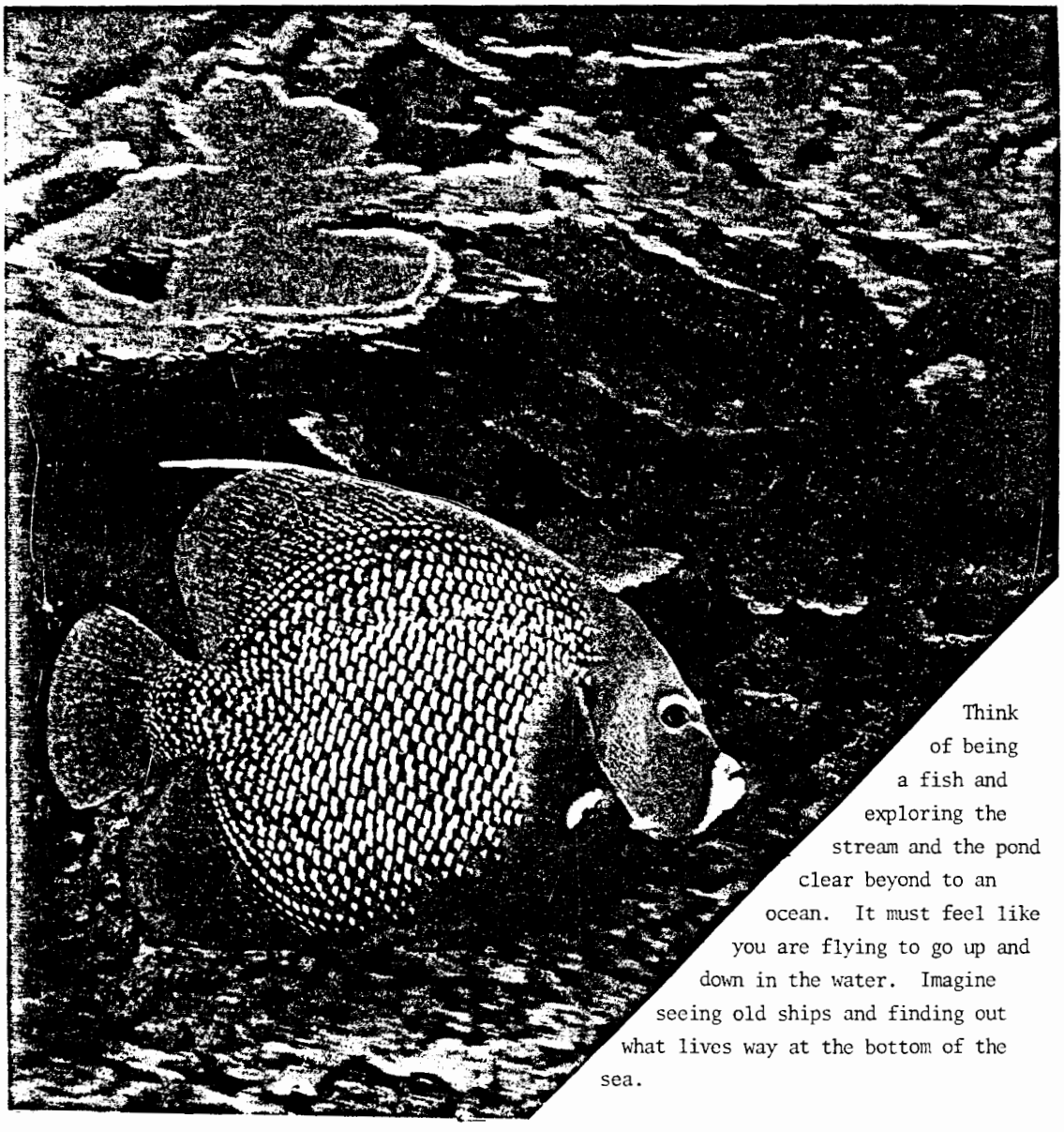
A butterfly fluttered over and landed on a bright flower. That would be better, thought Terry, if I was a butterfly I could fly where I wanted to and not have to wait for a breeze.

In a leap Terry was up and dancing across the park like a butterfly would dance if it had legs for dancing.

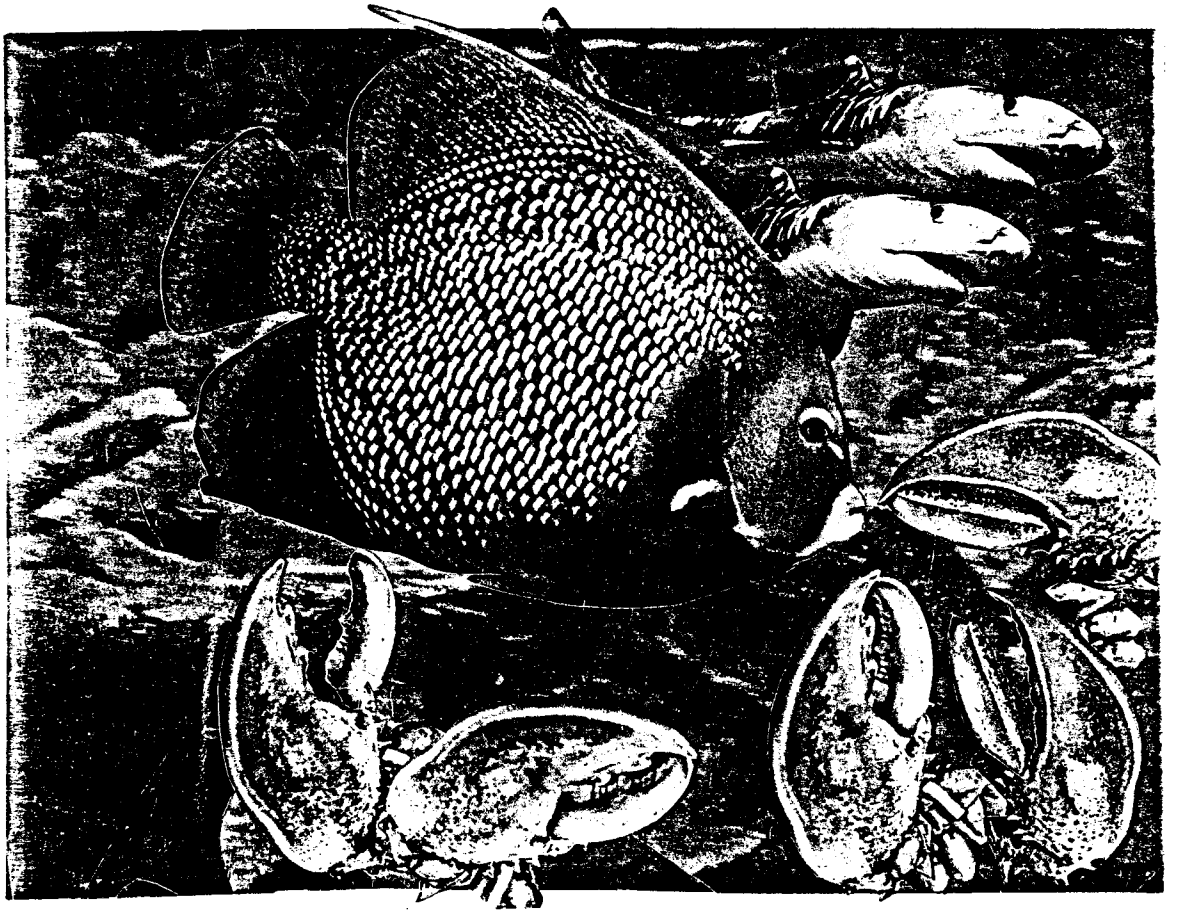
Around the bend came a chuckling, bubbling, laugh voice. The stream that ran through the park to the pond was just ahead.

By the path was Terry's favorite dreaming rock. Sitting on top of it you could pretend to be anywhere, anything, anyone.

Terry pretended to travel to a land where magic was real and the horses could trot across the water. Maybe it would be better to be in the water.

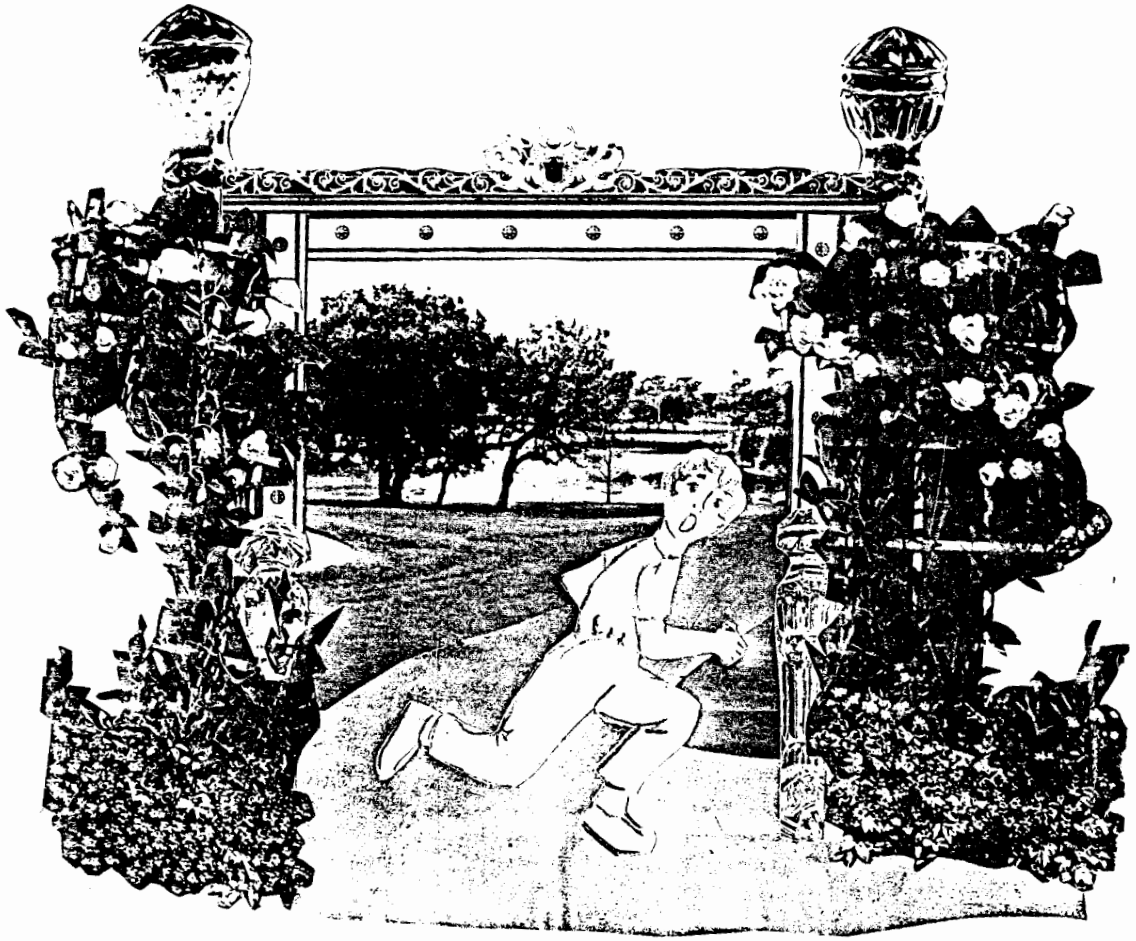


Think of being a fish and exploring the stream and the pond clear beyond to an ocean. It must feel like you are flying to go up and down in the water. Imagine seeing old ships and finding out what lives way at the bottom of the sea.



Maybe that wasn't the best place to be after all.

"Oh no!" yelped Terry, "The place I should be is in school!"



Down the path ran Terry, heels kicking high, hurrying to leave the park.

In a flash Terry was out of the park dome and into the school dome on the moon. "I wish all those exciting things would happen to me."

Appendix D

Response Tally Sheet

Subject Gender male female

Subject Age _____ months

Suggestion of similarity to character yes no

Gender assigned by child to character male female

Gender Awareness Questions	correct	incorrect
Gender Identity		
1. Is this a picture of a boy or a girl?		
2. Is this a picture of a girl or a boy?		
3. Is this a picture of a woman or a man?		
4. Is this a picture of a man or a woman?		
5. Are you a boy or a girl?		
Gender Stability		
6. When you were a little baby, were you a little girl or a little boy?		
7. Were you ever a (opposite of answer to 6)?		
8. When you grown up will you be a daddy or mommy?		
9. Could you ever be a (opposite of answer 8)?		
Gender Constancy		
10. If you wore (opposite sex) clothes, would you be a girl or a boy?		
11. If you played (opposite sex) games, would you be a boy or a girl?		
12. Could you be a (opposite sex) if you really wanted to be?		

Subjects Gender Awareness Stage

___Gender Identity
___Gender Stability
___Gender Constancy

Appendix E

Identification Pictures