CONSTRUCTING GENDER:

A STUDY OF THE DEVELOPMENT OF GENDER CONCEPTS

by

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ABSTRACT

This thesis is a consideration of the ways in which knowledge about gender and gender roles is created, justified, and maintained, both within individuals and society. It is argued that a non-traditional approach to the study of gender is needed, and that research in this area should no longer focus on a <u>product</u> - the produced reality of gender roles - but the <u>process</u> through which individuals create concepts of gender. Attention is drawn to the importance of social and historical influences on the construction of gender concepts.

The influence of social interests and the historical context on gender concepts was considered in a discussion of sex differences research in psychology from 1894 - 1981. Here, it was noted that views of the essential differences between women and men had changed dramatically in the time period cited, and it was suggested that psychological research both influenced and was influenced by prevailing popular opinion about the true natures of women and men.

In the empirical sections of the thesis, an attempt was made to describe young children's concepts of gender. It was my aim to discover and report what the children in my studies viewed as defining aspects of gender, and how they made use of that knowledge to construct ideas of what women and men are, and how women and men differ. The results of my preliminary studies of gender attribution and gender perception indicated that different defining aspects of gender seemed important to children at different ages.

To investigate this further, and to discover if gender concepts varied according to the age of the child, a study of the development of children's reasoning about gender roles was undertaken.

From these results, a model of the development of this reasoning was created, and then compared to other models of the development of children's social reasoning. In the process, assumptions about development made by other models were questioned; specifically, the assumptions that stages of development are universal, and that they express themselves in similar - that is, age related and sequential - ways in

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all individuals.

A concept of the child as 'theoretician' was then introduced, in conjunction with the proposed model of the development of children's reasoning about gender roles, and the concept was then also applied to theories about the development of gender identity.

In sum, the thesis delineates a non-traditional approach to the study of gender, and this approach is then applied in theoretical and practical contexts to raise questions about the construction of gender in everyday life.

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CHAPTER ONE: GENERATING GENDER

> Laws of nature are human _inventions_, like
> ghosts. Laws of logic, of mathematics, are
> also human inventions, like ghosts. The
> whole blessed thing is an invention, includ-
> ing the idea that it _isn't_ an invention.
>
> Pirsig, (1975)

This thesis is concerned with knowledge about gender
and gender roles; specifically, with the ways in which this
knowledge is created, justified, and maintained, both within
an individual and within a society. On a broad, societal
level, I will argue that popular, or 'commonsense' knowledge
about gender and gender roles often differs from what we
recognize as 'scientific fact,' although it is frequently
claimed that commonsense knowledge is based upon and mirrors
'scientific fact.' I will also argue that there exists an
interaction between commonsense knowledge and scientific re-
search such that commonsense reasoning has influenced the
interpretation of some research so that it has misleadingly
been used to support an author's particular point of view.
(see also Archer and Lloyd, 1982) Finally, moving to the in-
dividual level, I will consider the process through which
young children construct knowledge about gender roles.

The preceding paragraph reveals my theoretical stance,
and the assumptions I bring to this study. I assume that
reality is socially constructed. That is, although phenomena
do exist independent of our own volition, the way in which
we apprehend phenomena is inevitably coloured by the social,
biographical, and historical context in which we exist.
Thus, 'reality' emerges as a constructed relationship between

human beings and their environment, in the course of which both may be altered. 'Reality' will therefore be represented in different ways by different people, or groups of people.[1] Owing to this view, I have chosen to focus on individual and social conceptions of men and women, rather than trying to establish 'facts' about them. I will examine the generation of certain 'facts' about women and men, not the 'facts' themselves.

Terminology thus becomes very important. Following the lead of Kessler and McKenna (1978) and Archer and Lloyd (1982), I have elected to use the term gender when I refer to the psychological, social, and cultural aspects of maleness and femaleness, and sex when I refer to the biological aspects of males and females. In chapters two and four, the term 'sex differences' is used because it was used by the authors I cited - I would maintain, though, that in most cases, 'gender differences' more aptly describes the research discussed in those chapters.

Overall, then, the aim of this thesis is to examine the ways in which concepts of gender are legitimated within certain contexts. I will consider the ways in which our ideas about gender may come to be viewed as 'fact,' and transmitted as such. To refer back to the quotation which opened this chapter, and to translate those ideas into this context, what we will be studying is the process through which we invent concepts of gender, and the means by which we then try to persuade ourselves that our concepts are not inventions, but are real.

Social Selection and Concepts of Gender

It can hardly be disputed that sex and gender are important factors in our lives. Gender is often the first thing we notice about a person, consciously or unconsciously, and our ability to attribute gender is central to our interactions with others. Apparently gender must be attributed before any meaningful interaction can take place between people. (Kessler and McKenna, 1978)

We all carry with us general ideas about what women and men are, and how they differ. Notwithstanding the effects of the women's movement, commonsense beliefs about the nature of women and men tend to focus on two points, first, that women and men are essentially, or 'naturally' different, and second, that women are in some way inferior to men.[2] Very few people have tried to investigate how and why these beliefs arose, and came to be accepted as commonsense knowledge.[3] Although researchers have tried to prove or disprove those points, they are usually granted status as the starting point of a variety of investigations, and this has added to their appearance of truth.

When we turn to the question of how we invent concepts of gender, and the beliefs that women and men are essentially different, with women being inferior to men in some way, the easiest answer is that the existence of two sexes gives rise to concepts of gender; that biology in some way prescribes or influences the behaviours, traits, and abilities of women and men. It seems apparent that concepts of gender mirror established biological facts about the differences between women and men. This point has been contested, though, and several writers have argued the point

that the biological differences between women and men influence in a consistent and definite way, the social differences we observe. While a detailed discussion of this point is outside the scope of this thesis, I do look briefly at the contributions of biological knowledge to concepts of gender in chapter five. Let us leave the question of origins aside for the present, then, and go on to consider how traditional concepts of proper roles for men and women have been maintained.

Donald Campbell (1965, 1975) suggested a model of blind variation and selective retention of roles, ideas, or social practices which may help to account for the stubborn persistence of gender stereotypes. His model assumed that differing ideas about proper social organization have always existed, and that the ideas which have survived have (or had) some functional value. He argued that the surviving ideas, practices, etc. have made adaptive sense. In dealing with ideas about gender, this appears to be a viable proposal. Variations in assignment of roles to women and men have always existed, both within cultures (see chapter two) and between cultures. (see Mead, 1950) Moreover, there is ample documentation that the concept that women are inferior to men is maintained because it has functional value for the dominant group.[4]

While the ideas or practices which survive may be functional for a particular group of people, though, those ideas or practices may not always be adaptive. Indeed, Campbell noted that social organizations tend to evolve in the direction of internal compatability, rather than increased

adaptiveness. This, of course, has important implications
for my study, in that it can help to explain why we retain
the concept that women are inferior to men, even though such
a belief may no longer make adaptive sense.

Campbell's suggestions may plausibly account for the
survival of certain gender stereotypes, in that their pre-
servation is in some way functional, and that they seem
to have persisted regardless of their lack of adaptive
value. If we look at the range of viable ideas about the
roles and potentials of women and men today, his suggestions
lead us to ask what function these ideas serve, and who
might they benefit? These questions will be taken up in
a later section, so let us move now to a discussion of how
these selected concepts of gender come to be treated as
fact. We will look now at the process through which we
invent the idea that we haven't invented the 'whole blessed
thing.'

The Legitimation of Concepts of Gender

In this section, we will look at two questions; first,
what is legitimation, and second, how does it work? Berger and
Luckmann's model of levels of legitimation (1966) will
be applied to various concepts of gender, to illustrate
the ways in which these concepts came to be regarded as
objective, irrefutable facts.

Berger and Luckmann note that "legitimation produces new mean-
ings that serve to integrate the meanings already attached
to disparate institutional processes...integration is the
typical purpose motivating the legitimation." (p. 110)

Broadly speaking, the legitimation process makes social practices meaningful, and places the individual within a specific social order. It complements and extends one's identity on individual as well as institutional levels, and 'tells' group members who they are, what the appropriate actions for each individual are across a broad range of situations, and most importantly, explains why things are as they are. Spoken of in the abstract, it is difficult to see how legitimation functions in everyday life, but if one uses as an example concepts of gender, the process becomes much clearer.

Level 1: This is what is known as incipient legitimation and it is present as soon as linguistic objectifications of human experience are transmitted. At the same time as the child is learning the categories girl and boy, s/he will be learning that the two are different; that some actions are 'girl actions,' and some actions are 'boy actions,' and that such a division is proper. The child is presented with concepts of the way things are, and ought to be, and although these concepts may later be altered, they play an important part in the young child's construction of reality.

Level 2: This level of legitimation moves from the pre-theoretical explanations of incipient legitimation to a stage where explanations are theoretical propositions in rudimentary form. Integration of different sets of objective meanings begins to take place at this level, and the explanatory schemes here are highly pragmatic, and directly

related to concrete actions. One might call the legitima-
tions of this level 'folk wisdom,' as displayed through
proverbs, moral maxims, and the like. Legitimations of
this type go one step further in setting up and justifying
the gender dichotomy under consideration by the young
child. At this point, different roles may be justified as
follows: 'A woman's place is in the home,' 'A man may work
from sun to sun, but a woman's work is never done,' 'The
hand that rocks the cradle rules the world.' For the man's
roles, one recalls what little boys are made of - 'snips
and snails and puppy dogs' tails'- and the familiar images
of men in mythology come to mind as well. Man is the ex-
plorer, the conqueror, who may be hungry as a bear, or
strong as an ox - the list goes on and on. Significantly,
it is rare to find a man referred to as 'gentle as a lamb,'
or find maxims that place him second in importance to a
woman. For although it falls to the woman to 'rock the
cradle,' it is the man who must work from 'sun to sun,' at
the more important duties of provider and protector. At
this level of legitimation, the woman's participation in
affairs outside the home can only be vicarious - being
confined to the home, she asserts her powers only through
those she has nurtured.

Level 3: Legitimations of this type are again more
sophisticated than those preceding it, and it is at this
level that legitimations begin to move into the realms
of pure theory. This level contains "explicit theories...
which provide fairly comprehensive frames of reference
for...sectors of institutionalized conduct." (Berger and Luckmann,
p. 112)

As they point out, the complex sophisticated nature of these theories requires that they be entrusted to 'experts' who will transmit them through more formal channels. Thus in primitive societies one finds important and highly complex initiation rites for both women and men, in which the wisdom of the ages is transmitted, and segregated social roles are placed in a broader context. The differences in roles exhibited on a day-to-day basis are 'grounded' in myth or legend, and the ultimate correctness of such differences is established.

In present day Western society, examples of level 3 legitimations which specify specific institutional sectors are easy to find. In the economic sector, one may isolate particular theories of the division of labour where women are assigned the less powerful roles, and a large part of feminist argument centers on the discriminatory practices of the capitalist system. (see Greer, 1971) Religious and philosophical thought is full of the belief that women are in some way inferior to men, and are a 'spare rib' as far as socio-cultural progress is concerned. The Bible contains passages which state that women are to be subject to their husbands, and that the female is the weaker vessel, and the images of women in some philosophical work are no better.

The examples here are drawn from Nietszche's Beyond Good and Evil. "Comparing man and woman in general one may say: woman would not have the genius for finery if she did not have the instinct for the secondary role," he

wrote, along with "science offends the modesty of all genuine women. They feel as if one were trying to look under their skin or worse! under their clothes and finery." Hardly a complimentary assessment of the feminine character! Finally, standard psychoanalytic theory contains legitimations of the concept that women are inferior to men. These contributions will be assessed in chapter 2. We note that at this level, as well, the more important roles in society are given to men.

Level 4: Legitimations of this type are purely theoretical, and it is here that 'symbolic universes' are created. This symbolic universe has been described as a body of theoretical tradition which integrates different provinces of meaning and encompasses the institutional order in a symbolic totality. (Berger and Luckmann, p. 113) As such, a symbolic universe 'puts everything in its right place,' and 'orders and legitimates everyday roles, priorities, and operating procedures.' Seen in this light, concepts of gender do function as a symbolic universe, in that they do provide a social order, and do legitimate everyday roles, etc. Concepts of gender have another characteristic in common with a symbolic universe - they are self-maintaining, and pervade individual thought so that one may restructure his/her impressions of people to conform to traditional notions of maleness and femaleness, rather than restructuring those concepts in accord with one's experience. The symbolic universe of gender seems to rest on the notion that women and men are biologically - naturally - different, and that these sex differences necessarily imply gender differences.

The 'fact' that two sorts of persons exist serves as a legitimation for all sorts of social prescriptions, and has implications in all areas of our lives. This argument has some flaws, but this will be taken up in chapter five. We may see, though, how this model of these four types of legitimation helps to explain the reification of our concepts of gender and how those concepts come to be viewed as objective 'facts.' The model helps to explain how we invent the idea that our concepts of gender are based in fact.

I have, up to this point, tried to answer various 'how' questions - how are concepts of gender selected and maintained? How do these concepts come to be regarded as facts? These are, of course, important questions, but on their own, their answers are insufficient. It is necessary to ask the 'why' question as well, namely, why have concepts of gender been created, legitimated, and maintained?

The Role of Interests

The 'why' question necessarily arises when one considers the development of concepts of gender, and becomes aware that the particular concept that women and men are essentially different, with its correlate that women are inferior to men, has been maintained in spite of evidence to the contrary.[5] Campbell's account offered us the hypothesis that these concepts must be functional, but this hypothesis did not really go far enough. I would like to suggest that certain concepts about the nature and abilities of women and

men are maintained because they serve certain social interests. Pickering (1980) has defined an interest as "a particular constructive cognitive orientation towards a field of discourse," and Barnes (1977) has demonstrated that the imputation of a social or cultural interest is one way to account for consistency of usage of a particular concept. While we cannot expect social interests to completely account for the maintenance of concepts of gender, the invocation of such interests is a device I find useful in approaching the 'why' question, and I hope to demonstrate its utility in chapter two.

Approaches to the Study of Gender

If, as I have suggested, we are to set aside our preoccupation with the discovery of the essential differences between women and men, and if we can take time off from the battle to prove that women are, or are not, inferior to men in some way, what other avenues of research open? If we do shift the focus of research from a study of a produced reality - e.g., gender roles - to a study of the ways in which that reality is produced, what sort of questions could be posed? How might we approach the study of gender in a non-traditional manner? In partial response to those questions, two recent works will be briefly examined as illustrations of alternative approaches to the study of gender.

First to be considered is Nancy Chodorow's 1978 book, The Reproduction of Mothering. Chodorow's central thesis was

that "the contemporary reproduction of mothering occurs
through socially structured psychological processes," (p.7)
and she argued that women's mothering plays a critical role
in the social organization and maintenance of concepts of
gender. Citing the work of Rubin (1975), Chodorow accepted
that the body of knowledge relating to gender in our society
might be labelled a 'gender system,' and that this system
played a major part in the organization of our society. She
thus made it her task to detail the ways in which women's
mothering played a role in the reproduction of the gender
system. Chodorow's account focussed on psychoanalytic views
of development, and she presented psychoanalytic theory as a
theory of the reproduction of sex, gender, and family or-
ganization. Her work raised new questions about a role we
tend to take for granted as 'natural,' and Chodorow made im-
portant contributions to an alternative study of gender.

Kessler and McKenna (1978) took an ethnomethodological
approach to the study of gender. They believed that reality
(any reality, for the ethnomethodologist would not argue
that one 'true reality' exists) was created and maintained
through the systematic interaction of its participants; that
is, in any given situation, a sense of objective facts
would be created which transcended the situation in which it
was produced. Thus, Kessler and McKenna asked, "how, in
any interaction, is a sense of the reality of two, and only
two, genders constructed?" (p.5) They turned their atten-
tion to an examination of the process of gender attribution -
the process through which one person decides if another per-

son is male or female. By asking how we construct gender in everyday life, they suggested many paths for future research, and their approach to the study of gender raised questions about the role of gender in everyday life.

Alternative approaches to the study of gender such as these can be quite valuable. Such approaches force us to question our existing ideas about sex and gender, and the way in which we have structured our society. Chodorow, Kessler, and McKenna have indicated that there is much to be gained if we shift the aim of our research away from a quest for universal laws of behaviour, and toward the goal of achieving a clearer understanding of the ways in which we create ourselves and our society. (see Shotter, 1975)

Implications of an Alternative Approach

The theoretical stance I have adopted carries implications for the aims of my research. This 'sociology of knowledge' approach has incurred a shift from the study of gender roles themselves, to a study of the process through which gender roles are created, justified, and maintained within individuals. I elected to study young children, as I believed that their comments about gender and gender roles would yield a wider range of information about the development of concepts of gender than those of older children and adults. This is not to imply that once formed, concepts of gender remain fixed - on the contrary, I would argue that as individual or social constructions, our opinions and ideas of what facts are will always undergo change and

development throughout our lives. My decision to study
children was based on my belief that concepts of gender
would be more variable in children than in adults, and that
children might be more likely than adults to give me their
own opinions rather than a recital of currently popular
'liberated' ideas about the nature and abilities of women
and men.

In line with my theoretical assumptions, then, and my
'product to process' shift, the aims of my research are:
1) to describe the children's thinking about gender roles
as fully, and as faithfully as possible. 2) Following this,
I hope to be able to display the grounds which make their
perceptions viable; that is, I wish to display the assump-
tions which underlie their thinking about gender roles. In
so doing, I have adopted the perspective of McHugh, et al.,
(1974) who maintain that "analysis is the concern not with
anything said or written, but with the grounds of whatever
is said - the foundations that make what is said possible,
sensible, conceivable." (p.2)

Given my aims, some reorganization of, and re-orien-
tation to method will have to occur. The techniques I have
chosen in my studies have been used to describe and display
aspects of the children's thinking about gender roles. As
indicated earlier, my goal is to gain an appreciation of the
children's thoughts; to describe their world as faithfully
as I can. Thus, no attempt has been made to quantify my
findings in the hope of proposing a universal model of reas-
oning. To do so, I feel, would contradict my belief that
we construct, rather than discover, 'truth.' As such, I
have elected not to use statistical means to 'objectively

verify' my results. [6]

Using and Being Used by Models

Following a discussion of method, another question
which must be raised concerns my creation of a model of chil-
dren's thinking in chapter 4. As I cannot claim to be unaf-
fected by my own interests in the topic of gender, and as
I have disclaimed a belief in universal truths, how can
this be reconciled with the construction of a model of chil-
dren's thinking? Doesn't the construction of a model pre-
suppose a belief in its generalizability? If children's
thinking is influenced by the social, biographical, and his-
torical context in which they exist, how can one model ac-
count for all the variations which will occur?

Damon (1977) has addressed this problem in a succinct
way. He has characterized the assumptions of developmental
theorists such as Piaget and Kohlberg as follows. Many de-
velopmental theories assume that an individual's behaviour
changes as she/he grows older. Beyond that, many theories
assume that the changes are age related, and will improve
the functioning of the individual. Restating these assump-
tions, Damon wrote that

> There exist primitive and advanced modes of behav-
> ing in the world, that primitive modes tend to be
> replaced with advanced modes as a child grows
> older, and that the advanced modes tend to work
> better than the primitive ones. (p.8)

'Working better' may be taken to mean a particular mode of
thought enables the individual to adapt more successfully
to the world around him or her.

The objections to this assumed distinction between primitive and advanced modes of thought have been voiced frequently, though perhaps most forcefully by Levi-Strauss. (1969) He objected to the universality of the models put forth by some developmental theorists, and pointed out that insofar as ways of thinking and the value attached to them were context dependent, it was a gross oversimplification to label some modes of thinking advanced and others primitive. He argued that different cultures developed different ways of adapting to their unique environments, and therefore that the differences which did exist could "best be conceptualized as distinct yet parallel modes of dealing with the world in general."

I accept Levi-Strauss' point, and have tried to incorporate it into my study by omitting any references to one level of reasoning 'working better' than another. I believe that different children have different means of coping with information, and my aim is to describe these levels of reasoning, not to rate them according to some scale of merit.

The other problem raised in Levi-Strauss' statement concerned the relativity of children's thought structures, and whether this undermined any comparisons one might draw among them. Similarly, this poses problems for the construction of a model of children's thinking. Damon attempted to deal with this very important point by claiming that although comparisons between cultures were 'inherently value-laden and ethnocentric,' developmental comparisons between children of different ages could be accomplished 'precisely

and objectively.' Needless to say, this seems to me to be an unacceptable halfway measure. What is needed, is a re-orientation to model making, or toward the whole issue of particulars and universals, as Markova (1982) suggested. In my work, I have looked for universals in the sense that Markova used them; I have looked for common features in the children's reasoning to be expressed in an individual child in a particular and unrepeatable way. My model was drafted to account for similarities in the children's thought pro-cesses, and was not meant to be used as a rating scale. Thus, I have chosen not to draw cross-cultural comparisons between the children in my study. Of course the individual environ-ment of each child influences his/her reasoning, but this is outside the scope of the present research.

We see, then, that the adoption of a relativist point of view does not rule out the construction of a model. On the contrary, I would suggest that as we may never know the 'truth' about the processes we try to model, the models we create will be all we have in our search to understand the workings of the human mind. A proviso must be attached, however - it is important to bear in mind that this model, this construction of reality, should never be approached as if it were reality. In short, the purpose of the model is not to create the thing modelled, but to describe it.

Turbayne (1971) has drawn a useful distinction between using a model and being used by a model. He notes that the use of a model adds nothing to the actual process, while being used by a model involves the addition of features that

are products of speculation or invention instead of discovery.
While I would agree with Turbayne in that it is important
not to be used by a model, I cannot endorse his implicit
assumption that there is always a 'truth' which researchers
'discover.' I can't accept his assumption that there is
one true reality which our models strive to approximate.
Our models, in that they are developed within particular
contexts by particular individuals with interests of their
own, are necessarily the products of speculation and inven-
tion, but that doesn't mean that we must be used by them.
Instead, I would offer that we use a model insofar as we
faithfully adhere to the context and spirit of the process
which we try to model. Thus, we are used by a model if we
try to claim that it is universally applicable, and docu-
ments a process that will be manifested in a similar way in
individuals regardless of their environment.

Finally, the question of flexibility of my model must
be addressed. It seems that the best way to illustrate the
flexibility of my model of the development of gender identity
is to contrast it with other models of that process. Kessler
and McKenna (1978) have developed a good shorthand means of
representing various models of the development of gender
identity, and their characterization of Freudian, social-learn-
ing, and cognitive-developmental models is presented here.
(A fuller description may be found in chapter 4 of their
book.) My model - presented in a similar shorthand - fol-
lows theirs, and will be further developed in chapter four.

Briefly, the problems of the following models are as

COMPARISON OF MODELS OF
THE DEVELOPMENT OF GENDER IDENTITY IN CHILDREN

FREUDIAN:

OWN AWARENESS OF GENITALS (implicit gender identity) ——→ FANTASY ——→ IDENTIFICATION ——→ GENDER ROLES

SOCIAL LEARNING:

OTHERS' AWARENESS OF GENITALS ——→ DIFFERENTIAL REINFORCEMENT ——→ IDENTIFICATION → GENDER IDENTITY
——→ GENDER ROLE

COGNITIVE DEVELOPMENTAL:

OTHERS' AWARENESS OF GENITALS ——→ LABELLING ——→ GENDER IDENTITY ——→ GENDER ROLE ——→ IDENTIFICATION

ALTERNATIVE:

OTHERS' AWARENESS OF GENITALS AS DICHOTOMIZING FEATURE ——→ LABELLING BY OTHERS OF CHILD AS MALE OR FEMALE ——→ SELF-LABELLING BY CHILD; PLAYFUL REFLECTION OF CONCEPTS OF GENDER

CHILD'S COGNIZANCE OF SOCIAL CONCEPTIONS OF GENDER; AWARENESS OF GENITALS AS DICHOTOMIZING FEATURE; SELF IDENTIFICATION IN ACCORD WITH SUCH KNOWLEDGE; STABLE GENDER IDENTITY ——→ DISSATISFACTION WITH POPULAR CONCEPTS; RESELECTION OF GENDER ROLES IN ACCORD WITH INDIVIDUAL PREFERENCE ——→ DEVELOPMENT OF CONCEPT OF SELF AS PERSON; REDEFINITION OF CONCEPTS OF MASCULINITY AND FEMININITY WITH RESPECT TO THIS; CONTINUED RESELECTION OF GENDER ROLES TO SUIT THE INDIVIDUAL

follows. <u>Freudian</u> - (As Freud didn't propose a model per se of the development of gender identity, the one presented here has been derived from a consideration of his theories of development.) Among other things, this model does not allow for individual differences in the construction of reality. Freud assumed that this model was universal, and that the processes he isolated were meaningful to children. Moreover, this model cannot account for two important points, as Kessler and McKenna have noted. 1) How do children learn to see genitals as a feature by which they categorize themselves and others? 2) How could this model account for those children that develop female gender identities, even though they have penises? (pp.85-6)

<u>Social learning</u> - This model carries similar assumptions to the Freudian model, namely, that its proponents do not allow for the individual's construction of reality, and assume the model to be universal. Social learning theory isn't concerned with the way in which children interpret the world around them, and as evidence will show, these interpretations play a major role in the development of gender identity.

<u>Cognitive-developmental</u> - Again, this model carries with it assumptions of universality, but it is more acceptable than the other two, in that it does allow for children's participation in the construction of their worlds. The main drawbacks of this model are first that the development of sex-role concepts is tied to physiology - an assertion which later research would call into question. Second, this model

takes no account of the fact that self-socialisation can occur before the terms male and female are important to a child. That is, a child may perform 'male' or 'female' activities before it perceives itself as male or female. Finally, the degree of emphasis placed on the importance of gender roles to gender identity may be questioned. These questions will all be addressed in more detail in chapter 4.

Alternative model - This model recognizes the individual's own process of constructing a self, in conjunction with environmental influences in a broad sense. The child comes to learn the meaning of the terms male and female through a period of playful experimentation after which the child may select traits, behaviours, or roles in accordance with his/ her own individual preference. It also takes aspects of the previous three models and reworks them into an alternative description of the development of gender identity. Finally, the model has been created with a redefinition of the term 'universal' in mind, as indicated earlier. Rather than describing a process that will be similarly manifested by all children, this model is universal in the sense that it describes a process which may be manifested in different ways by different individuals. In this way, it can allow for more individual variation than the other three models proposed.

Conclusions - A Revised Approach to the Study of Gender Roles

The sociology of knowledge approach, in combination with an awareness of the influences of social interests does not have to prevent one from carrying on with psychological re-

search. On the contrary, this alternative approach suggests many new fields of endeavor for psychologists. As noted before, we still need to understand how, within specific contexts, we create the 'facts' which we then use to construct our lives. Markova's suggestion that we "reconceptualize social psychological phenomena with respect to change and development" has important implications for a study of gender, as I began to indicate in the previous section. Likewise, McHugh et. al's suggestion that we view research as a process of explicating the assumptions on which everyday knowledge rests can be applied to a study of gender. The aforementioned works of Chodorow and Kessler and McKenna have also indicated new areas of research.

It is hoped that the approach taken in this thesis will contribute to our understanding of concepts of gender. By combining some of the suggestions for research outlined in this chapter, I hope to raise some useful questions about the way in which we construct knowledge about gender, and in attempting to answer those questions, I hope the utility of my approach will become apparent.

The overall plan of the thesis is as follows: In chapter 1, I have attempted to display my theoretical background and explain my approach to the study of gender. In chapter 2, I will look at the generation of psychological knowledge about the essential differences between women and men, and the way in which this knowledge reflects and has been influenced by the social and cultural interests of a particular period.

In chapter 3, we break from these theoretical discussions, and begin to examine the ways in which gender is constructed in everyday life. In this chapter, gender attribution is the focus. Chapter 4 narrows the field of investigation to gender roles. Here my aim is to examine children's justifications of the roles they deem appropriate for women and men. Stages in the development of reasoning are suggested, and a model of the development of gender identity is proposed. In chapter 5, general conclusions are drawn, and the utility of this approach is assessed. The influence of biology on concepts of gender is considered. Finally, we take a look ahead, at possibilities for change.

CHAPTER TWO: SEX DIFFERENCES: ESSENTIALS OR IDIOSYNCRACIES?

In the preceding chapter, I discussed my theoretical orientation and approach to psychological research, and looked at some of the practical implications of this shift in focus from 'product' to 'process.' I would now like to begin to use this alternative approach to research to look at some of the ways in which we have created currently popular beliefs about the true nature of women and men, and the essential differences between them.

This question, 'what are the essential differences between women and men,' sometimes surfacing as 'does being female or male predispose one to certain behaviours from birth' has held a particular fascination for psychologists, and they have sought the answer in a variety of ways. In this chapter, I will begin to trace the history of sex differences research in psychology, examining different approaches to this topic, and looking at the ways in which research findings both influenced, and were influenced by, popular conceptions of the essential differences between men and women.

While the idea that women and men are essentially different has consistently surfaced and re-surfaced within our society, it is interesting to note that concepts of exactly what these 'essential differences' are have not remained static. These concepts have changed over time, as has the degree of importance attached to them. Accordingly, the social roles deemed appropriate for women and men have varied with respect to popular views of the sex differences which

were assumed to prescribe, or at least heavily influence,
those roles. For example, as Adam (1975) noted,

> a woman born at the turn of the century could
> have lived through two periods when it was her
> moral duty to devote herself, obsessively, to
> her children; three when it was her duty to so-
> ciety to neglect them; two when it was right
> to be seductively feminine and three when it
> was a pressing social obligation to be the re-
> verse; three periods in which she was a bad
> wife, mother, and citizen for wanting to go out
> and earn her own living, and three others when
> she was an even worse wife, mother, and citizen
> for not being eager to do so. (pp.212-13)

I will focus on these changing views of the essential
differences between women and men, and the relationship
between conceptions of those differences and the social
and historical period in which they arose. In this analy-
sis, I am assuming first of all that certain types of
knowledge will be seen as more reliable than others -
that is, knowledge which is believed to proceed from ex-
pert sources will always be viewed with more respect than
that of the layman. In this analysis, I consider psycholo-
gists to be 'experts.' Second, I am assuming that there
are tools and/or methods which may be used to create the
'expert knowledge.' These methods, along with the facts
their use is meant to discover, are subject to social and
historical currents, and their acceptability will vary
according to the scientific or academic ideals of a given
period.

In this chapter, I hope to draw the preceding points
together and display the connections among a particular
social and historical climate, the experts it recognizes,
the facts those experts generate, and the methods chosen

to validate those facts. Thus, my concern is not with a
product - the actual sex differences various psychologists
have tried to document - but with a process, the way in
which knowledge about sex differences has been created.
I will suggest first that social or cultural interests
exist which "inspire the construction of knowledge out of
available cultural resources in ways which are specific
to particular times and situations and their overall so-
cial and cultural contexts." (Barnes, 1977, p.58) Second,
I will suggest that those interests influence the general
reception of particular research findings and play a role
in defining future avenues and methods of psychological re-
search.

Without implying that 'expert' researchers are the
pawns of social or cultural interests, this analysis will
suggest that there exists a mutually constitutive relation-
ship between a given society and its acceptance of the know-
ledge generated by the experts it has created. As a final
note, this analysis deals primarily with the middle class -
with that section of the population of some wealth and edu-
cation who were most likely to be influenced by expert
opinion. As such, some of the assertions I will make will
not apply to the lower classes, where different sorts of
role stereotyping could be evidenced.

The Early 1900's: Havelock Ellis

One of the first and most important books to appear
on the subject of sex differences was Havelock Ellis' Man

and Woman. The book was published in 1894, in a time which saw a temporary waning of earlier feminist activity. A surge of interest in feminism in the 1860's and 1870's resulted in challenges to assumptions about men and women and their abilities, and their very natures were being questioned. Writing in 1869, John Stuart Mill noted:

> Neither does it avail anything to say that the nature of the two sexes adapts them to their present function and position, and renders these appropriate to them...I deny that anyone knows, or can know the nature of the two sexes, as long as they have only been seen in their present relation to one another...What is now called the nature of women is an eminently artificial thing-the result of forced repression in some directions, unnatural stimulation in others. (p.238)

Both in Britain and the United States the feminist movement was getting underway, and women were beginning to speak up for their rights. This initial burst of activity lasted roughly from the 1860's to the 1890's, and by the time Ellis was writing, the feminists, weary of continual defeat, had retired from the limelight to reassess their strategy.

Into this relative calm after the storm, then, did Ellis deliver Man and Woman. That he was affected by the debate over the true natures of women and men brought to light in the thirty years preceding publication of his book was evident in the statement of aims of Man and Woman.

> A leading aim in this book, he wrote, was the consideration of the question how far sex differences are artificial, the result of tradition and environment, and how far they are really rooted in the actual constitution of the male and female organisms. (1894, p.vii)

Ellis took a cautious, scholarly approach to the question,

fully realizing the difficulty of his task, and issued an

important proviso on his findings:

> Nearly all those sex differences which I have
> proposed to call tertiary are merely a matter
> of averages. In order to obtain reliable re-
> sults, not only must the investigation be ac-
> curately and uniformly carried out, it must
> extend to a very large number of individuals.
> By confining our observations to a small num-
> ber of individuals, we either reach results
> that are expected or unexpected; in the former
> case we accept them without question; in the
> latter case we suspect a fallacy and reject
> them. (pp.27-8)

The example Ellis cited in support of his point that social

factors and the researcher's own expectations often influ-

ence acceptance or rejection of findings, though lengthy,

is worth citing in full.

> Until quite recent times it has over and over
> again been stated by brain anatomists that the
> frontal region is relatively larger in men, the
> parietal in women. This conclusion is now begin-
> ning to be regarded as the reverse of the truth,
> but we have to recognise that it was inevitable.
> It was firmly believed that the frontal region
> is the seat of all the highest and most abstract
> intellectual processes, and if on examining a
> dozen or two brains, an anatomist found himself
> landed in the conclusion that the frontal region
> is relatively larger in women, the probability
> is that he would feel he had reached a conclusion
> that was absurd. It may, indeed, be said that it is
> only since it has become known that the frontal
> region of the brain is of greater relative extent
> in the Ape than it is in Man, and has no special
> connection with the higher intellectual processes,
> that it has become possible to recognise the fact
> that that region is relatively more extensive in
> women. (p.28)

In spite of his cautions, however, Ellis remained

bound by the most popular beliefs of his day, evidenced in

the following remark. "As long as women are unlike (men)

in their primary sexual characters and in reproductive func-

tion they can never be absolutely alike even in the highest

psychic processes." (p.17) Ellis could not move away from
the conviction that the true natures of man and woman were
inextricably linked with their bodies, and therefore men
and women were necessarily different in essential psycho-
logical aspects as well. Interestingly, he did not focus
on these psychological differences when writing up his
main conclusions, preferring to stick to the more biologi-
cal sex differences. In brief, Ellis felt that 1) fe-
males had a greater affectability than males - compensated
by greater disvulnerability; 2) females had less varia-
tional tendency, i.e., less aptitude to produce either
genius or degeneration; and 3) females, being closer to
"Nature" and closer to the infantile form than males, were
in some morphological respects, the most evolutionarily ad-
vanced form of the species. (Klein, 1946, pp.48-50)

In all his work, however, Ellis remained aware of the
"extreme susceptibility of all human traits under the influ-
ence of any external conditions," and noted that "under
varying conditions men and women are, within certain limits,
infinitely modifiable...a precise knowledge of the actual
facts forbids us to dogmatise rigidly concerning the re-
spective spheres of men and women." (p.441) So saying,
Ellis laid the groundwork for many future studies of sex
differences, and given the social climate of his time, could
be commended for not forcing his data into accepted form
and further supporting the myth of vast differences between
women and men. He did indeed fulfill his stated aim to
clear away the "thick undergrowth of prepossession and super-
stition which flourished in (this) region." (p.453)

1900 - 1927: The Experimental Approach

After 1900, revived feminist activity again called
into question the true natures of man and woman. The cam-
paign for woman suffrage was in full swing, and women were
again loudly proclaiming themselves the equals of men. Thus,
it was again important to try to determine the true nature
of the differences between men and women, though by this
time the method of investigation had changed. The observa-
tional, documentary approach taken by Ellis was no longer
in vogue; psychologists were anxious to accumulate hard
facts about sex differences and were placing their faith in
the experimental method. The prevailing sentiment seemed
to be that tests conducted under properly controlled labora-
tory conditions would yield definitive results about the
essential differences between men and women, and many psy-
chologists working in the period between 1900 and 1930 were
primarily concerned with the application of their experi-
mental methods to the investigation of sex differences.
Some psychologists investigated sex differences in mental
traits, some looked at differences in physical capabilities
and performance, while others looked at differences in the
performance of certain motor tasks. The results of three
psychologists representative of this time period will be
discussed.

In 1903, Helen Thompson conducted a study of fifty
men and women at the University of Chicago, which formed the
basis of her book, The Mental Traits of Sex. Admittedly,
her subject group was small and not representative of the

general population, but her work was the first of its kind and spawned a number of similar studies. Generally speaking, she concluded

> The point to be emphasized as the outcome of our present study is that, according to our present light, the psychological differences of sex seem to be largely due, not to difference of average capacity, nor to difference in type of mental activity, but to differences in the social influences brought to bear on the developing individual from early infancy to adult years. The question of future development of the intellectual life of women is one of the social necessities and ideals, rather than of the inborn psychological characteristics of either sex. (1903, p.10)

The idea that social environment played a large role in the development of sex differences was echoed by J. B. Watson in 1919. "We do not have common social education for boys and girls," he stated,

> almost immediately the girl is swept into one system and the boy into another - from infancy they are differentiated in their dress, their general activity and the things that they are allowed to play with. Until the sexes are brought up side by side and under exactly the same conditions, no reliable conclusions in this division of the problem can be obtained. (Watson, 1919, p.382)

As Thompson did before him, after stating his position, Watson went on to catalogue the differences between women and men that had been observed up to his time. He cited physical differences, that women had a smaller stature and less physical strength than men, and noted that this could make some difference in the possibility of certain motor acquisitions. In lab tests, women were found to excel "In such recondite activities as color naming, cancellation tests, spelling, and the acquisition of languages." (p.383) Men, on the other hand, were said to excel in reaction time,

and speed and accuracy of movement. Finally, regarding life
achievements, Watson was inclined to think that social bar-
riers played a larger role in limiting women's accomplish-
ments than did a lack of ability. The question still re-
mained, however, if men and women were more or less equal
in ability, and if social limitations could be lessened or
removed, would we then see equal numbers of women and men
playing equivalent roles in society? For Watson, the answer
remained no, for as he saw the issue,

> the fundamental fact is that attractive women do
> not have to compete in vocational life, and nearly .
> every woman has at least one man who passes a
> favorable judgement upon her. Hence, when business
> difficulties arise, when hard training periods
> face them, many women choose the seemingly easier
> road and allow some man to earn the bread for
> two. Having once accepted the sheltered position,
> there is again neither the incentive nor the op-
> portunity to achieve in the field men achieve in. (p.384)

Thus, the sex differences debate raged on, though the
questions were framed in somewhat different ways by dif-
ferent researchers. In 1927, A. T. Poffenberger took up
the gauntlet, asking "Does being male or female imply the
possession of certain original characters which make one or
the other incapable of certain kinds of useful activity?"
(p.120) His main area of interest was the influence of sex
upon efficiency, and, as others had before him, he found
no significant sex differences in performance on laboratory
tests. Moreover, he joined with J. B. Watson in endorsing
the work of Hollingworth (1914), whose studies of the influ-
ence of the menstrual cycle on women's efficiency failed to
show any rhythmic variation in ability or performance, thereby
refuting the older views as inapplicable to healthy women.

Poffenberger noted, too, that custom was a powerful factor in determining the proper sphere of the sexes, and observed that prevailing opinions were liable to be altered if and when circumstances surrounding their genesis altered.

In short, all of the psychologists of the 1900 - 1930's whose work has been examined here have tended to place more weight on the influence of social factors rather than innate ones regarding sex differences. Ellis, Thompson, Watson, and Poffenberger would agree that it was extremely difficult to reach hard and fast conclusions about 'essential differences' between women and men. All of them qualified the results they offered, and were careful to note that in many ways men and women were more similar than different. These psychologists, then, would agree with the principles of the following quotation, though perhaps not with its tone. This was Thorndike's characteristically blunt appraisal of the state of sex differences research:

> The most important characteristic of these (sex) differences is their small amount. The individual differences within one sex so enormously outweigh the differences between the sexes in these intellectual and semi-intellectual traits that for practical purposes the sex differences may be disregarded. So far as ability goes, there could hardly be a stupider way to get two groups, alike within each group but differing between the groups, than to take the two sexes...The psychologist's measurements lead to the conclusion that this equality of achievement comes from an equality of natural gifts, not from an overstraining of the lesser talents of women. (1915, p.345)

Freudian Theory as a Counter to the Experimental Approach

It is interesting that the findings of the experimentalists did not receive as much attention as did the concur-

rent work of Freud. We have seen that the time in which all these psychologists were working, 1894 to the 1930's, was a time when the sexual status quo was greatly upset, and one in which women were actively proving the assertions of the experimental psychologists. It no longer appeared a 'natural fact' that men were superior to women.

Faced with this social upheaval, then, I would argue that the last thing the conservative element in that society wanted to hear was that women and men were more similar than different. Judging from the course of events following World War I, it was a pressing concern to restore the old order, and sentiments such as those voiced by Thorndike would do nothing of the sort. On the contrary, what was needed was a theory that would define and accentuate the differences between women and men, and give new weight to the old propositions of the natural inequality of men and women. Thus, the way was clear for a theory of femininity such as Freud's, which seized upon the popular issues of the day. It spoke about sex, thus catering to those wrapped up in the 'sexual revolution' of the immediate post-war period; it delineated separate spheres of endeavor for women and men based on the natural, biological attributes of each, and though his work was a radical departure from accepted psychological method of the day, Freud retained the trappings of the professional, and the theories he produced were able to be assimilated into the cultural 'idea pool' as expert knowledge.

Though not the first to cite women's biological con-
stitution as the reason for her inferior social standing,
Freud was one of the first experts to systematically detail
the ways in which the anatomical distinction between the
sexes expressed itself in psychical consequences. If one
accepted the basic premise that anatomy is destiny, Freud's
arguments provided ample justification for keeping women
in the home. Woman was, by her very nature, hostile to
cultural achievements.

> Women represent the interests of the family and
> sexual life; the work of civilization has become
> more and more men's business...Woman finds her-
> self thus forced into the background by the claims
> of culture, and she adopts an inimical attitude
> toward it. (from Klein, 1946, p.78)

To Freud, everything about the female justified her secon-
dary position in society. As little girls, they were "as
a rule less aggressive, defiant and self-sufficient...they
(had) a greater need for being shown affection and on that
account (were) more dependent and pliant." (Freud, 1933, p.117)
Throughout her development, the female was never likely to
be as well-adjusted as the male, and as a woman, the char-
acteristic mental traits associated with her constitutional
structure were:

> penis envy, resulting in a general disposition
> to envy, jealousy, and social injustice; a greater
> amount of narcissism as compared with men; a weaker
> urge and smaller capacity for sublimation, i.e.,
> cultural activities. To this may be added a gen-
> eral antagonism to civilization, caused not so
> much by woman's physiological structure as by the
> biological purpose she represents. (from Klein,
> 1946, p.78)

Small wonder, then, that women were barred from the more re-
sponsible positions. It would hardly be sensible to trust

an'envious, hysterical person with limited intellectual interests and a hostile attitude toward culture' to diagnose an illness, manage a factory, preside over a court case, or represent someone in government. The wonder of it was that women were still trusted with the care and upbringing of children.

Thus, the Freudian theory of sex differences can be seen to serve a distinct purpose in the society which spawned it. His theories were the work of a socially recognized expert, and benefitted from the corona of truth and objectivity a scientific method of inquiry was thought to bestow upon information. That his theory seemed to proceed from 'natural' differences between women and men only helped facilitate its acceptance in scientific and academic communities. More importantly, though, as Freudian thought filtered down into everyday knowledge, persons so inclined could once again claim it was a fact that women were 'naturally' inferior to men. Clearly, social interests mediated against the acceptance of research which claimed men and women were generally more similar than different. It was a time when differences needed to be stressed, and Freud's theory was an extremely useful means of perpetuating the 'superstitions' about women and men at that particular time.

The 1930's: Experimentalism Returns

Coming out of the late '20's and early '30's, then, was a new formulation of the proper social roles for women and men - or rather, a new justification of traditional roles.

A new method of investigation - clinical case study - had been introduced, and quickly gained popularity within and without the discipline, to the extent that it succeeded in pushing out conflicting findings about the differences between men and women put forward by the experimental psychologists. In the 1930's, however, this began to change slightly. Within psychology, there was a movement toward the use of quantitative methods, toward the search for hard facts. It could be that this trend was a response to the 'soft' methods of the clinicians, or perhaps a response to large scale industrialization occurring at the time, when the need to deal with mass phenomena put a premium on the quantitative approach. (Klein, 1946, p.104) With regard to sex differences, then, researchers such as Terman and Miles were trying to establish "a reliable scientific measure, arrived at by experimental investigation, of the masculine - feminine types, i.e., of whatever differences may in fact exist in present day Western civilization." (from Klein, 1946, p.105)

Let us step outside psychology for a brief time, however, and look at the broader historical context in which this shift toward the quantitative methods was taking place. Although British and American women gained several important rights during the first World War, and were granted the vote in the 1920's, many people were still loathe to concede that women and men should be social equals. With the advent of the Depression, many resentments which grew from unemployment and a generally poor standard of living were chan-

nelled toward women. As is usual in times of economic crisis, women were urged to step aside and leave their jobs for men - and indeed many women did return home during this period. On the whole, though, the situation remained such that it was easier for women to find work than men. This was threatening to men, even if the family's survival depended on the woman's wages. For, in a culture in which the man's position and authority both within and without the home rested upon his employment and economic support of his family, he was now stripped of that position and authority. This brought repercussions on many levels, and led to a generally conservative trend in all areas of social life. Psychologists were not immune to this trend, and in their conservatism, began to respond to questions they considered important with more 'scientific' methods of inquiry.

Terman and Miles' work, Sex and Personality (1936) blended into this background easily enough. They began with the assumption that "masculine and feminine types are a reality in all our highly developed cultures...although there is much difference of opinion as to the differentiae which mark them off and as to the extent to which overlapping of types occurs." (p.1) Their work contained the standard proviso on sex differences research, and was noted in that they acknowledged that "the belief in the actuality of M-F types remains unshaken by the fact, abundantly attested, that observers do not agree in regard to the multitudinous attributes which are supposed to differentiate them." (p.2) This did not deter them, however, for "although practically every attribute alleged to be characteristic of a given sex

has been questioned...the composite pictures yielded by majority opinion stand out with considerable clearness." (p.2) Their aim was to define this 'majority opinion' as clearly as possible. As they put it, "it is highly desirable that our concepts of the M-F types existing in our present culture be made more definite and be given a more factual basis. Alleged differences between the sexes must give place to experimentally established differences." (p.3) Thus, armed with the most popular tool their discipline had on offer at the time, Terman and Miles set out to determine, more accurately than was possible by observation or clinical methods, the range and overlap of the sexes.

They began by justifying their method, and by assuring the reader of the reliability and validity of their instrument. They referred to past work on sex differences, noting that their work offered no radical departure from the methods of their predecessors, but differed in one important aspect. The work of Terman and Miles represented

> a more systematic attempt to sample sex differences in a large variety of fields in which such differences were empirically demonstrable...The test was based, not upon some theory as to how the sexes may differ, but upon experimental findings as to how they do differ, at least in the present historical period...(p.7)

By adopting this strategy, Terman and Miles hoped to stay away from the raging controversy over the cause of those differences. By stating as clearly as possible the differences that did exist, they hoped to provide some sort of yardstick against which the influence of 'numerous physical, social, and psychological factors' affecting a given

subject's rating could be assessed. In this way, then, they planned to refrain from making any value judgements about the differences; Terman and Miles hoped to present a picture of what was, without any reference to what ought to be, or why.

This stated, the areas in which men and women were found to differ were as follows: in preferences for particular kinds of games, colors, books, school subjects, occupations, and ideals. They differed in the manifest degree of dominance, inferiority feeling, conservatism, and emotional stability. Men seemed to have a more distinctive interest in exploits, adventure, outdoor and physically strenuous activity, in machinery and tools, in science, physical phenomenon and inventions. Women "evinced a distinctive interest in domestic affairs and in aesthetic objects and occupations; they distinctly preferred more sedentary and indoor occupations, and occupations more directly ministrative, particularly to the young, the helpless, the distressed." (from Klein, 1946, p.106) Finally, the most striking difference found was that of a marked superiority in linguistic or verbal abilities in females, and a mechanical superiority in males.

In their interpretation of results and in the conclusions they drew, Terman and Miles were again at pains to remain as objective and value-free as possible. Where they did reach conclusions, they were carefully qualified, particularly with respect to the nature/nurture conflict. In their own words,

> masculinity and femininity are important aspects
> of human personality...they are one of a small

number of cores around which the structure of
personality gradually takes shape. The masculine
feminine contrast is probably as deeply grounded,
whether by nature or by nurture, as any other
which human temperament presents...In how far the
lines of cleavage it represents are inevitable
is unknown, but the possibility of eliminating it
from human nature is at least conceivable. The
fact remains that the M-F dichotomy, in various
patterns, has existed throughout history and is
firmly established in our mores. (Terman & Miles,
1933, p.451)

Thus, using a currently acceptable 'big stick' within

psychology, Terman and Miles delivered acceptable sex

difference findings. They delivered a long and impressive

list of hard facts about the differences between women and

men, thus providing the objective scientific information de-

sired at that particular time. It was, I suggest, not coin-

cidence that their findings tended to mirror popular con-

ceptions of male and female roles, giving the arguments for

the maintenance of those roles additional force. In this

time of depression, with women urged to give up their jobs

for men, and with the 'wife and home' cult firmly en-

trenched, it seems not unreasonable to point out a possible

connection between those influences and Terman and Miles'

finding that mechanical interest was an outstanding mas-

culine trait, while domestic activity was a typically femi-

nine one.

In spite of their claims of objectivity, then, I would

conclude that Terman and Miles were no more or less influenced

by the cultural interests of their period than any other re-

searchers. My criticism of their work centers on the as-

sumptions which underlie it - assumptions which I take to

betray the workings of these cultural interests. First, I

would question their implicit assertion that their work is essentially value free. Though they claimed that "it is not our purpose to defend the prevailing ideals with regard to sex temperaments" and noted that "in most cultures (sex temperaments) have been shaped to the advantage of the physically stronger sex..." (p.454) they overlooked the congruence of their results with social thought of the time, and clung to the accepted notion that the scientist seeks only to understand human behaviour, leaving the application (and responsibility?) of those findings to the social reformer. By isolating sex differences as a topic of research, Terman and Miles betrayed the accepted notion that gender was a useful dimension along which to differentiate persons and their traits, abilities, and behaviours, and further hinted that manifest sex differences of the type they discovered were probably related to male-female differences in bodily structure.

This, I would argue, would be what the general public wanted to hear, hence the greater popularity of their work compared with that of Maslow, who was concurrently arguing that masculinity and femininity were unsatisfactory concepts as a dimension of personality. Although Terman and Miles did concede that it might be possible to eliminate the masculine and feminine dichotomy from human nature, in their eyes, the possibility was a slight one, and they thought it more useful to pursue a study of masculine and feminine types. Their focus on sex differences then, in accord with the prevailing interests of the time, can be seen to have contributed to the acceptability of their research, while

those interests mediated against the reception of research such as Maslow's. It was clearly not the time to suggest that sex might not be a useful means of differentiating individual abilities, traits, and behaviours.

Second, I would argue that by using the tool most popular within psychology at the time, Terman and Miles presented a static view of masculinity and femininity. Owing to the nature of their method, they presented an elaborate and refined public opinion poll, which gave information on a temporary state of affairs. As Klein noted, "even if it is admitted that measurements only record differences as they exist at the time, in its ultimate effect, such an investigation limits the horizon of the inquiry instead of broadening it." (Klein, 1946, p.12) Beginning as they did with the commonsense assumption that experimentally verifiable differences did exist between women and men, it was inevitable that their tests would deliver information about those differences. Their method made it almost impossible for them to consider male-female similarities in any of the areas they investigated. Thus, the information Terman and Miles presented tended to reinforce popular stereotypes about women and men, lending further support to the myths which had been created about the relative abilities of women and men.

The 1940's: The Advent of Individual Differences

Into the late '30's and early 40's, then, psychologists carried the view that definite, empirically verifiable sex

differences in traits and abilities did exist, differences which coincided nicely with the social roles deemed most appropriate for women and men during that period. The second World War would eventually work toward blurring those male-female role distinctions, in much the same way as did World War I, presenting a problem for psychologists. By the 1940's, many psychologists had quite a bit invested in sex differences research, and in the wake of World War II, renewed their efforts to uncover the essential differences between women and men, determined to prove that the wartime similarities in role could be only a temporary aberration. The war had shown how variable 'human nature' could be, a point with which psychologists had never really quarrelled. Still, they maintained, this did not undermine their efforts to find essential sex differences, and as a result, the research shifted from a demonstration of sex differences per se, to a demonstration of sex differences in patterns of ability. Leona Tyler's The Psychology of Human Differences, first published in 1947, is a good example of this new type of approach.

Tyler began by setting down the two main approaches to the field of individual differences. Those adopting the first approach, as she saw it, made the assumption that all persons were created equal. Therefore, the task before us was to "hold high the ideal of equality and to work unceasingly at the task of making opportunities for all men truly equal." (Tyler, 1965, p.4) Those who favored the other approach adopted the assumption that "differences

between men are basic and ineradicable, biological facts
which cannot be ignored." (p.6) Tyler herself took up a
middle of the road position, noting that neither of these
assumptions with regard to human individuality could be
either proved or disproved, and stated that

> the viewpoint to be adopted in this book is that
> while all individuals may be considered to have
> equal value, they are not alike in how they think
> and feel and act...there are differences between
> people (which) must be taken into consideration.
> Our first need is to understand what the differ-
> ences are. (p.6)

In her approach to sex differences specifically,
Tyler expected to uncover the principles and conclusions
which had the most solid foundation. A summary of her con-
clusions follows. She began with an analysis of sex dif-
ferences in achievement, and asked, why had women made so
few major contributions to civilization? Why had they os-
tensibly achieved so much less than men? She noted the
contradiction in studies of women's achievement, that women
seemed to achieve more while in school than did men, but
they achieved significantly less in the world outside. After
surveying several studies of this problem, Tyler concluded
that sex differences in achievement were probably best ac-
counted for by relating them to differences in attitudes
and personality traits:

> Docility and submissiveness, usually considered
> feminine traits, enable girls to make a better
> impression on teachers than boys do. Inevitably
> this will show up on report cards in other places
> besides the deportment column. And such traits
> would, to some extent, prevent their possessors
> from assuming positions of leadership in the
> world of affairs. (p.243)

Moving on to sex differences in tested abilities and a

survey of the relevant material, Tyler reported the following,
noting that such differences as were found were always averages,
and that there was a high degree of overlap between the sexes,
and a high degree of variability among individuals. Still,
she echoed and expanded the findings of Terman and Miles, de-
claring that men were superior to women on tests of mathe-
matical reasoning, spatial relationships, and science, while
women were superior in tests of verbal fluency, rote memory,
perceptual speed, and dexterity. (p.247)

Tyler also found marked differences in male and female
interests. Here she quoted a study by Strong (1943), which
again echoed the findings of Terman and Miles, and stated
that masculine interests lay in active, outdoor, or mechani-
cal/scientific areas, while feminine interests lay with seden-
tary pursuits and domestic affairs. It is interesting to
note that she cited this study in spite of her admission
that women and men resembled each other in their interests
more than they differed, and most importantly, that the pro-
cedure used by Strong exaggerated the differences between
males and females.

Finally, with regard to sex differences in personality
organization, Tyler focussed on the research finding that
personality traits measured by psychologists were linked
together differently in the two sexes. Tyler's conclusion,
after careful consideration of earlier studies, was that

> a major difference between males and females is
> to be found in the way the traits they manifest
> are organized or combined. Thus even things that
> look like the same sort of behaviour in men and
> women may have different origins and different

implications...In current studies of personality,
sex has become an important moderator variable.
(p.266)

Tyler's book contains a carefully qualified presentation
of the accepted facts regarding sex differences at the time
of its publication. It presents views entirely consonant
with the attitudes of the time in which it was written, and
uses popular and acceptable methods of inquiry. The same cri-
ticism that was levelled at the work of Terman and Miles may
be applied here, however. Tyler's a priori acceptance of the
popular belief that sex was an important moderating variable
in the assessment of individual abilities and traits led her
to focus on the differences her tests produced, and to ne-
glect any similarities which emerged. It was convenient for
her to differentiate individuals by sex, as she herself said.
"Any psychologist who is trying out a new laboratory proce-
dure or standardizing a new test can easily compare the per-
formance of males and females, since his subjects, however
chosen, divide themselves into these two categories." (p.239)
Tyler never questioned the assumption that sex differences
entail gender differences, and thus her work could not help
but deliver information which would fortify popular stereo-
types of women and men, and widen the social gap between them.

This socially inculcated bent to search for differences
manifested itself in many ways in Tyler's research. For ex-
ample, when she wrote about achievement, her focus on sex as
the 'cause' of the observed differences led her to overlook
the important question of how 'achievement' ought to be defined.
She assumed that one definition would suffice, and although

her definition - never explicitly stated - did indeed yield
the hoped for sex differences, her reluctance to consider
that men and women might have different goals which could
be achieved with greater or lesser degrees of success, must
lead one to question her findings. If one takes into ac-
count the idea that male and female definitions of achieve-
ment may vary, the questions Tyler was asking no longer make
sense. Women have ostensibly achieved less than men only
if one assumes a shared, universal criterion - inevitably
male in orientation - for measuring achievement.

In her discussion of sex differences in tested abili-
ties, Tyler's assumptions must also be questioned. Her ac-
ceptance of the premise that the average scores yielded by
her tests can give useful information about individual men
and women simply does not make sense. Types may exist, but
one must be extremely careful when trying to apply 'facts'
about those types to individuals. Of course, this is ex-
actly what differential psychologists are supposed to do,
but perhaps we should reassess the utility of this pursuit.
Should we expect commonfeatures to manifest themselves in
similar ways in all individuals, or should we focus instead
on the ways in which common features are expressed in par-
ticular ways in particular individuals? Work such as Tyler's
tends to overlook important individual differences, and in
accentuating sex differences, presents a distorted and po-
larized view of the abilities, traits, and behaviours of in-
dividual men and women.

Finally, in her section on personality organization,

the main flaws in Tyler's thinking become most apparent.
Here, after commenting on the difference in the way per-
sonality traits are linked in the two sexes - which is a
neat way of side-stepping the issue of variability within
one sex - she wrote that even though certain behaviours in
men and women may look similar, it is likely that the be-
haviour has different origins and implications. This is
quite a good counter argument to those who would refute
her earlier claims about sex differences in abilities by
calling attention to those periods in which women per-
formed jobs traditionally thought to be men's. She could
still claim that important differences in ability did exist,
and that the lay understanding of those situations was not
complete. Tyler could still argue that those similar be-
haviours had different origins.

While on the face of it this seems a good argument, it
has two flaws which undermine its validity. First, as they
were constructed, the tests Tyler referred to could tell
us nothing definite about the origins of the behaviours or
traits they sought to analyse. The tests only measured what
existed at a particular time, as did the tests of Terman
and Miles. Second, Tyler never considered that the converse
of her statement about male - female similarities in be-
haviour could be true - that things which looked like dif-
ferent sorts of behaviour in men and women could have simi-
lar origins.

As Klein noted,

the difference in the interest in handling hammer
and nail may not be so essentially different from the
interest in handling a sewing machine; and mixing
ingredients for a food dish might be only another
variation of activities normally carried out in a
chemical laboratory. (1946, p.107)

Her basic assumptions about men and women, no doubt influenced by prevailing attitudes of her time, made implicit in Tyler's work the idea of a 'norm' of behaviour, a norm which was based upon current ideas about a behavioural norm for men. Measuring female interests, traits, or behaviours against this 'norm' would of course yield wide sex differences in the results. Tyler delivered a limited and distorted picture of real men and women. Finally, although Tyler took note of a key issue in the sex differences debate, she made no attempt to deal with it. "The wide range of abilities in both sexes makes it appear that sex typing of occupations is not appropriate..." she wrote, "But the attitudes that both men and women have grown up with fit these practices better than they do the actual economic and psychological facts, and too great a deviation from the accepted attitude makes for maladjustment." (p.272) In her avoidance of the question 'why don't the attitudes fit with the facts?' Tyler most clearly showed us what was and wasn't acceptable knowledge in her day, and demonstrated the influence of social interests in her work.

The 1950's   Psychology for the Career Mother

The work of the differential psychologists in the 1930's and 40's illustrates the following point of de Beauvoir's:

> At a given epoch of history, the techniques,
> the economic and social structure of a society,
> will reveal to all its members an identical
> world, and there a constant relation of sexu-
> ality to social patterns will exist; analogous
> individuals, placed in analogous conditions,

> will see analogous points of significance in
> the given circumstances. This analogy does
> not establish a rigorous universality, but it
> accounts for the fact that general types may
> be recognized in individual case histories.
> (1974, p. 48)

Again, psychologists were looking for common features
to be expressed in common ways, and thus they tried to recog-
nize types in individuals, not individual variations on a
type. Commonsense notions of masculine and feminine types
were used as a basis for the construction of new tests
which were to verify and describe those types, and in the
process, male and female stereotypes became more firmly
entrenched in the psychological literature. These stereo-
types carried over into the 1950's, where they met with op-
position from those people who appreciated the changes in
role World War II had allowed women.

Surprisingly, though, those delivering the expert veri-
fication of these stereotypes gained important allies ·
during the fifties and found themselves advising a new
section of the population. Again, let us step outside
psychology for a moment to consider the social climate
which fostered these new allies. Psychologists working in
the fifties faced an interesting challenge. Times had
changed; society was now more sophisticated and technologi-
cally biased than ever before, and the theories that had
worked to restore the status quo after World War I could
not be expected to work now. Women had made some advances
in the time between the wars - more women were now univer-
sity graduates; more women did compete in a man's world; and
these women would not easily accept the same old song about
woman's 'natural' place.

However, there was now a generation of women who had
never seen work as a mark of emancipation, and had no ob-
jection to stepping aside for the returning soldiers.
The young woman who had spent her girlhood as a conscript
of directed worker was eager to leave her job and adopt
the kind of routine her mother had found so frustrating
and imprisoning. (Adam, 1975) These women were the unex-
pected allies of those who were trying to engineer just
this sort of return to the 'natural order' of things.
The postwar 'home and motherhood' cult was launched, and
the housewife role again became an important and desir-
able one for women.

As Betty Friedan wrote, "domestic bliss had suddenly
become chic, sophisticated - whatever made you want to be
a lady editor, police reporter, or political activist,
could prevent or destroy that bliss." (1976, p.10) Fi-
nally, it was at this time that a shift in attitudes among
educated women - the so-called 'graduate wives' - was oc-
curring. Previously, wives' attitudes toward going out to
work had been in reverse ratio to the economic necessity
to do so. That is, the educated woman who didn't have to
work had always fought hardest for the right to do so,
while the lower class woman whose family's survival de-
pended on her income never thought of work as a right. Now,
however, these graduate wives were wanting to stay home and
raise a family. An interest in science became an interest
in domestic science, an interest in art, an interest in
the art of child care. Women who had never wanted a career

were now making a career of motherhood, and were setting the fashion for large families. Friedan noted, "'career woman' in the fifties became a pejorative, denoting a ball-busting, man-eating harpy, a miserable neurotic witch from whom man and child should flee for very life." (1976, p.11) These new graduate wives, shunning the 'career woman' role they had once embraced, were the best allies the new experts could have wished for, as they tried to spread the more theoretical justifications for restoring women to their place in the home.

Working with this 'wife and home' cult and a subtle shift of interest within psychology, the next wave in sex difference research tended, in fact, to leave men out. The focus was on women as mothers, and although standard sex differences research was continuing throughout this period, it was not currently in vogue. Although the shift in focus seemed to be away from traditional lines of sex difference research, this new avenue, in that it explicitly prescribed roles for women and therefore implicitly prescribed roles for men, actually expanded the areas of application of the sex differences research that had gone before.

Psychologists were now catering to a slightly different audience than before, and directing their research at educated, middle class career mothers. These mothers, schooled to respect expert opinion, helped spread the word of Dr. Spock and of John Bowlby, whose Child Care and the Growth of Love made 'maternal deprivation' household words.

Bowlby's work reinforced the popular opinion that mothering was a full time occupation, and the (middle class) mother should not work outside the home. His book was designed to drive any such heretical thoughts from the mother's mind. Bowlby stated that "it was essential for mental health...that the infant and young child should experience a warm, intimate, and continuous relationship with his mother." (1953, p.11) When the child did not have this, it was said to be maternally deprived, and this was to be avoided at all costs.

Justifying his use of the term maternal deprivation rather than parental deprivation, Bowlby explained that the child's relationship to its mother was without doubt by far the most important relationship of his early years. To soften the blow to fathers, however, Bowlby noted that

> fathers have their uses even in infancy. Not only do they provide for their wives to enable them to devote themselves unrestrictedly to the care of the infant and toddler but...they support mother emotionally and help her maintain that harmonious, contented mood in the atmosphere of which the infant thrives...his value as the economic and emotional support of the mother will be assumed. (p.13)

This prescription of correct roles for the middle class family echoed those pronouncements of Dr. Spock made in 1945, and in numerous reprints thereafter. The popularity of his Baby and Child Care was enormous - by 1957 over eight million copies had been sold, and it seemed that in the late 50's/early 60's, we were all 'Spock parents.' And what were Spock parents like? Mother stayed home, tending baby, while Father went out to earn the daily

bread. Mother was to be continuously available, and she
was the best one to care for the child. A working mother
was a special problem, mentioned between separated par-
ents and the fatherless child in the 'problems' section
of Spock's book. He said,

> you can look at it this way: useful, well-adjus-
> ted citizens are the most valuable possessions
> a country has, and good mother care during early
> childhood is the surest way to produce them...
> if a mother realizes clearly how vital this kind
> of care is to a small child, it might make it
> easier for her to decide that the extra money she
> might gain or the satisfaction she might receive
> from an outside job is not so important after
> all. (1957, p.570)

The enormous popularity of these works reflected the
public's increasing acceptance of the psychologist as 'ex-
pert.' The public accepted this type of writing, and the
social prescriptions it carried, as a natural extension of
the sex differences work which had gone before. Implicit
in the formulations of Bowlby and Spock are the 'essential
differences' specified by Tyler, Terman and Miles, and
others. Bowlby and Spock broadened the scope of that work
by prescribing social roles for women and men. Standard
sex differences work was no longer ideally suited to the
time, and this new body of work, by focussing on women as
the social climate demanded, capitalized on the spirit of
the time, and both Bowlby and Spock profited immensely from
this.

The 1960's: Winds of Change Begin to Blow

Although the work of Spock and Bowlby did seem to con-
vince the majority of women, there was still a minority of

heretics who remained to be won over. During the 1950's,
increasing numbers of women were trying to buck the system
and advance to positions of responsibility in whatever
their chosen careers. They were trying to overcome the
role of the 'eternal deputy,' but inevitably found them-
selves confronted by the feminine mystique created by the
experts. Out of this, however, light began to dawn, and
gradually the created 'home and motherhood' cult was
exposed. Margaret Mead wrote:

> at present there is a growing insistence that
> child and biological mother must never be sepa-
> rated...this is a new and subtle form of anti-
> feminism in which men - under the guise of ex-
> alting the importance of maternity - are tying
> women more tightly to their children than has
> been thought necessary since the invention of
> bottle feeding and the baby carriage. (cited
> in Adam, 1975, p.166)

Myrdal and Klein remarked that the 'cult' was "...fos-
tered by the press and propaganda. The sentimental glori-
fication which these activities receive may flatter house-
wives, but sometimes the glorification has the suspicious
air of persuasion." (1956, p.128) Dissatisfaction with
this role grew, and in 1963 an explosion occurred with the
publication of Betty Friedan's The Feminine Mystique. As
Friedan herself wrote of the book, "I sensed the inesca-
pable implications of the trail of evidence I had followed -
if I was right, the very assumptions on which I and other
women were basing our lives and on which the experts were
advising us were wrong." (p.18)

This was a critical time for those involved in sex dif-
ferences research, and many of their earlier findings fell
under attack. Technological advances and labor saving

devices now accessible to most had changed the face of housework; women no longer needed to spend so much time at the daily chores. Increasing availability of reliable contraceptives gave women more control over their own bodies, and hence more freedom of choice in other areas. Now more than ever we could control nature and its effect on our lives, and this dealt a harsh blow to the scientifically verified results of inescapable differences between men and women. Moreover, women were beginning to organize, and in 1966 women in the United States formed the National Organization of Women. Faced with this, psychologists regrouped and shifted gears slightly, anxious to provide new explanations for their old claims.

From this, two main lines of approach to the problem emerged. The first group of psychologists tried a novel approach and applauded the special characteristics of women. They looked at the traditional wife and mother role many women had played, and tried to explain that this, too, was an important contribution; moreover, it was one that only women could make. The second group of psychologists reverted to the experimental approach to sex differences. They wanted to find the real, essential differences between the sexes which would settle the nature-nurture debate once and for all.

The first group of experts were humanistically oriented, and were concerned with the threat of nuclear war. They gathered at a conference on the psychology of women in 1963, and asked the same questions that had been asked by

sex difference psychologists in earlier years, with minor revisions. "What in woman may be said to be enduring, and what is subject to social and historical modification? To what extent is woman's psychological life determined by her anatomy and biology, and to what extent can we speak of a specific feminine psychology?" (Lifton, 1964, p.viii)

Answering these questions were D. C. McClelland, R. J. Lifton, and Erik Erikson, among others. McClelland stressed the special qualities of women, and urged them to be true to themselves if they wanted to get ahead; he felt women should do it on their own terms and not adopt the methods of men. He seemed to feel that sooner or later society was bound to realize that women were the equals of men.

Lifton wrote of the woman as 'knower,' one who was closer to nature, more intuitive, and somehow closer to the truth of life than men. He acknowledged women's inequality and felt that the situation should be corrected as men seemed to be bringing us close to the brink of nuclear war. Lifton, unlike Freud, saw women as a civilizing influence and hoped that we would recognize our need to become more civilized and thereby grant women an equal place in society. Erikson agreed with this, and felt that we definitely needed more women participating in society outside the home. Speaking in global terms, he said "the question now arises whether such a potential for annihilation as now exists in the world should continue to exist without the representation of the mothers of the species in the councils of image-making and of decision." (1964,p.2)

As might be guessed, the role Erikson saw for women was a
rather limited one. He wrote, "the modalities of woman's com-
mitment and involvement for better and for worse, reflect the
ground plan of her body." (p.2) Women, owing to their psy-
chological tie to their productive 'inner space,' could only
participate in society as mothers, homemakers, etc. Erikson
put it thus:

> Maybe if women would only gain the determina-
> tion to represent as image providers and law
> givers what they have always stood for pri-
> vately in evolution and in history (realism
> of householding, responsibility of upbringing,
> resourcefulness in peacekeeping, and devotion
> to healing), they might well be mobilized to
> add an ethically restraining...power to poli-
> tics in the widest sense. (p.2)

What looked like an admission of the value and importance
of women was in fact no less limiting than any of the earlier
roles experts had deemed suitable for them.

The second group of psychologists, well represented
in Eleanor Maccoby's 1966 book The Development of Sex Dif-
ferences, picked up the trail of Terman, Miles, and Tyler,
and brought it up to date. Using experimental methods so
popular at the time, these authors looked at the influence
of sex hormones on sex differences in behaviour, sex dif-
ferences and cultural institutions, and sex differences in
intellectual functioning, among other things. Maccoby's
own article, 'Sex Differences in Intellectual Functioning'
will be singled out here, for it shows most clearly the
trend that sex differences research of this period was fol-
lowing.

Maccoby began as many of her predecessors did, by
looking for sex differences in average proficiency on the

tasks she had isolated. Surveying the literature, she found support for her claims that sex differences in intellectual functioning appeared in seven general areas: general intelligence, verbal ability, numerical ability, spatial ability, analytic ability, 'creativity,' and achievement. She then went on to give the standard caution about those results, however, noting that the differences obtained were averages, that there was a problem in the presentation of data - differences were presented as statistically significant while the actual magnitude of the mean scores was never given - and finally drew attention to the considerable overlap between the distribution of scores of the two sexes. In spite of those reservations, Maccoby continued to use similar techniques to investigate those sex differences.

Maccoby's task, as she saw it, was essentially the same as Terman and Miles', and Tyler's - namely, to "examine what is known concerning the linkages between performance on intellectual tasks and other characteristics, especially personality characteristics, to see whether the nature of these linkages is different for the two sexes." (1966, p.28)

Considering a number of studies, Maccoby concluded that

> 1) there are a number of aspects of intellectual performance on which the sexes differ consistently in the average scores obtained, and that 2) whether or not there is a difference in average performance on a given task, there are some substantial sex differences in the intercorrelations between intellectual performance and other characteristics of the individual or his environment. (pp.38-9)

She then tried to isolate possible causal factors of the sex differences she found. It was in this pursuit that she left the trail of the earlier sex difference researchers. While the others were content to offer their findings with only vague speculation as to their causes, Maccoby, availing herself of the medical and technological advances which occurred in the years between her study and Tyler's, had access to more specialized information; she was able to cite with some authority such factors as hormones, cortical structures, and hemispheric specialization as having an effect on the sex differences she reported. In addition, she also drew on some of the popular social explanations for sex differences, in a manner her predecessors could not, or perhaps did not, want to do. With regard to genetic v. environmental influences on sex differences, she concluded that

> the sex-typed attitudes of personality and temperament which we have found to be related to intellectual functioning are the product of the interweaving of differential social demands with certain biological determinants that help to produce or augment differential cultural demands upon the two sexes. The biological underpinnings of the social demands for sex-typed behaviour set modal tendencies for cultural demands and set limits to the range of variation of these demands from one cultural setting to another. (p.50)

Though the approaches of these two groups of psychologists differed, they converged on one very important point, namely, that biological/physiological differences between men and women necessarily implied social ones. Erikson mentioned that 'the modalities of woman's commitment...reflect

the ground plan of her body,' and Maccoby spoke of biologi-
cal determinants and their influence on sex roles and sex
differences. In short, both groups of theorists took a
biological 'is' and turned it into a social 'ought.' The
problems of this 'naturalistic fallacy' will be more fully
discussed in chapter five; however, it is interesting to
note how prescriptive psychological research had become by
this time, and the extent to which psychologists were re-
sorting to biological or 'natural' explanations of the sex
differences they discovered and the roles they prescribed.
This practice, while not admirable, can at least be under-
stood if looked at within its particular social and his-
torical context. The sixties was a decade of social up-
heaval, with traditional social roles visibly breaking down
as women, blacks, and other subordinate groups began to or-
ganize and protest. Meanwhile, science and technology were
booming, radically altering our perceptions of our own li-
mitations. Faced with this, it isn't hard to see why bio-
logical or 'natural' explanations of gender differences were
again 'hot,' and why their proponents used them to advocate
traditional conservative roles for women and men. Bruno
Bettelheim succinctly analysed the situation:

> The achievements of the women's movement have
> led to severe identity confusion among many
> women. The change in social roles women ful-
> fill in society and the home, and changes in
> their views of themselves and of their relation
> to males, have led to parallel and equally wide-
> spread identity confusion among males regarding
> their relations to females and their sexual role.
> All this has made social and sexual relations
> more problematic for both females and males.
> While a traditionally ordered society tightly

shackled both females and males to narrowly
defined social and sexual roles, society thus
provided people with certainty regarding their
identities. (1979, p. 69)

Once these traditional roles were threatened, then much
was thrown into doubt, and it became the job of the psycholo-
gist to restore order with regard to sex roles, to restore
the status quo. Thus it happened that descriptive research
became prescriptive. With social roles already in flux,
it would have been too threatening to admit that sexual dif-
ferentiation increasingly depends on social definitions that
do not depend on biological forces.   Effort was thus put
into maintaining sex roles as something 'natural,' and there-
fore constant, and somehow set apart from social chaos.
Clearly the time was not yet right for a new question to be
asked - why are myths about masculinity and femininity
believed and sustained - even in the face of evidence to
the contrary?

The 1970's: Sex Differences and the Women's Movement

While the launching of the women's movement in the 1960's
may have prompted some reorganization of theory in psycho-
logical circles, during the 70's, those theoretical lines
became battle lines, and became more rigid. The nature -
nurture controversy raged on in the literature, and no doubt
in response to the increasingly separatist tendencies of the
'women's libbers,' a psychology of women was receiving much
attention. This new psychology gradually took the place
of sex differences research, as it offered a rather safer
venue for the discussion of male - female differences.

Sex roles became the topic in vogue, rather than sex differences, as the social climate altered. Still, though, biology reared its head, as interest remained in the 'natural' antecedents of then current male and female social roles. Three works from this period will be considered, each displaying a different approach to the topic of sex differences: Bardwick's Psychology of Women (1971), Dinnerstein's The Rocking of the Cradle (1976), and finally Miller's Toward a New Psychology of Women (1976). Each book reflects a particular type of accepted knowledge, and a look at the assumptions underlying each should reveal something about the social and psychological climate of the 1970's.

Bardwick's ideological bent was exhibited early, in the sub-title of her book - 'A Study of Bio-Cultural Conflicts.' Her subtitle presupposed some basic problem for women, and harked back to Freud's Civilization and its Discontents, where he also posited some deep tensions between civilization - or culture - and the individual. Indeed, the first sentence of Bardwick's book was not unlike Freud's characterization of women in his "Essay on Femininity:" "Almost every woman alive is aware that she is part of some huge problem." (1971, p.1) So saying, Bardwick went on to talk of the need for a psychology of women, and in so doing exhibited the way in which sex differences research had metamorphosed into the 'new' field of feminine psychology.

Regarding the nature - nurture controversy, Bardwick extended and refined the ideas put forward by Maccoby in 1966. She adopted the view that "differences between men and women originate interactively; in genetic temperamental

differences, in differences in the adult reproductive sys-
tem, and in sex-linked values specific to each culture."
(p.3) As did Maccoby, Bardwick also made use of the spec-
ialized knowledge science and technology had made avail-
able, citing endocrine and CNS differences as possible
causes for male - female differences in behaviour. With
this information, she extended her earlier position some-
what, saying "to the extent that there are physical con-
tributions to the development of human beings, there is
likely to be a limit upon changes in the characteristic
distribution of traits that can be wrought by different
socialization practices." (p.216) Clearly, as far as
Bardwick was concerned, biology did prescribe certain defi-
nite limits for social roles. It was unfortunate that she
saw the interaction between an individual's biology and
his/her (social) consciousness as a one-way flow, however,
for in so doing, she neglected to examine the ways in which
the individual was able to act back upon nature, and re-
structure or redefine its limits.

Finally, when it came to the justification for her
work, Bardwick used an approach which was by now familiar.
In her own words,

> important difficulties confront us as soon as
> we set out to explore such a complicated con-
> tent as the psychology of women. We will be
> emphasizing sex differences, but we must keep
> in mind that in many ways men and women are
> alike. Ignoring similarities results in a
> somewhat distorted perspective - talking
> about differences as though they are absolute
> makes one forget that there is always a dis-
> tribution of traits. (p.3)

This did not deter her, however, and her response seemed to

be the next step in the shift from sex differences in in-
dividual abilities to differences in _patterns_ of abilities
witnessed earlier. Bardwick felt that "men and women are
very different in some basic ways: in their life styles,
in the organization of their egos, in their personality
qualities, in their motives, and in their goals." (p.3)
Thus we see how the search for sex differences had become
more sophisticated; how a subtle shift away from quanti-
tative methods had resulted in a focus on the interpersonal
qualities which differentiate women from men. Bardwick ex-
tended and developed the earlier 'anatomy is destiny'
line, making use of the special information about human
biology that science had placed at her disposal. She was a
good representative of the conservative approach to sex
differences research, and her reworking of the old 'natu-
ral' argument shows much about the popular assumptions of
one particular group of psychologists working at her time.

In direct contrast to this, was the approach of Doro-
thy Dinnerstein in _The Rocking of the Cradle_. If Bardwick
can be taken to represent the modified 'naturist' approach,
then Dinnerstein was her opposite number in the 'nurturist'
camp. As Dinnerstein put it,

> It is senseless, I shall argue, to describe
> our prevailing male - female arrangements
> as 'natural.' They are of course a part of
> nature, but if they should contribute to the
> extinction of our species, that fact would
> be part of nature too. Our impulse to change
> these arrangements is as natural as they are,
> and more compatible with our survival on earth.
> (1976, p.9)

In this, we see a clear statement of the constructivist line
of feminist thought. Responding to the biological deter-
minists, Dinnerstein echoed the predominant mode of thought

for the feminist movement in the 1970's. She was trying to
redefine women's roles in their own terms, and trying to
make clear that humans were not 'slaves' to their biology.
This was not a new idea, but an old one appearing again in
response to a favorable social and psychological climate.
Dinnerstein reformulated it thus: "What we think of as
human nature cannot for that reason be regarded as immut-
able...the quintessential feature of human life...is its
self-creating nature; its control - for better or worse -
over the direction in which it develops." (p.12)

Dinnerstein's extension of this argument was novel,
however, and its appearance said a great deal about the way
in which the social climate had changed since the 1960's.
Dinnerstein's thesis called the institution of motherhood
into question and was openly critical of existing parenting
arrangements. It was unlikely that her radical argument
that the female domination of early child care had crip-
pling consequences for children in their later lives would
have received serious attention ten or fifteen years ear-
lier. Emotions surrounding the assumptions and structures
she called into question ran deep in our social system, and
only in a 'revolutionary' period like the 70's could they
emerge. Dinnerstein's work found its niche in the far
left of the women's movement, in a space which provided
fertile ground for its popularization.

Dinnerstein's account of the forces which bound us to
social roles no longer required by the era was lengthy
and complex. Essentially, though, it ran that "the rules of

personal symbiosis between men and women offer us a silent
ready-made language, a tacitly formalized and stylized
set of expectations, perceptions and skills, around which to
organize some unexamined and crucial aspects of emotional
life." (p.231) In this, she displayed the interests of
another social group, interests which were the antithesis
of those represented by Bardwick. The differences between
these two authors neatly revealed the tensions within psy-
chology at the time, as well as the conflicts in the larger
world.

Having surveyed thesis and antithesis within the con-
text of the psychology of women in the 1970's, there is
left the task of examining the synthesis of those views.
This is found in Jean Baker Miller's 1976 book, Toward a
New Psychology of Women. Miller combined important ideas
from both the 'nature' and 'nurture' groups, and wove them
together in a logical, cogent manner. Addressing the 'natu-
rist' stance, she accepted that women and men did seem to
have different psychological traits, and that because of
this sex difference, a separate psychology of women was
needed. However, she did not take the next step and at-
tempt to locate the cause of these differences in biological
or physiological sex differences.

Turning to the 'nurturist' view, Miller analysed domi-
nant - subordinate relationships in general terms, and went
on to note how male-female relationships as structured in
our society have succeeded in creating the present unfor-
tunate state of affairs. She wrote, "humanity has been held

to a limited and distorted view of itself - from its inter-
pretation of the most intimate of personal emotions to its
grandest vision of human possibilities - precisely by vir-
tue of its subordination of women." (1976, p.82)

While Miller believed that what were seen as important
sex differences then - as revealed through the psychology
of women - were largely due to inequalities in our social
system, she did not advocate a total revolution or separa-
tist stance. She maintained that "women's psychological
characteristics are closer to certain psychological es-
sentials and are therefore both sources of strength and the
basis of a more advanced form of living," (p.27) and pro-
posed a human alternative, a cooperative redefinition of
ourselves and our situation as the best way for women and
men to achieve their full potential. Thus, she neatly
bridged the gap between the factions represented by Bard-
wick and Dinnerstein.

The 1980's: Sense and Sensibility?

In the preceding three works, then, the main currents
of social and psychological thought in the 70's have been
revealed. Within psychology we have seen sex differences
research shift to a psychology of women, as well as the
appearance of moderate interactionist views of the devel-
opment of sex roles. In this, the social interests have
been reflected - clearly there was an audience for the
three types of work, and the tension between the conserva-
tive, radical, and liberal elements of the time has been
shown.

This tension continues to the present day, with some reworkings of the positions just outlined. The popularity of sociobiology and the boost it gave to naturist theories cannot be overlooked, while the nurturist camp continues its campaign with works such as Chodorow's The Reproduction of Mothering. It is the interactionist approach which is perhaps the most popular today, however, and it is interesting to look at the ways in which psychologists have tried to accommodate this perspective in their recent work on sex differences. Eleanor Maccoby's book Social Development (1981) will be considered here, and since we have already looked at her 1966 work, it will be especially interesting to see how her ideas have changed in the intervening fifteen years.

The softening of her 1966 and 1974 positions was apparent on the first page of Maccoby's chapter on sex differences and sex typing, as she wrote

> we cannot yet be sure about the mix of social
> and biological factors which underlie a number
> of behavioural differences between males and
> females. The nature of the causal differences
> should be investigated rather than implied at
> the outset...no implication of biological caus-
> ality for sex related differences is intended.
> (1981, p.203)

She then went on to give a careful list of cautions to keep in mind when sex differences research was examined, expressing reservations about the homogenous subject population used most often in sex difference studies, the reluctance of researchers to publish a 'no sex difference' finding, the tendency in our culture to equate sex differences with some 'natural' origin, and personal and political bias and

its influence on a given researcher. Finally she stressed
that most sex difference results expressed only averages,
and that the characteristics of the two sexes overlapped
greatly. This cautionary list clearly displayed the changes
in Maccoby's thinking and the modification of her earlier
stance, when she in fact neglected many of the cautions she
had by now come to view as vital.

Although she had not done a full about-face with re-
gard to her stand on sex differences, Maccoby had clearly
altered her earlier conclusions and was much more inclined
to simply report behavioural differences rather than look
for sex differences in intellectual functioning and specu-
late on their origins. Her 1981 conclusions about sex
differences reflected this change, and in accord with her
new and more moderate approach, were carefully worded.

> "Many aspects of the behaviour of an indi-
> vidual child cannot be predicted merely
> from a knowledge of the child's sex," she
> wrote, "a great deal of individual varia-
> tion exists within each sex. In some re-
> spects, however, the average boy behaves
> somewhat differently from the average girl."
> (1981, p.247)

Interestingly, the differences Maccoby mentioned have to do
with the social play of girls and boys - she mentioned none
of the differences written up in her 1966 paper. No doubt
this was in part a response to changing models of 'normal'
behaviour for males and females within and without psychol-
ogy, and partly a response to a social context which no
longer prescribed rigid roles for women and men - roles
which were previously thought to have been based on essen-
tial and inescapable differences between women and men.

Looking Ahead To New Questions

In the eighty-seven years covered in this survey, we have seen a number of changes in the way psychologists have regarded sex differences. The changing social/historical climate within and without psychology has been shown to influence the popularity of different theories and different methods of investigation, and from this we have been able to see what has qualified as 'acceptable knowledge' at different points in the past years. What has been viewed as acceptable knowledge about differences between the sexes should be clear. The continuing focus on gender as a useful dimension along which to differentiate the abilities, traits, and behaviours of individuals - in spite of evidence to the contrary - argues strongly in favor of the imputation of a cultural interest in the maintenance of the concept that men and women are essentially different, with all the social implications that difference carries.

In accord with these interests, the nature/nurture controversy with regard to sex differences has been played out through a series of theoretical and methodological shifts within the discipline of psychology. Theoretically, the idea that gender can be a useful predictor of individual differences has begun to give way to the view that it is less a predictor than an interesting correlate of observed differences. In methodological terms, there has been a progression from the documentary approach to a psychoanalytic one; from a quantitative approach to one more qualitative; and we have seen the nature of experiments themselves change as theories of social or biological bases of sex differences

came to the fore.

In spite of these shifts, however, two important questions have never really been studied. First, why was/is the association between gender and personality made in the first place, and second, why has research continued to focus on sex differences, when most researchers grant that the similarities far outweigh the differences? How is it that these two questions have never yet found a climate conducive to their exploration? It isn't that they are particularly new questions - indeed the assumption that a connection between gender and personality or ability or behaviour exists is fundamental to all sex differences work and must have been dealt with by the researchers we have discussed. They all give reasons why they think the connection does exist, but that still doesn't explain how the two came to be associated in the first place. Moreover, every work cited in this paper contains a proviso about the similarities of males and females and notes that with respect to this, the differences are small. Yet the investigation of sex differences continued.

Previously I have turned to the tides of cultural interests to explain why certain theories and methods were accepted, and although interests could again be invoked here, I would like to extend that line of reasoning. Without intending to sound trite or dismissive, I would say that the reason why these two important questions were not, and have not been taken up by researchers, is that they were - and perhaps still are - premature. Gunther Stent characterized

prematurity thus: "A discovery is premature if its implications cannot be connected by a series of simple logical steps to canonical, or generally accepted, knowledge." (Stent, 1972, p.84) With this definition of prematurity in mind, it is possible to see why both questions were avoided. Quite simply, if one cannot assume that a connection between gender and personality or behaviour exists, the foundations upon which sex differences research is built are completely undermined. Habitual modes of thinking about women and men necessarily disintegrate, leaving unsettling personal and political options for researchers - options previously taken up only in science fiction novels. If, however, one has that seemingly common sense assumption connecting gender and personality, ability, and/or behaviour, one is presented with a convenient grouping of subjects, and an endless supply of areas to investigate. Sex difference findings have been and are topical and newsworthy, and build (comfortingly) upon a 'natural order.'

In this survey of sex differences research we have seen how researchers influenced by cultural interests and the limits they defined for acceptable knowledge have helped to perpetuate the 'myths of masculinity and femininity.' It has become apparent that within psychology, as in other sciences,

> there must be at all times a predominantly accepted scientific view of the nature of things, in the light of which research is jointly conducted by members of the community of scientists. A strong presumption that any evidence which contradicts this view is invalid must prevail. Such evidence has to be disregarded, even if it cannot be accounted for, in the hope that it will eventually turn out false or irrelevant. (Stent, 1972, p.88)

It would seem that we are finally beginning to see that research which tells us gender may not be a useful way to differentiate individuals and their abilities, traits, and behaviours is not false or irrelevant, and should not be looked upon as invalid. Knowing this, and being cognizant of the interaction among cultural interests, researchers, the questions asked and results produced, we ought to be able to, as Ellis suggested in 1894, clear away the thick undergrowth of superstition which flourished in the area of sex differences research, and in popular beliefs about the potential of women and men.

CHAPTER THREE: PRELIMINARY STUDIES OF GENDER ATTRIBUTION
                  AND GENDER PERCEPTION IN CHILDREN

While in the preceding chapter my main concern was the
application of an alternative approach to research on gender
in a theoretical context, my concern in this chapter and in
chapter four is the application of this approach in experi-
mental studies. In this work, I take for granted that the
child plays an active role in the construction of his/her
world. (See McGurk, 1978, for a fuller discussion.) In
line with the 'product to process' shift I mentioned in the
introduction, my work is focussed on the ways in which chil-
dren construct a body of knowledge about gender. Rather
than ask questions about a produced reality - e.g., what
roles the children deem appropriate for women and men - I
have asked the children to explain what they see as appro-
priate, and have tried to discover the processes through
which their ideas about gender develop.

The theoretical perspective which incurred this gen-
eral 'product to process' shift in research aims has also
had a direct impact on the way in which I approached the fol-
lowing experiments, the way in which I framed questions, and
the methods I chose. While many of the methods I have em-
ployed are quite in keeping with tradition in social psy-
chology - interviews, questionnaires, the 'I am' technique -
my shift away from an emphasis on a product, an 'objective'
reality to be empirically verified, has meant that I have
used traditional methods in a somewhat non-traditional manner.
My focus is on the subjective, personal aspects of each

child's thinking, the process through which the child comes
to make sense of a world where gender is of great impor-
tance. Thus, I am using these methods to gain a better
subjective impression of the children's thoughts, and I am
not trying to quantify them, or claim that the information
I have gathered is universally valid.

It is well known that traditional methods of research
used to explore children's thinking have presented dis-
torted pictures of those processes. Baumrind (1980) and
others criticized the artificial research situations of
traditional experiments which undermine their accuracy,
while Donaldson (1978) has emphasized the importance of task
meaning and context in the design of research with children.
With this in mind, I have taken care to ensure that each
task was understood by, and meaningful to the children
participating in it. Moreover, I have tried to use a vari-
ety of research techniques which would supply me with various
types of information about the children. During the course
of the research, all the children participated in both
open-ended and structured tasks, ranging from drawing and
commenting on pictures of men and women, to participating
in open-ended interviews, to playing what I called a 'jus-
tification game' with special cards I had created. To
further develop my knowledge of the children, I sent ques-
tionnaires to their parents, spent a great deal of time talk-
ing to their teachers, and undertook classroom observation
and a small study of the books, magazines, and TV programs
the children had cited as favourites.

Thus, the variety of techniques employed has provided

me with several contexts from which to view and interpret my findings, and has also enabled me to better understand the children's perceptions of gender and gender roles by comparing them to the impressions of their parents and teachers. It is hoped that this variety of perspectives will enable me to present a well-rounded and representative picture of the children's thinking at a particular point in time.

The final aim of my research has changed rather completely from the goals I had in mind at the outset. My initial plan was to study gender attribution, that is, the process through which one decides if another person is female or male. The final study has grown logically and in straightforward steps from this beginning, so the course of its evolution should be clear, once the exploratory work has been described and discussed. Throughout the work, however, my central concerns have not changed, rather they have been approached in different ways. I wanted to know how children come to understand gender and gender roles. How do children define women and men, and then decide that certain activities are appropriate to one or the other, or both? I started with the most basic question in my first study, and concerned myself with the way in which children decide if a person is female or male. I wanted to find out what cues were important to that initial classification, and what was seen as acceptable evidence for attribution of the label female or male.

Study One: A Look at the Process of Gender Attribution

While common sense might lead us to believe otherwise,

Garfinkel (1967) has suggested that gender attribution is more than a simple inspection process, and later work has tended to support this hypothesis.

Thompson and Bentler (1971) examined the relative importance of cues associated with physical sex characteristics. Using plastic dolls with eight different combinations of genitals, hair length, and body type, they asked subjects to sort the sex-typed clothing provided, then to dress each doll appropriately and assign it a gender. They found that hair length and body type were the most important cues for children, while genitals, followed by body type, were the important cues for adults. Thus, they concluded that many cues associated with sex for adults have no sexual salience for children. In fact, it was discovered that children tended to use genital cues improperly.

Other aspects of gender attribution were dealt with by Ray Birdwhistell (1970) in an essay titled "Masculinity and Femininity as Display." He was one of the few authors to effectively make the point that children do not immediately note the gender defining qualities of either the external genitalia or differential mammary development. He discounted the idea that genital display is of primary importance for gender attribution, and felt that people necessarily organized much of gender recognition and display at the level of position, movement, and expression.

These characteristics he labelled 'tertiary sexual characteristics' and accumulated a considerable body of data to support the claims that they were: 1) culturally coded/relevant, 2) readily identifiable by members of a given sub-

ject group, and 3) meaningful only in conjunction with other cues - i.e., no cue was enough in itself to warrant a gender attribution; gender attribution resulted from the interaction of a number of cues.

Birdwhistell also pointed out that children had considerable difficulty learning appropriate inter/intra gender messages, and noted that children matured into these (tertiary socio/sexual) behaviours, and later gave up, or matured out of them.

Finally, although almost all of his subjects regarded the various cueing behaviours as instinctive, Birdwhistell strongly disagreed with them, believing this behaviour "is not simply a response to instinctual mechanisms, but is shaped, structured, and released both by ontogenetic experiences of particular organisms, and by patterned circumstances of the relevant environment."

Kessler and McKenna (1978) pursued the various aspects ·of gender attribution in more depth in their book Gender: An Ethnomethodological Approach. Their main points were as follows: 1) gender attribution is not the result of simple inspection alone, 2) gender is of primary importance to any interaction and apparently must be attributed before the interaction can proceed, 3) gender attributions are not guesses, they are the result of several cues, and usually made with the absence of information about genitals, 4) once a gender attribution is made, any additional information about the 'attributee' will be interpreted in light of that attribution.

Kessler and McKenna were the first to suggest that gender attribution might be a developmental process, and, adopting a constructivist position, they set out to test this hypothesis. A study involving children's drawings of men and women was devised, and the specific questions to be answered were: 1) were participants more accurate in attributing gender to drawings by older children than younger children? 2) were older children more accurate in attributing gender to their own drawings, one month later, than younger children? 3) did the ability to correctly attribute gender increase with the age of the participant?

For questions 1) and 2), a simple increase in accuracy with age was found. For question 3), however, older children and adults were not better at attributing gender than younger children - it seemed that accuracy depended upon who judged which group of drawings.

These findings, reported also when the study was replicated in Japan, are intriguing, and suggest that cues for gender attribution are, to some extent, shared by children of the same age. If this is so, it casts doubt on the Piagetian notions of egocentricity in young children. If ideas about gender were so idiosyncratic, there would be little conceptual information shared among children, and hence, little in their drawings that would serve as recognizable cues for other children.

The purpose of this first study was to further investigate the questions 'what do children see as useful criteria for attributing gender?' and 'do criteria for gender attribution vary with age?' Kessler and McKenna's study of

children's drawings was replicated, with the subject population expanded from ten to sixteen members in each group.

Method:

Subjects: Subjects were divided into three groups according to age - I) ages 3-1/2 to 4-1/2 years, II) ages 5 to 6 years, III) ages 8 to 9 years - and there were sixteen subjects in each group, eight males and eight females. For comparison purposes, sixteen adults were later selected to examine the drawings, again eight males and eight females.

Children in the first subject group came from two nursery schools in the Edinburgh area, and had middle and working class backgrounds. Children in the second and third groups were drawn from a public primary school in Edinburgh, and they, too, had middle and working class backgrounds. Subjects in all groups were randomly selected from class attendance lists, none of the children being known to me beforehand.

Materials:

White, unlined drawing pads were used, 8 inches by 10 inches in size. At the outset wax crayons of various colours were given to the children to draw with, but these proved unsuitable, and coloured pencils were substituted.

Procedure:

I) After subjects were selected, I was introduced to the class as a friend of the teacher's who wanted some pictures and needed the children's help. The children were

then taken, one at a time, to a separate room with a desk and two chairs, and chatted with me for a few minutes until he/she felt at ease. Each child was then given the following instructions: "As your teacher said, I need people to make pictures for me. Today I need one picture of a man and one picture of a woman - do you think you could draw those for me? Here are some pencils - use as many colours as you like, and take your time. Which picture would you like to draw first? Fine. Now go ahead, and tell me when you're finished."

After the child had completed the first drawing, I took it and labelled it in one corner. I complimented the child on his or her drawing while handing him/her a clean sheet of paper, and then asked him/her to do a picture of a man or woman - whichever one would complete the set.

When the second drawing was finished, it was labelled, and I complimented both drawings. The two pictures were placed together in front of the child, and I would say, "Now I need to ask you a question. Look at your picture of a man/woman. What makes that a picture of a man/woman?" If the child appeared not to understand the question, it was rephrased as either "why is that a picture of a man/woman?" or, "what makes you know this is a picture of a man/woman?" Responses were recorded in a separate notebook, and the questions repeated for the second drawing.

When the second response was recorded, the child was thanked for his or her help, and went back to the classroom with me to find the next child on the list. This procedure was repeated until all subjects had completed a set of

drawings.

The same basic procedure was used for groups I, II, and III, with slight variations in the simplistic wording of the instructions, according to the age of the subject. In some instances, it was more convenient to use a quiet corner of the classroom to do the drawings, rather than a separate room. In these cases, a table and two chairs were provided, so that the child and I were isolated from the rest of the class, and the drawings were done privately. In all cases, the procedure was adapted to the facilities available, and to the specific child. Although each situation may have varied somewhat, the basic procedure was always maintained, and the necessary questions asked.

II) Approximately one month later, I returned to the classrooms to ask each subject to look at a set of drawings. Those in group I saw eight drawings each - their own set, one other set from group I, and one set each from groups II and III. Children in groups II and III, and the adult subjects saw twelve drawings - two sets from each age group, the subjects own set always included. Each subject saw a different set of drawings, and each individual drawing was seen at least four times.

For the presentation, drawings were displayed one at a time in random order, however, no pair of drawings was ever displayed one after the other. The labels on each drawing were concealed during the presentation.

Children and adults were given the following instruc-

tions:

> I am going to show you eight (twelve) drawings
> now, and for each one, I want you to tell me if
> you think the person is a man or a woman. After
> that, I'd like you to tell me why you called the
> person in the picture a man or a woman. There
> might be some pictures where you won't be able
> to tell what the person is, and it's o.k. to
> say you don't know. Do you have any questions?

As before, the wording of the instructions was occasionally

modified to suit the age of the subject.

Quite often the youngest children needed prodding, and

as each picture was displayed, needed to be asked "what is

this person?" and then, "why do you think so?"

Responses were recorded on a separate sheet, and the

procedure was repeated for each subject, in a separate room,

or isolated part of the classroom, as before.

Results:

The results of this study are highly suggestive. Al-

though these results are not so clear-cut as those of Kessler

and McKenna, i.e., there were no significant differences

between groups in percentage of correct answers given to

suggest that the ability to correctly attribute gender de-

pended upon which group judged which drawings, these re-

sults do lend some support to Kessler and McKenna's hypo-

thesis.

The breakdown of results is as follows: In judging

the nursery school (group I) drawings, no group was par-

ticularly good. (See example I in Appendix A for a rep-

resentative set.) The nursery school children themselves

had 45.3% correct answers. the group II children had 38.3%

correct, group III had 40.6% correct, and group IV (adults)

TABLES SHOWING PERCENTAGE OF CORRECT RESPONSES FOR ALL GROUPS JUDGING DRAWINGS OF

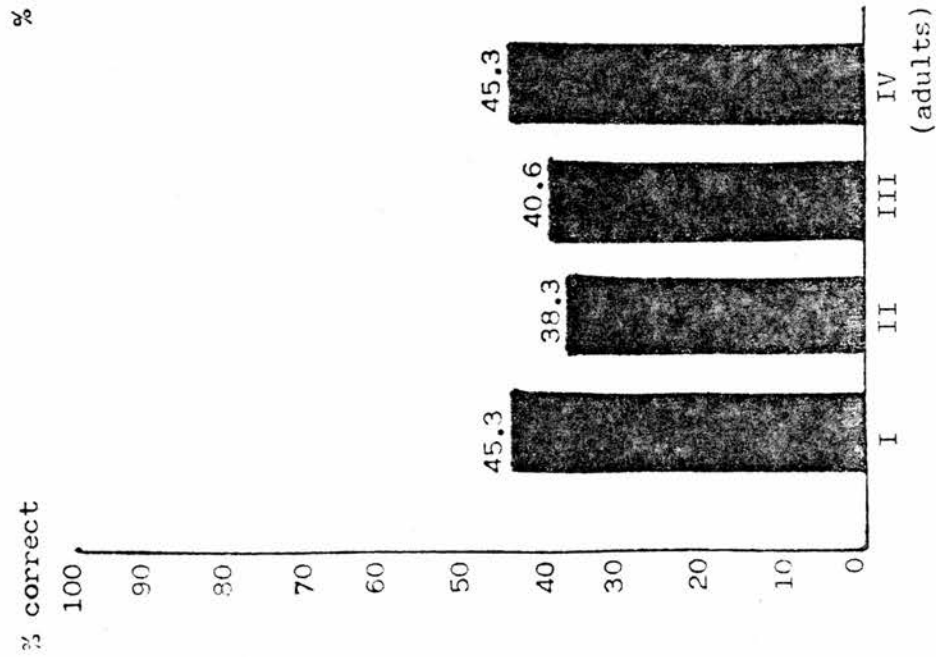GROUPS I (3½–4½ yrs.), II (5–6 yrs.), and III (8–9 yrs.)
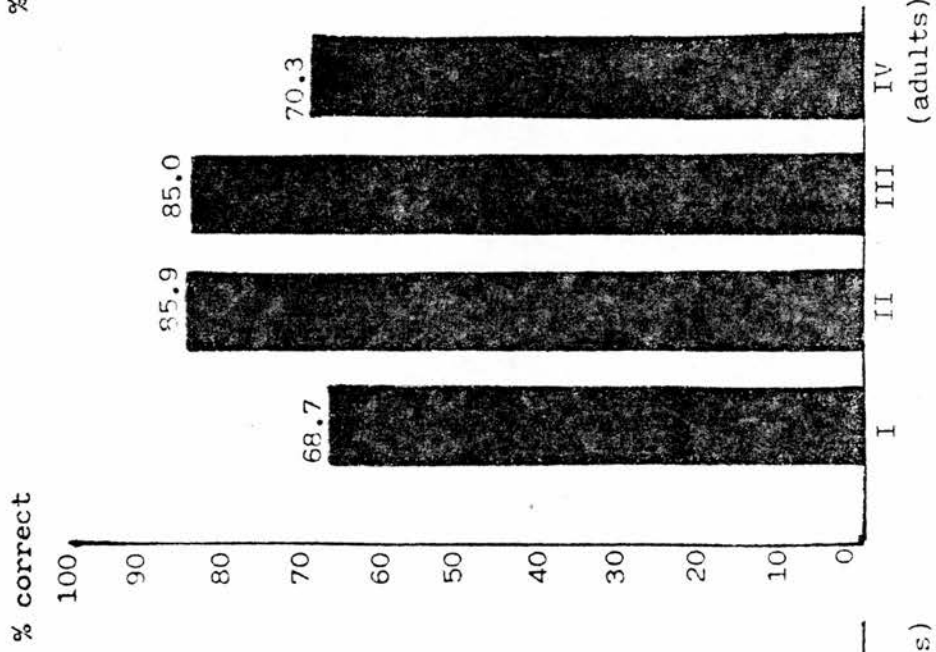

TABLE I – Group I drawings
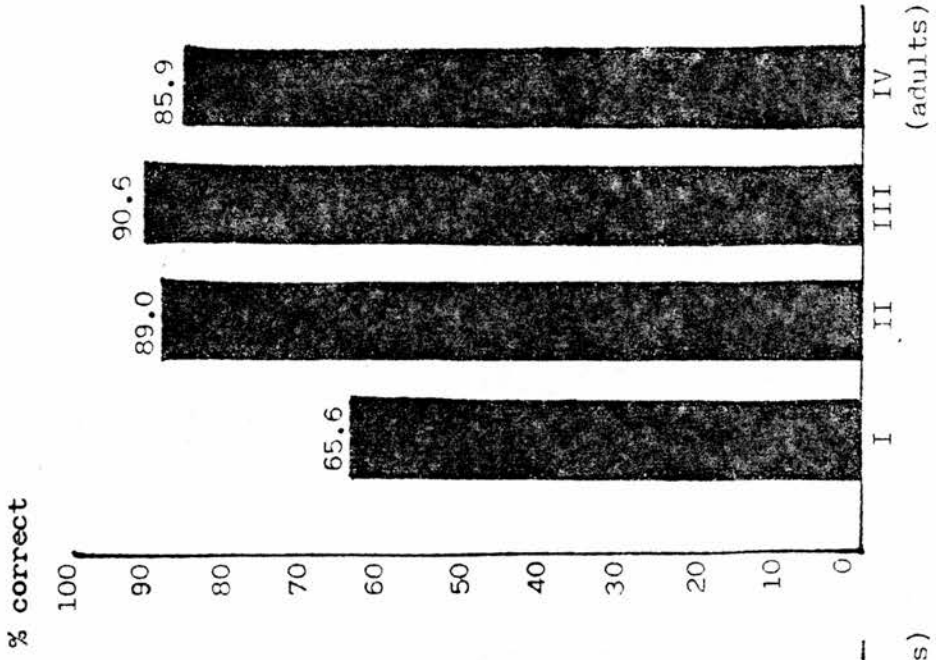
TABLE II – Group II drawings

TABLE III – Group III drawings

had 45.3% correct answers. (See table I) Criteria most
commonly used for evaluation by all groups was hair length
and clothing, but each group had its own secondary criteria
as well. When asked to go beyond 'short hair + trousers =
male, and long hair + skirt = female,' the youngest children
would cite physical characteristics, e.g., "It's a man be-
cause it has legs," or give idiosyncratic reasons to justify
their gender attributions. Young children were also the most
likely to give tautological reasons - "It's a woman because
it is," or answer "I don't know" to my request for a reason.
This was entirely consonant with Kessler and McKenna's find-
ings.Children in groups II and III used different secondary
criteria, and would use the size of the figure and the colours
it was wearing to support their attributions. Adults, on
the other hand, would fall back on size, shape, and 'psycho-
logical characteristics' of the figures to justify their
responses. Answers such as "It's a man because he looks
aggressive," or "It's a woman because she looks happy"
were not uncommon. Adults would also give reasons based
on the absence of these cues, such as "It's a woman because
she isn't wearing anything that looks like trousers."

It is interesting that although the adults were using
different and much subtler criteria than the youngest chil-
dren, they gave the same amount of correct responses. It is
also interesting that all groups tended to 'see' more in
the group I drawings than would appear to be there. The
youngest children would look at a set of lines and call them
trousers (see example 2), thereby justifying a male attri-
bution, groups II and III would look at what appeared to be

a meaningless scribble and call it a woman "because of the
long hair," (see example 3) and adults would endow the draw-
ings with emotional or psychological characteristics. Are
we to treat these answers as responses to the 'demand char-
acteristics' of the experiment? As subjects' attempts to
please me as the researcher by 'acquiescing in the bizarre'?
Or were the subjects perhaps trying to put themselves in
the place of the group I 'artists' and respond as they
thought those children would? These questions will be taken
up in the discussion.

Looking at the results of all groups judging the group
II drawings (see example 4 for a representative set), we
see a substantial rise in accuracy for all age groups.
(See table 2) Group I has risen to 68.7% correct, group II
has 85.9% correct, group III 85.0% correct, and the adults
have 70.3% correct answers. On the whole, the drawings are
more identifiable as people, as children of this age have
greater representational skill, and more often than not
draw clothing on their figures. Not surprisingly then, the
reasons given most often by all groups judging this set of
drawings concerned clothing, followed in frequency by hair
length or style. Older children and adults used size as a
secondary reason, and youngest children would occasionally
cite physical characteristics if pressed for a more detailed
justification.

Again, most answers were along traditional stereo-
typic lines - male attributions were made if the figure
seemed large and had short hair and trousers, while female
attributions were made if the figure was seen to have a

skirt, long hair, and ribbons or earrings. These results
indicate that ability to represent gender clearly in draw-
ings increases with the age of the child, as does the abil-
ity to correctly attribute gender to one's own and others'
drawings. One curious result has emerged, however, con-
cerning the results of groups I and IV - there is no sig-
nificant difference between the percentage of correct
answers given by both. Notice also that in judging the
group I drawings, the adults and group I children again had
a similar percentage of correct answers. Are the adults
and youngest children sharing some criteria for attributing
gender?

The results of all groups judging group III drawings
are much as one would expect. (See example 5 for a repre-
sentative set of drawings, and table 3 for results.) The
children in group I had 65.6% answers correct, group II had
89.0% correct, group III had 90.6% correct, and the adults
gave correct answers 85.9% of the time. Looking at the
drawings, it is easy to see why recognition scores are so
high - by the time they are eight or nine years old, vir-
tually all of the children are able to draw figures that are
recognizably human. Beyond that, children of this age are
putting more detail into their drawings, and all the figures
are clothed 'appropriately.' Predictably, the reasons given
by subjects when judging this group's drawings concerned
clothing, hair, and other specifically masculine or feminine
details in the drawings, such as hair ribbons and earrings
for females, and hats and eyeglasses for the males. On the
whole, subjects seemed most sure of their answers for the

group III drawings, and were less likely to 'see' more in the drawings than was immediately apparent. This might be because the presence of more obvious or 'standard' gender cues made the attributions seem easier or more straightforward, and the subjects, having objective 'good reasons' for their attributions, didn't need to look further or make inferences to justify their responses.

So although the results of this study did not show the clear differences in correct judgements obtained in the Kessler and McKenna study, similar trends emerged. For example, reasons given by the subjects were virtually the same in both studies, and showed the same variations with age. The group I children gave the most idiosyncratic answers and were more likely to say 'I don't know' than the other groups, while groups II, III, and IV cited hair and clothing as primary cues, confirming the data already collected by Kohlberg (1966) and Thompson (1975). Adults were again found to endow the figures with psychological characteristics. Both sets of results raise a number of questions for further study.

Discussion:

Children's drawings have been used as a basis of study for a number of psychological research projects, and can provide valuable information about the way children view the world. In a drawing, "the child will select and represent the characteristic or essential features of the object in question," (Goodenough, 1926) thus the finished picture is an example not only of the child's representational ability,

but his or her capacities for discrimination.

This is particularly important in the study of gender attribution, where one is interested in selective perception. It is possible to hypothesize that in a drawing of a woman or man, the child will select and portray the features she/he deems most salient to gender identification. Likewise, the reasons given for a particular gender attribution should reflect the qualities each child perceives as important. This appears to be the case, and reasons for gender attribution do vary according to the age of the child. The differences in types of reasons given have already been enumerated, but how are we to interpret subjects' tendencies to 'see' skirts or trousers in seemingly unrecognizable drawings? This happened most frequently when subjects judged the group I drawings, where admittedly the style of the drawings left much to the judges' imaginations, and gender attribution was difficult. It is interesting that all subject groups tended to endow those drawings with characteristics which would not necessarily be objectively verifiable. Interesting, too, that the youngest children would 'see' skirts and trousers or a setting for the figure, while older children 'saw' hair length, and adults 'saw' different facial expressions or psychological features. This does indicate that different age groups use different criteria for attributing gender.

However, can it be assumed that 'what is said is what is meant,' or that the criteria children say they use is what they are actually using? Both Donaldson (1978) and

Kessler and McKenna (1978) have called attention to the fact that young children - indeed, many experimental subjects, regardless of age - will respond to the demand characteristics of a research situation and will give answers which they think will please the researcher. It is possible that in this case, subjects looking for a 'good reason' to justify their gender attributions found none, and resorted to tried and true social signs of gender. Judgement of the drawings is of course subjective, and it would be difficult to argue with any interpretive attribution a subject wished to give. Fortunately, the consistency of responses given within and between subject groups argues against the premise that subjects were finding no cues to support gender attributions and were giving responses which they thought would be acceptable to me as the researcher.

Are these reasons given to justify gender attributions necessarily indicative of the types of cues utilized in everyday gender attribution? As far as skirts, trousers, and hair length go, common sense tells us that these are not totally reliable indicators of gender. Increasing androgyny in the fashion world undermines the reliability of these formerly 'surefire' cues. Could it be that there are levels of gender cues used by each person when she/he makes a gender attribution? If clothing and hair cues yielded no conclusive information with which to make a gender attribution what would a person resort to next? Posture, or way of moving, as Birdwhistell would suggest? Voice? Facial 'type?' Or something more indefinable, something which researchers have not stumbled onto yet?

We may also ask if a process of gender attribution used by an adult would also be used by a child. Thompson and Bentler (1971) have suggested that many cues used by adults have no sexual salience for children, and the present study indicates that social cues used by adults may not be perceived as important by children either. When and how does a child internalize the socially constructed signs of gender? Does the child mature into and out of these cues, as Birdwhistell has hypothesized? There is some evidence to indicate that very young children use movement as a means of discriminating between females and males (Aitken, 1977), and work currently being undertaken by Jackie Kujawski at Edinburgh University has supported this theory, as well as offered support for the claim that facial expression may play a part in gender identification.

Finally, it seems as though in the event that socially agreed upon gender cues do not supply enough information for a gender attribution, the child will resort to more personalized criteria. Once agreement has been reached among a number of cues, the attribution will be made, and interaction can proceed on a meaningful level.

In sum, the evidence gathered thus far indicates that criteria for gender attribution do seem to vary with age, and that clothing, hair length and general physical size are the most acceptable - that is, most frequently used - types of 'evidence' for attributing gender. Whether one considers the representation of women and men in drawings, or the reasons given to justify a particular attribution, differences do emerge along age-segregated lines. There

is also evidence to support the argument that gender cues work in a gestalt fashion; respondents rarely gave just one reason to support a gender attribution, but often cited two or three. There are also indications that a basis of comparison is useful in making gender attributions. This fairly obvious point was illustrated quite clearly when subjects were presented with the complete set of drawings, and asked to re-attribute gender. In the paired presentation, the rate of accuracy rose considerably, and subjects took far less time to make the attributions. Perhaps two drawings provided more information about the artist's perceptions of men and women, thereby making attribution less difficult.

Overall, then, the findings of this study echo those of Kessler and McKenna's work. Great similarities have been found in the types of drawings gathered from each group of subjects and the reasons given by the various age groups. Interpretations of the results agree as well: Kessler and McKenna are no doubt accurate in stating that the reasons given by the youngest children are not gender cues as such, but illustrative of the attempts of the children to be methodical in their efforts at gender attribution. Their explanation is as follows:

> Giving reasons is not the same as making a
> gender attribution. It may be that adults
> and older children could have made more ac-
> curate gender attributions than they did to
> the pre-school and kindergarten (group I)
> drawings, but not finding anything in the pic-
> ture that could serve as a 'good reason' they
> assumed they did not know the gender. The
> youngest children may not have been concerned

with 'good reasons,' not yet sharing in the
adult construction of reality, and thus were
not afraid to say 'I don't know why it's a
man,' or 'It's a man because I say it is.'

One is tempted to take this interpretation one step
further and say not only that the reasons show the children
being methodical, but that the different types of reasons
may be used to illustrate the development of concepts of
appropriate gender cues. The reasons given and the draw-
ings may indicate the criteria which are particularly rele-
vant to a child at a particular point in his or her de-
velopment.

Study Two: Gender Perception in Children

To explore this idea further, and to obtain more know-
ledge about children's perceptions of gender and gender
roles, I decided to conduct a second study. Realizing that
the drawings themselves may have constrained, or in some
sense directed the children's answers, I opted for an open-
ended interview, so that this time the children would have
as much freedom as possible to talk about what they saw as
relevant points with respect to gender and gender roles.
It was at this stage that I also decided to concentrate on
the older children in my subject group. The type of inter-
view I had in mind would not have been very comprehensible
to a child younger than five years of age. In this inter-
view, I wanted to explore each child's thoughts about being
a girl or a boy, and what they meant to them. What were
the salient aspects of gender, as far as the child was con-
cerned? Did gender carry implications for behaviour? Would
self-descriptions coincide with general descriptions given
by those of the child's own, or opposite, gender? To this

end the following interviews were undertaken.

Method:

Subjects: After obtaining permission to work in a local primary school from the Lothian Region Education Council, a school was selected and all parents of children aged 5-6 years, and 8-9 years were sent notices describing the research project and requesting permission to interview their children. When the positive responses were collected, sixteen children in each age group were selected at random to be interviewed. Eight boys and eight girls were in each group. The children all attended the Broughton Primary School in Edinburgh, and all came from either working class or lower middle class backgrounds.

Materials:

All interviews were tape recorded, using a Sony cassette machine with a built in microphone. This gave quite accurate sound reproduction, and eliminated the awkwardness usually created when a remote control microphone is used. All interviews were later transcribed verbatim.

Procedure:

After the children in each group were selected, I went to all the classrooms and introduced myself, explaining what I was doing at the school. The children were then taken one at a time to a separate room in the school for the actual interview. There the children had the opportunity to experiment with the tape recorder, and the recording level was tested while I chatted to the child about the machine. Each child was then asked about his or her family, or what

was happening in their classroom that day as a means of getting conversation started. When the child seemed relaxed and at ease in the situation, the interview began. Children were asked the following questions, generally in the order they appear below.

Questions:

1) Describe yourself. Tell me about things you like to do, clothes you like to wear, games you play - anything you think will help me to get to know you.

2) Describe a girl. Describe a boy.

3) What is a man? What is a woman?

4) Are girls different from boys? How are they different?

5) What are you? How do you know? How do other people know? If you put on girl's/boy's clothes, does that make you a girl/boy?

6) Would you ever want to be a girl/boy? Why or why not? How would you get someone to believe you were a girl/boy if you wanted to pretend?

7) Have you ever seen someone you couldn't say for sure was a man or a woman? What did that person look like? How did you finally decide what the person really was?

It was important that the questions were open-ended and understandable to the child, therefore, the phrasing was sometimes altered. For example, with the 5-6 year olds, I frequently would ask them to think about one specific boy and describe him for me, or to tell me about one girl they knew,

instead of using the standard for question 2. Similarly, for question 7, I would sometimes ask the youngest children if they had ever been walking down the street and seen a person and not been able to tell if the person was a man or a woman? Also, as a means of prodding the children, I frequently would repeat their answers back to them, adding 'anything else?'

Interviews generally lasted for 15 to 20 minutes, and attempts were made throughout to keep the children focussed on the question at hand. Digressions were allowed to continue unchecked only if I thought they would contain relevant information.

Results:

A table of responses to the questions asked, always ranked in order of popularity - that is, frequency of response - follows. In cases where an answer was given two or more times, this is indicated by a number following the response. If no number follows, the answer was given just once.

Looking at the responses of the 5-6 year olds first, and beginning with the descriptions they gave, it is immediately obvious that appearance terms and activity terms dominate their descriptions. People are described in terms of how they look and what they do. There are very few terms used to describe either their own personalities, or those of the girls or boys they were asked to describe. The one exception to this is that a few boys said that 'girls argue,' and a few girls said 'boys are rough.' One notices

RESPONSES FROM 5 - 6 YEAR OLDS

Girls' self descriptions

N = 8

I:
- like to play with girls {7}
- wear skirts and dresses {7}
- play games (5)
- sometimes play with boys (4)
- wear trousers (2)
- ride bikes (2)
- like to paint (2)
- like to read
- like school
- am clean

Girls' general descriptions of girls

Girls:
- wear skirts and dresses (7)
- wear trousers (3)
- have long hair (2)
- have nice clothes (2)
- help each other
- wear shoes with buckles
- play with dolls
- are chased by boys
- are pretty
- are sweet
- are gentle
- are clean

Boys' self descriptions

N = 8

I:
- play with boys (6)
- wear jeans/trousers (5)
- like games (3)
- like to ride bikes (2)
- play with cars
- play with trains
- wear football stripes
- play with girls
- like to play outside
- play with the cooker and iron
- don't play with girls
- wear T-shirts

Boys' general descriptions of girls

Girls:
- wear dresses and skirts (5)
- have long hair (5)
- wear trousers (3)
- play with cookers, irons (3)
- don't wear trousers (2)
- play in the house
- have short hair
- play school
- wear tights
- play with girls
- grow up and get married
- argue

RESPONSES FROM 5 - 6 YEAR OLDS

Girls' general descriptions of boys

N = 8

Boys:

```
wear trousers    (8)
have short hair  (3)
are rough        {2}
are dirty        {2}
wear shoes with laces
don't help you
play with cars
can be mean
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Boys' general descriptions of boys

N = 8

Boys:

```
wear trousers    (5)
have short hair  (5)
wear jumpers     (3)
don't play with dolls
wear shorts
have curly hair
go to speedways
grow up to be men
play superheroes
play football
go fishing
play with boys
```

N = 16 for the following questions.

3) What is a man/woman?

Don't know (8)

A man is:

```
a grown up boy  (5)
someone who works  (2)
a person who has short hair
a person who wears trousers
```

A woman is:

```
a grown up girl  (4)
a lady           (3)
someone who has babies
someone who does the washing
    and the shopping
```

RESPONSES FROM 5 - 6 YEAR OLDS

N = 16 for the following questions.

4) How are boys and girls different?

They wear different clothes (7)
They have different hair (6)
They're made differently (4)
They play different games (3)
They have different faces (2)
They have different voices (2)
They play with different things
They look different
They are a different style
They are different but have the same faces

5) How do you know what you are?

Boys (N = 8)

I look like a boy
I wear trousers
I have curly hair
Because I am
I don't have a girl's face
I have a boy's name
I have a little man (penis)
I don't know

Girls (N = 8)

I just know (2)
I have a girl's name (2)
I wear dresses (2)
I have long hair (2)
I just am
I'm like my Mummy

6) How do others know what you are?

Because of my clothes (7)
Because of my hair (7)
Because I don't look like a girl/boy (2)
Because I have a boy's/girl's name (2)
By the look of me

They could ask me
By my voice
I tell them
They know what they are and what you are

RESPONSES FROM 5 - 6 YEAR OLDS

7) If you put on girl's/boy's clothes, does that make you a girl/boy?

Yes (7)   No (9)

Why do clothes change you?

Girl's clothes make you a girl, and in boy's clothes you're a boy.

Why don't clothes change you?

Clothes aren't magic, they don't change you
My hair isn't long enough for me to be a girl
Girl's clothes would only be a disguise
Clothes only make you look like a girl
In boy's clothes you'd be pretending
Being a girl or a boy depends on the way you are, not on your clothes

8) How would you get other people to believe you were a boy/girl if you wanted to pretend?

I'd dress like a girl/boy   (14)
I'd have long/short hair   (7)
I wouldn't have pockets   ⎫ to pretend to be a boy
I'd wear a cap   ⎬ to pretend to be a boy
I'd wear shoes with laces   ⎭ to pretend to be a boy

9) Have you ever seen someone and not been sure if the person was a man or a woman?

Yes (3)   No (13)

How did you finally decide what the person was?

By their clothes
By their voice
Because they had a moustache
I looked very closely
With babies you can tell when you change their nappies

RESPONSES FROM 8 - 9 YEAR OLDS

Girls' self descriptions   N = 8

I:
play with girls (6)
wear trousers (5)
like running (3)
like games (3)
like to read (2)
wear skirts (2)
play rounders (2)
play the piano
skip rope
play netball
like art
play with boys
like gymnastics
play chasey

Girls' general descriptions of girls
Girls:
wear skirts (6)
have long hair (4)
play chasey (3)
wear trousers (2)
like sewing
skip rope
can be tomboys
play house
play with dolls
wear tights
play rounders

Boys' self descriptions   N = 8

I:
wear jeans/trousers (8)
play with boys (8)
play football (5)
play chasey (3)
play rounders (2)
play with girls sometimes (2)
like to ride bikes
play badminton
play pool
like to run
play soldiers

Boys' general descriptions of girls
Girls:
wear skirts (6)
have long hair (4)
skip rope (4)
play with dolls (4)
wear trousers (3)
play chasey (3)
play rounders (2)
play house
go to discos
wear bright socks
talk a lot
argue
are sulky

RESPONSES FROM 8 - 9 YEAR OLDS

Girls' general descriptions of boys N = 8

Boys:

wear trousers (5)
have short hair (5)
play football (5)
play spaceships
do hard jobs
fix cars
run faster than girls
are better at games than girls
get more rows than girls
are sometimes smarter than girls
play rough games
get dirty
are rough

Boys' general descriptions of boys N = 8

Boys:

wear trousers (5)
run about more than girls (3)
have short hair (2)
play with Action Men (2)
can be fathers
play pool
climb rocks
like cars
play soldiers
play chasey

N = 16 for the following questions.

3) What is a man/woman?

A man is:

someone who works to get money for
the family (5)
big (3)
someone who wears trousers (2)
someone with short hair (2)
someone who marries a lady (2)
a father (2)
the opposite from a woman
a person
built differently from a lady
someone with a beard

A woman is:

a grown up girl (5)
someone who wears skirts (3)
a person (2)
a mother (2)
the person who looks after the
family (2)
the person who cooks and goes
shopping (2)
someone who marries a man
someone who wears make-up and
high heels

RESPONSES FROM 8 - 9 YEAR OLDS

N = 16 for the following questions.

4) How are boys and girls different?

They do different things (13)
They have different clothes (11)
They look different (5)
They have different faces (5)
They have different hair (4)
They talk differently (2)
They have different natures (2)
They're made differently

5) How do you know what you are?

Boys (N = 8)
I have a boy's face (2)
I'm made different from a girl
I'm stronger than a girl
I just know
My mother told me
I don't know
I was born a boy
I like boy's things
I have a boy's voice

Girls (N = 8)
I wear girl's clothes (2)
I don't know (2)
The doctor told me
I just know
I have my hair in bunches
I have a girl's name
My mother told me
I have a different nature from boys

6) How do others know what you are?

By my clothes (10)
By my hair (8)
By my face (6)
By my voice (3)
I have a girl's/boy's name
I look different from a girl/boy
They look at the games I play

RESPONSES FROM 8 - 9 YEAR OLDS

7) If you put on girl's/boy's clothes, does that make you a girl/boy?

No (16)

Why not?

If you're born a boy/girl, you'll stay a boy/girl (7)
Clothes can't change you, it is only pretending (5)
In boy's/girl's clothes, you only look like a boy/girl, you aren't really one (4)

8) How would you get people to believe you were a girl/boy if you wanted to pretend?

I'd dress like a girl/boy (15)
I'd change my hair (7)

Pretending to be a girl: Pretending to be a boy:
I'd wear make-up (3)   I'd carry a football
I'd change my voice   I'd play football
I'd wear high heels   I'd act like a boy
                                         I'd play rough games

9) Have you ever seen someone and not been sure if the person was a man or a woman?

Yes (12)   No (4)

How did you finally decide what the person was?

They had a moustache (4)
I never found out (4)
By their name
I looked at their make-up
I asked the person
They had a man's hands

also that idiosyncratic answers appear frequently.

Breaking down the results to make various comparisons, we notice first of all that with the exception of clothing differences and differences in who they say they like to play with, there are no glaring differences in the most popular items in the girls' self descriptions and the boys' self descriptions. Individual differences in activity preference emerge further down the list, and stereotypical girls' or boys' activities begin to appear.

Comparing both groups' general descriptions of girls, we find they agree on appearance, in that skirts and trousers are both acceptable. Having long hair ranked higher in the boys' description than it did in the girls.' Interestingly, the girls tended to use more 'dispositional' terms describing girls than the boys did - pretty, sweet and gentle showed up in the girls' list, while the boys remained focussed on activities - girls play in the house, play school, or grow into women and get married. Again, among the most popular items, we find no substantial disagreement.

Looking at the general descriptions of boys, on matters of appearance, both agree - boys wear trousers and have short hair. The difference in use of dispositional and activity terms shows up here, too. Girls say that boys are rough, mean, and that they don't help you, while boys focus on activities in describing boys - they play superheroes or football or go fishing. Again the descriptions are not so radically different between the two groups. They tend

to dovetail, revealing a difference in focus, rather than a substantial difference in attribution of qualities.

Between the two sets of self and general descriptions, again we find no major disagreement. Although somewhat different activities are cited in the self and general descriptions given by the girls and boys, this could reveal a desire not to repeat themselves, or it could simply be a response to the way the questions were asked. Most importantly, though, there are no major contradictions in the way the children see themselves and their gender groups.

Finally, looking at the self descriptions of the girls and the general descriptions of girls given by the boys, and vice versa, we find, not surprisingly, that the self descriptions contain more information about girls or boys than do the general descriptions. In both cases, although the same activities were not mentioned in the self and general descriptions, similar activities were mentioned by both boys and girls. It is doubtful that either the girls or the boys would find much to disagree with in the others' general descriptions of the appearance or activities of their gender.

For the third question, almost half the children gave no answer at all, which tends to indicate to me that the questions did not make much sense to them. However, among those who did answer, the most popular response was 'a grown-up girl/boy.' Other responses focussed on the way men and women looked, or what they did. Interestingly, the roles seen as appropriate by the children are very stereotypic - a man goes to work to get money, while a woman has babies

and looks after them, and does domestic chores.

All of the children felt boys and girls were different, and when asked how they were different, the most popular answers were that girls and boys have different clothes and different hair length. One-quarter of the children said that boys and girls were 'made differently,' although they did not expand on this. After these most frequently given answers, the children focussed on the different activities pursued by girls and boys, and returned to physical differences, citing different faces and voices. A few idiosyncratic responses are also evident here, as elsewhere - 'girls and boys are a different style,' and 'girls and boys are different, but they have similar faces.'

Not surprisingly, all of the children knew what they were, but their ways of knowing this were quite varied. Rarely were answers repeated within a group, though similarities emerged between groups. The various types of reasons are interesting to consider in terms of the reasoning involved - does it display the same level of thought to say 'I'm a girl because I am' as it does to say 'I'm a boy because I have a boy's name,' or 'I'm a girl because I'm like my mummy?'

Regarding the ways in which other people could tell if the child was a girl or a boy, again the most frequently given answer was because of the child's clothing or length of hair. After those responses, the answers were fairly idiosyncratic, perhaps representing the children's attempts to please me as the interviewer.

With respect to the question about gender constancy, it

is important to note the problems that arise in the investigation of this topic. Henshall (1980) and others have demonstrated quite persuasively that perception of gender constancy in young children is heavily dependent on the type of task used to investigate the topic, and the way in which questions about gender constancy are framed. With this in mind, it is difficult to separate out the extent to which the answers I received were influenced by the way in which I approached the topic. I found that just under half of my subjects believed that wearing clothes of the opposite gender would cause them to change gender. The reasons given were 'girl's/boy's clothes make you a girl/boy.' This is certainly consistent with all the earlier answers given in which clothing and hair length were seen as defining features of a girl or boy, but takes no notice of the fact that both girls and boys considered it appropriate for girls to wear trousers and jumpers - 'boys' clothes.' For the slight majority who believed that wearing clothes of the other gender didn't cause one to change, the reasons given tended to run along the lines of 'You're only pretending if you wear girl's/boy's clothes,' or 'Clothes aren't magic, they don't change you.' Clothes were referred to as a potential means of disguise, as a means of making you _look_ different without actually _being_ different. Finally, as one child noted, 'Being a girl depends on the way you're born, not on your clothes.' I did find it interesting, though, that two children cited inappropriate hair length as a reason why clothes wouldn't cause a change in their gender. Why they should focus on hair

length instead of something else is somewhat of a mystery, although it is consistent with the most popular defining features of a girl or boy given earlier.

None of the children wanted to change gender, but if they were to pretend to do so, they would alter their appearance - clothing and hair length.

Three-quarters of the children had never seen a person they couldn't identify as male or female, but of the quarter who had, they said they were eventually able to guess the person's gender by 'looking very closely,' by discovering the person had a beard or a moustache, or by listening to the person's voice. One little boy reported that you could never tell what babies were just by looking at them, you had to see when you changed their nappies.

Turning now to the responses given by the 8-9 year olds, again a table of results follows, presented in the same way as before. Generally speaking, we notice again that the most popular answers center on what the children wear, and who they play with in the descriptions they give. As noted before, this could be partly due to the way in which I asked the questions. In the self descriptions, there is a distinct lack of dispositional terms - references to personality - but the range of activities cited by the girls and boys is fairly large. In the general descriptions, clothing and hair length are once more cited as gender defining features, and activities are very important in the descriptions. Interestingly, comparisons begin to enter into the general descriptions, i.e., boys are described as rougher and faster than girls, among other things.

Beginning the comparisons by looking at the girls' self descriptions and the boys' self descriptions, we notice that there is still a marked segregation of playmates, although both boys and girls do say that they play with members of the opposite gender. In the self descriptions, clothing differences aren't as apparent as one might think - both say they usually wear trousers, and wearing skirts hardly figured at all in the girls' self descriptions. Activities play a large role in both self descriptions, with football being the most popular for boys, and the girls volunteering a wide range of sport preferences. Overall, the differences between the two sets of self descriptions aren't so vast that a naive reader would immediately be able to discriminate between the two lists.

Comparing the two general descriptions of girls, it emerges that, although by a small margin, the most frequently given responses were that girls wore skirts and had long hair. Odd that it should surface here and not in the self descriptions. Second, there is a marked lack of dispositional terms in the descriptions, none at all in the girls,' and only two - that girls are sulky and argue - in the boys' descriptions. We find lots of agreement in the activities each group cited, though. Playing house, playing with dolls, skipping rope and playing rounders are popular answers given by both girls and boys. In general, there is no major disagreement between the two general descriptions. The differences that do emerge I would think are largely the result of individual preference rather than markedly different perceptions of the way girls look and behave.

Looking at the general descriptions of boys, there is complete agreement on their appearance, that they wear trousers and have short hair, and agreement on boys' favourite activity - football. There are again many activity terms, and most are fairly stereotypically masculine. There is also an absence of dispositional terms, as noted before, with the exception of some girls describing boys as 'rough.' One particularly interesting thing appears in these descriptions - terms of comparison, with a few girls noting that boys are faster, better at games, and sometimes smarter than them. Whether this reveals individual quirks in giving descriptions, or a general trait of that age group, though, cannot be deduced from the information at hand.

Some interesting differences come to light when the girls' self descriptions are compared with their general descriptions of girls. First, they tended to give a bit more information in the self description than in the general description, although this could be expected. What wasn't expected, however, was the change in the way they described their appearance. While in the self descriptions, the majority of girls said they wore trousers, when describing girls in general, they said girls wore skirts. Hair length, which didn't appear in the self descriptions, did appear in the general descriptions. In keeping with this slight shift toward the stereotypically feminine evidence in the general descriptions, we find that the range of sports cited by the girls in their self descriptions is not mirrored in the general descriptions, replaced in part by the more traditional pursuits of playing house and playing with dolls. Finally,

it may be noted that if the more obvious gender cues such
as 'wears skirts' and 'plays with girls' were taken out of
both descriptions, one would not necessarily view the self
descriptions as girls', while one would be much more likely
to view the general descriptions as applicable to girls.

Comparing the boys' self descriptions with their general
descriptions of boys, we do not find the same discrepancy
which appeared in the girls'. Here, there are no major dif-
ferences between self and general descriptions; appearance
and activities cited are roughly the same. Both descrip-
tions tend toward the stereotypically masculine, in contrast
to the girls' descriptions, where the general descriptions
held many more traditional feminine attributes. Finally, as
previously cited, terms of comparison emerge in the general
descriptions that do not appear in the self descriptions.

Looking at the girls' self descriptions and the boys'
general descriptions of girls, a few differences arise. First,
the range of sports the girls included in their self descrip-
tions is not repeated in the general descriptions given by
the boys. Second, it turns out that more boys think girls
wear skirts than the girls report in their self descriptions.
Third, we notice that traditional feminine pursuits such as
playing house or playing with dolls, that figure in the boys'
general descriptions do not appear in the girls' self de-
scriptions. Lastly, the dispositional terms used by boys to
describe girls do not have a place in the girls' self descrip-
tions.

Finally, comparing the boys' self descriptions and the

girls' general descriptions of boys, there is a general
agreement. Wearing trousers and playing football were popu-
lar responses from both groups. We notice next, as before,
that the comparative terms which appear in the girls' gen-
eral descriptions are not in the boys' self descriptions, and
also that while girls refer to boys as rough or dirty, or
as being capable of doing hard jobs, the boys applied none
of these terms to themselves.

Looking at the question 'what is a man/woman?', there
are almost as many different answers as children responding.
Where there was any consensus, it was very slight, with only
a quarter (or less) of the children giving the same re-
sponse. Thus, for a man, the most popular definition was
'he's someone who works and gets money for the family.' For
a woman, the most popular definition was 'a grown up girl.'

All of the children felt boys and girls were different,
and the most frequently given response was 'they're different
because they do different things.' After this, the most
frequently received answer was 'they're different because
they have different clothes.' Other answers concerned
'looking different,' or 'having different faces.' It is
worth noting that approximately half of the children re-
ported that although there were some differences between
girls and boys, they were basically the same. As one girl
put it, 'Boys and girls may look different, but we're really
all just people.'

Not surprisingly, all of the children knew what they
were, and as before, their ways of knowing were quite varied.

Answers ranged from 'I wear girls' clothes,' to 'the doctor told me,' to 'I have a different nature from boys,' to 'I'm made differently from a girl.' As noted earlier, these answers seem to display different levels of sophistication of reasoning.

When asked how other people knew what they were, the most popular answers concerned clothing, followed by hair length, and then faces. This is not substantially different from the answers given by the 5-6 year olds.

None of the older children were in any doubt about gender constancy, which is not especially surprising. The general feeling was that if you're born a boy or girl, you'll stay a boy or girl, and that if you put on the clothes of someone of the other gender, you'd be pretending. A few children volunteered the information that if you really wanted to change, "the doctor could do something."

Asked how they would pretend to change gender, most children said they would wear girl's/boy's clothes, and alter their hair length. Boys pretending to be girls would wear make-up and a wig, while girls pretending to be boys would 'act like boys,' playing football and climbing trees.

Most of the children had seen someone they couldn't readily identify as male or female. Some means of identification cited were noticing facial hair when the person turned around, hearing the person's name, and looking at his/her hands. It was also common for the children to remain in the dark about the gender of the person.

Discussion:

What do children see as salient aspects of gender?
What, to these children, are the defining features of a boy
or a girl, and what are the important differences between
them? The results of this study give us some clues, but
raise more questions in the process.

To begin, and combining the responses of all the chil-
dren, we find that the children think that girls can wear
skirts or trousers, and have long hair or short hair. They
can play with girls or boys, and they play a variety of
sports, e.g., netball, tennis, or rounders. They also like
to play in the house, and play with dolls, and can be gentle
and sweet. On the other hand, boys usually wear trousers
and usually have short hair. They can play with girls or
boys, and also like various sports, e.g., football, running,
and rounders. They like to play outside or play with Action
Men, and they can be rough. The children's descriptions and
the things they cite as defining features in each case are
not as different as one might expect. Nor are they as rigidly
prescriptive as earlier studies might lead one to believe.
The degree of overlap between the two sets of descriptions
is heartening, and may perhaps be taken as a sign that tra-
ditional gender roles and stereotypes are beginning to lose
some of their force. On the other hand, it may mean that al-
though these children can acknowledge stereotypes, they don't
play a large role in the way each child constructs gender.

When we consider the answers the children give regarding
the way in which girls and boys differ, and the ways in

which they know and others know what gender they are, we begin to see some interesting trends emerging. As far as the major differences go, the children are, not surprisingly, focussing on appearance and activities, as they have throughout the interviews. Hence boys and girls wear different clothing, have different hair styles and hair length, and they do different things. Boys and girls also 'look' different, have different faces, and are made differently. These answers begin to reveal various levels of sophistication of thought about gender, a point which we will consider later on in this section. Interestingly, the same trend emerges when we consider the responses they gave to the questions 'how do you know what you are,' and 'how do other people know what you are.' Here, there is a definite hierarchy of reasons appearing, ranging from the wearing of gender specific or appropriate clothing, to having an appropriate face or voice or name for one's gender, to having the appropriate biological signs of one's gender - being born a girl or a boy.

It is here that we begin to see what functions as 'acceptable evidence' for a gender attribution among children, and it is well worth noting that this acceptable evidence seems to follow some sort of developmental sequence, with different age groups holding different cues in positions of importance. It is unfortunate that the children were not pushed a bit further on this question, and asked to deal with the contradictions in their statements. For example, most children said clothes were a useful means of discrimi-

nating women from men, and although this is true to some extent, there is a great overlap in dress between women and men which goes toward rendering clothes cues unreliable.

It would have been interesting to pursue this point to see what sort of cues the children would eventually come to hold as totally reliable indicators of gender. On the other hand, perhaps the fact that none of the children raised this problem themselves indicates that they do view clothing as a reliable cue, and perhaps among children of their age, it is. Then, too, they might have intended to refer to a man or woman's entire outfit, in which case shoes, handbags, and jewelry would provide much more useful information for a gender attribution.

To turn to the differences we find emerging between the 5-6 year olds and the 8-9 year olds, these results do not, on the whole, support the findings of earlier studies in perception. According to Rogers (1978), the young children should use egocentric terms in their descriptions, such as 'boys hit me,' while the older children should use more dispositional terms, e.g., 'boys are mean.' The descriptions given by the youngest children should also show greater use of concrete terms, terms of size, appearance, or clothing, for example, than those of the older children, who ought to be using more abstract terms. Rogers also writes that the descriptions of the young children will lack qualifiers and be univalent, again trademarks that should begin to disappear when the child passes the age of about 7 or 8.

Crucial to Rogers' line of argument is that children's descriptions of people represent not only their perceptions of the important features of others, but that the descrip-

tions contain information which the child has judged to be useful in making predictions about the behaviour of others. Thus, as the child matures and is better able to extract and process information from the world, descriptions become more sophisticated, and by inference then, the child's ability to predict the behaviour of others will have matured as well. While this hypothesis may hold for some aspects of person perception, I don't believe it may successfully be applied to the study of gender perception, for the simple but important reason that gender appears to function as both a concrete and a dispositional term to these children, and in itself potentially carries much more information about a person than terms such as 'tall' (concrete) or 'good-natured.' (dispositional) If indeed these descriptions show that children are trying to make behavioural predictions, there is a whole set of socially acceptable predictions or expectations which would open up once the gender of a person is established. To the extent that children share in the social knowledge about gender that we all possess, then perhaps they feel that after defining the gender of a person, the use of other dispositional terms is to some extent unnecessary, at least within the context of these interviews.

To look at the results I have obtained, however, it becomes clear that the answers given by each age group are much more similar than they are different. On the whole, as one would expect, the older children gave more detailed replies to each question than did the younger ones, but in content,

none of the answers to any question were so radically different between groups. Looking at the descriptions given, they all tend to focus on appearance and activities, what Rogers would call concrete terms, and very few dispositional terms emerge in any of the descriptions. It must be noted, however, that my comments above regarding gender as a concrete and a dispositional term, that the lack of dispositional terms here may have been influenced by the way in which I asked the questions, at least by the way I asked for self descriptions. Then, too, my focus on gender may have driven out thoughts of other terms the children might have used to describe people. The differences between the age groups which do emerge in the descriptions, though, are that in the general descriptions given by the 8-9 year olds, comparative terms appear, and marked differences appear between the 8-9 year old girls' self descriptions and their general descriptions of girls, which are not matched in the descriptions given by the 5-6 year olds. These divergences will be discussed later.

Moving onto the other interview questions, again, very few glaring differences emerge. For question 3, 'what is a man/woman?', both groups see similar roles as appropriate for women and men, and the answers given by the 5-6 year olds are generally echoed and extended by the older children. This, one supposes, could reveal the extent to which both sets of children have become sensitized to the social roles deemed suitable for women and men, or as these children all come from similar backgrounds, perhaps it is this homogeneity we see reflected in their responses.

In questions 4 and 5, differences do emerge, as each group of children tends to focus on different aspects of the differences between boys and girls, and they do have different 'ways of knowing' what gender they are. This is a very interesting point, and although it has been taken up earlier, it will be touched on again in a later section of the discussion.

For the questions dealing with gender constancy, between those 5-6 year olds who had no doubts about remaining female or male, and the 8-9 year olds, none of whom had any doubts, the reasons given were again fairly similar. Both groups referred to a change of clothing as a means of pretending you were a boy or a girl. The 8-9 year olds extended this, however, and gave reasons such as 'if you're born a boy, you'll stay a boy.' Again, this may reveal different levels of reasoning about gender, as noted earlier. As for changing gender, none of the children would wish to, but if they were to pretend, again both groups answered similarly, saying they would alter their appearance and activities.

For those who had seen a person not readily identifiable as a male or a female, the 'ways of finally deciding' were very similar. Both groups cited the presence of facial hair as a giveaway, and also cited the person's voice. Again, the 8-9 year olds gave more answers, and more specific answers to this question than did the younger children, but one would expect this.

Given the many similarities in the content of the answers

given by both sets of children, we must ask why this study did not obtain the marked differences in responses that other person perception studies have? Certainly a few differences have emerged, and throughout it is obvious that the older children have a better command of the situation and have volunteered more information than the younger children. Their greater verbal sophistication is very evident. In overall content, though, the responses are not strikingly different, and two main reasons for this come to mind. The first is that the style of these interviews does not allow the children free enough rein to generate the dispositional terms which Rogers and others say should be appearing. My continuing focus on gender may have led the children away from thinking about other aspects of their personalities.

Second, as I have mentioned before, gender holds a slightly odd place in person perception literature. For so long it has been taken for granted that gender attribution poses no problems, and because it seemed such an obvious and straightforward attribution to make, it escaped the notice of researchers looking for more esoteric topics of study. Thus, gender perception has unfortunately been taken for granted in the person perception literature. But gender does have an odd status; while on the one hand we are born and exist as females or males, with gender as a biological 'given,' gender is also a social construction, an 'achieved status,' as Garfinkel (1967) noted. In other words, being a biological male or female is not necessarily the same as being a social male or female. Moreover, as mentioned

earlier, gender functions as a concrete and a dispositional term at the same time; not only does it describe what one is, to a certain extent gender may be used - although not too effectively - as a predictor of personality traits or behaviours. Certainly the children in this study have used gender to predict appropriate activities, and with no small degree of inter and intra group agreement. Perhaps then, gender has taken the place of other dispositional terms, and is being used as a sort of shorthand term for describing people.

Moving along, let us now take up a point raised earlier, the difference noticed between the 8-9 year old girls' self descriptions and the general descriptions of girls they gave. As noted in the results section, the general descriptions show a slight trend toward the use of more stereotypically feminine terms than do the self descriptions. It is conceivable that one might not immediately guess the girls' self description belonged to the girls, but it is much less likely that one could mis-attribute the girls' general description. The questions we must ask, then, are why is this divergence appearing, and why is it only showing up in this age group, and only among the girls?

One could argue that the younger children are not yet aware of, or do not feel any conflict between what they are themselves and the socially prescribed roles for their gender. Or it could be said that these youngest children aren't thinking in terms of stereotypes at all, but are reporting on the norm in their social situations, a norm with which they feel no conflict. Finally, it could be put forward

that the youngest children do not differentiate concepts of
'self' from concepts of 'girls' or 'boys.' Perhaps, thinking
egocentrically (to use a loaded term) they take themselves
as a model for 'girls' or 'boys' and therefore no conflict
arises. Any of these explanations may be plausible.

So why, then, is the conflict the particular province
of the 8-9 year old girls? Here, one is tempted to guess
that by the age of 8 or 9, the girls are conscious of a
socially acceptable female 'type' which they may or may not
feel adequately describes them. The appearance of the com-
parative terms also argues that these girls are cognizant of
a female type. It might be that the female type as they see
it is much more prescriptive of appearance, behaviours,
and character traits than they would like, and they have,
therefore, rejected the type in their self descriptions, al-
though they would deliver it when asked in a general de-
scription. Perhaps stereotypically feminine qualities such
as they have named are not important to their own sense of
identity as girls. They may be showing us some of the early
fruits of the women's movement - that women now have more
latitude in defining themselves than before and are not re-
quired to adopt current socially acceptable feminine traits
and behaviours. On the other side of the coin, one could
argue that there is so little divergence between the boys'
self descriptions and their general descriptions of boys be-
cause they have traditionally had much less freedom to
experiment with gender inappropriate behaviours or roles than
girls have. For example, it has always been more acceptable

for a girl to be a tomboy and pursue boys' activities, than

for a boy to take up girls' activities. As Hartley (1959)

noted,

> boys are aware of what is expected of them be-
> cause they are boys and restrict their interests
> and activities to what is suitably 'masculine'
> in the kindergarten (ages 4-5), while girls amble
> gradually in the direction of 'feminine' patterns
> for five more years. In other words, more strin-
> gent demands are made on boys than on girls...

This does appear to be the case here, and certainly could

help explain the high levels of agreement obtained between

both 5-6 and 8-9 year old self and general descriptions of

boys.

To conclude and draw the two studies together, a few

main points stand out. First, there has been a remarkable

consistency in the types of answers given - that is, in the

cues cited - throughout the two studies. These studies

lend additional support to the work of Kessler and McKenna,

(1978) Thompson and Bentler, (1971) and Kohlberg, (1966)

among others. Clothing and hair length - appearance in

general - do seem to be of primary importance in the process

of making a gender attribution. In keeping with this, there

has been a notable lack of reference to anatomy as a useful

cue in the gender attribution process. The children in these

studies referred only vaguely to anatomy as a differentiat-

ing feature of females and males, saying things like: "Girls

and boys are made differently."

Why is it that children generally neglect to mention the

physical differences between women and men? A few reasons

come instantly to mind. First, the children may have felt

uncomfortable talking to me about physical differences.
Although they might have been perfectly aware that such dif-
ferences existed, they might have been told by parents not to
talk about them. Then, too, the children might have been
embarrassed by any mention of such private things. Finally,
within the context of the interview, they may have felt no
need to broach the subject of physical differences; other
answers would suffice, and I didn't press them on many
points, as I wanted them to stay comfortable and talkative.

On the other hand, we may consider some points from
previous research. As noted earlier, Thompson and Bentler
(1971) found that many cues used by adults in making gender
attributions had no sexual salience for children, and that the
children tended to use genital cues improperly. So it may
be that the children in my study either viewed genital/ana-
tomical differences as relatively unimportant, or that they
were still a bit confused as to 'who had what,' and what the
possession of a penis or vagina implied about their cate-
gorization as male or female in the long run. Either hypo-
thesis could account for the lack of specific references to
anatomical differences in my studies. We must consider one
obvious point, as well - that on the whole, gender attri-
butions are generally made in the absence of information
about a person's genitalia. Thus, the children may have
been focussing on gender attribution in a practical way, and
did not mention anatomy because it is usually possible to
attribute gender without that type of information.

Some research has been done on this subject, and this
research confirms that hypothesis. Bower (1980) has classed
gender (I would say sex) as a distal variable, something to

which we have no direct access, and noted that we must rely on proximal variables such as clothing and hair length to supply information about a person's gender. Garfinkel (1967) approached this same problem - that we have no direct way of ascertaining the sex of a clothed individual - by drawing a distinction between the biological possession of a penis or vagina and their cultural possession. It is the 'cultural genitals' which are assumed to exist, and which generally are attributed on the basis of other gender cues. Thus, though most adults 'know' that biological genitals are the 'real' or 'essential' insignia of gender, it is the cultural, or attributed genitals which play the more important role in gender attribution. This is an interesting theory, and one which might be tested further with children.

Is gender attribution a simple inspection process? I think we still don't know. For all that my studies have turned in findings consonant with those of other researchers, I think we still don't know enough about the less obvious cues that play a part in gender attribution, such as posture, movement, and facial expression. I have found it intriguing that these children have delivered answers such as 'girls and boys have different faces,' and 'I have a different style from a boy.' One wonders if they aren't trying to make some reference to more subtle gender cues. This is clearly an area where more study is necessary.

The second important idea to emerge from these studies is that certain gender cues may be appropriate at particular points in a child's development. This was indicated early

on when it was noticed that different age groups listed different secondary criteria for gender attribution, and further supported in the interviews, when it was clear that certain answers regarding male and female differences or ways of knowing one's own or another's gender were more sophisticated than others. Furth (1979) and Damon (1977) among others, have posited developmental sequences for the child's acquisition of social knowledge, and it would be interesting to see if such sequences would hold for the acquisition of knowledge about gender and gender roles. This seems to be the most fruitful line of investigation to arise from the studies, and it will be intriguing to examine the ways in which children reason about theories of gender they create. This will be the focus of the research in chapter four.

CHAPTER FOUR: THE DEVELOPMENT OF REASONING ABOUT GENDER
ROLES IN CHILDREN

In this chapter, my intention is to explore the area
of children's thinking about gender roles. As the work in
chapter 3 suggested, different cues for gender attribution
seemed important to children of different ages, and it is
my aim to see if such a developmental trend will be echoed in
the types of reasons children use to justify the social roles
they deem appropriate for women and men.

It is now generally accepted among developmental psy-
chologists that the young child plays an active part in
structuring his/her world. As I noted in chapter 3, I take
this interaction between the child and his/her world for
granted, and in this chapter, then, I will look to see how
the child structures and restructures concepts of gender and
gender roles between the ages of five and twelve years.

Literature Review

The precedent for this sort of work has been set by
Piaget (1932), who described certain age-related changes in
children's modes of cognitive organization. His 'develop-
mental hypotheses' have recently been recapitulated thus:
(Furth, 1979)
1) Children's thinking and behaviour is primarily a product
of their developing minds. From observation of their be-
haviour, the mental frameworks can be inferred that underlie
the behaviour.

2) Children spontaneously apply their available mental frameworks to make sense of what they experience.

3) In doing this, children frequently go beyond existing frameworks, constructing new frameworks. In simpler language, the experience of thinking becomes the occasion for a growth of mind.

Furth and others (see below) have persuasively argued that the hypotheses and stages of development set out by Piaget to describe the child's thinking about the physical world may also be applied to the child's thinking about the social world. An examination of this previous work will serve the dual purpose of providing a rationale for my developmental analysis of reasoning about gender and gender roles, as well as functioning as a review of literature immediately pertinent to my work.

The first study to be considered is Turiel's 1977 work on the development of moral and conventional reasoning in children. Turiel was dissatisfied with the universality of the model of the development of moral reasoning set up by Kohlberg (1972), and felt that this model "could not take account of the diversity of social rules, both moral and nonmoral, in persons' lives." (cited in Damon, 1977, p.233) He adopted Weber's (1947) categories of social rules, distinguishing a custom - a social habit which does not necessarily serve a social function and is not enforced by external sanctions; a convention - a practice which does serve a social function, is considered binding within a society, and is enforced by social sanctions; and ethics - a universal system of rules organized around moral principles.

Turiel was concerned with the latter two, and the study which is of interest here concerned the development of so-

cial-conventional reasoning in children. Using the familiar technique of the story-dilemma, Turiel interviewed a large number of children aged from six to twenty-five years. (Only one of Turiel's dilemmas concerned gender roles.) From their responses, he formulated a seven level model of social/conventional reasoning. The first four levels of that model, dealing with children from six to thirteen years of age, will be the focus here.

The interesting conclusion drawn by Turiel was that the children seemed to develop through levels in which they first accepted, then rejected the validity of conventions. While this cycle remained constant throughout the levels, Turiel found that the child's justification for acceptance or rejection of a particular convention changed as she/he developed. A brief summary of the characteristics of his first four levels follows.

At Level I (ages 5-6), the child will understand social conventions on a descriptive level, based on what she/he observes around him/her, and takes as normal. Observed regularities will not necessarily be assumed to result from social regulation. At Level II (ages 7-8), Turiel found that children tend to reject social conventions. At this stage, children no longer view the existence of social regularities as adequate justification for maintaining them; conventions are seen as fairly arbitrary, and compliance with them not compulsory. Level III (ages 9-10) again sees acceptance of conventions, based upon an awareness of the necessity of social regulation. At Level IV (ages 11-12),

however, conventions are again rejected and no longer retain
their mandatory status. Moral violations, on the other hand,
are not so easily condoned, and a moral regulation is
viewed as important and inviolate.

In a follow-up study, Damon (1977) adopted Turiel's gen-
eral point that a distinction between social, conventional,
and moral reasoning existed, and designed his own study, ex-
panding it to include younger children. Damon considered
gender roles to be one type of social convention, and in-
cluded a story-dilemma of this type along with story di-
lemmas about table manners and stealing, etc. Damon adopted
Turiel's Levels 1, 2, and 3, as described earlier, but added
a Level 0, at which conventions are viewed similarly to per-
sonal customs or habits that may be followed or ignored at
will.

While the Turiel and Damon studies are useful from a
methodological standpoint, there are two points with which I
take issue. First, Turiel and Damon investigated the de-
velopment of children's reasoning about social conventions
as <u>rules</u>. Were I to adopt their framework, I would have to
assume, as they do, that gender roles are social conventions,
and appear to a child as a set of social rules. While the
classification of gender roles as conventions does make
some sense, one could argue equally well that they might be
classified as customs or ethics, given Weber's definitions.
Neither Turiel nor Damon attempted to discover if the children
understood gender roles in one of those three ways.

Second, both assume that what appears as gender stereo-
typic behaviour to an adult will appear so to a child. In
so doing, they overlook the previously stated developmental
hypothesis on which they base their studies. I see no evi-
dence of their belief that children's understanding of so-
ciety (and I assume gender roles are a part of 'society') is
qualitatively different from that of adults. On the con-
trary, these studies would lead one to believe that adult
concepts of gender stereotypes exist 'out there' to be
learned by the child in much the same way as she/he would
learn other types of socially accepted behaviours. Insofar
as they have not delved into the children's understanding
of their story dilemmas and the gender roles portrayed
therein, what Turiel and Damon have actually obtained are
the children's comments about conventions the researchers
consider meaningful. Admittedly, in some cases the social
understandings of child and adult will overlap, but this is
no mandate for such an 'across the board' assumption of simi-
larity in conceptions of appropriate gender roles, or the
classification of gender roles as conventions in Weber's
sense.

In contrast to this is the work of Dorothy Ullian
(1976a, 1976b). While maintaining the developmental hypo-
theses set out by Furth, and echoed by Turiel and Damon,
Ullian did not assume that children's understanding of gender
roles was similar to that of adults. Her research was de-
signed to discover what gender stereotypes meant to the
child, and she asked why these stereotypes were so resistant

to change both within and between cultures. (See Block, 1973 for a fuller discussion.) Ullian was concerned with the proposition that there might be something about the internal logic and organization of stereotypes that would account for their persistence.

Ullian usefully isolated three 'common assumptions in the literature' (1976a, p.13), which bear consideration.
1) "Sex role identity...was defined in terms of the degree to which particular traits, interests, or activities conform to conventional standards of behaviour." Furthermore, she felt that

> most research proposed a linear model of de-
> velopment in which incremental changes in
> thinking are expected to occur with increas-
> ing age. Development was defined, therefore,
> as a continuous cumulative process in which
> children increasingly internalize, incorporate,
> or accept the sex typed norms and standards of
> their society.

2) Early childhood is the critical stage in determining later attitudes and beliefs.
3) Once sex-role concepts are established, they persist relatively unchanged through adolescence and adulthood.

Ullian maintained that the development of personality was an interactive process with biological or social factors becoming important at different times in an individual's life. Furthermore, she stressed that with increasing age, there would be shifts in the kinds of interpretations an individual gave to biological and social differences between males and females, and that the nature of these differences would shed light on psychological aspects of masculinity and

femininity. Her work hinged on the premise that male or fe-
male identity was not stable and invariant, but influenced
by the child's changing conceptions of masculinity and
femininity, and the way in which the child thought about
the nature of the differences between women and men.

The focus of Ullian's work was the development of con-
ceptions of masculinity and femininity in children. From
information obtained through open-ended interviews with ap-
proximately seventy children, Ullian was able to construct
a six-stage model of sex-role conceptualization, which cov-
ered ages five through eighteen.

Ullian found that concepts of masculinity and femininity
did change with the child's age, reflecting sequential con-
cerns with biological, social, and psychological issues.
As did Turiel, Ullian found that the children alternately
seemed to accept and reject typical sex-roles. Ullian also
believed that the development of stereotyping must be viewed
in terms of descriptive and prescriptive modes of thought, as
her results indicated differences not only in beliefs about
the nature of women and men (descriptive), but in the child's
need or desire to conform to masculine or feminine stereo-
types (prescriptive). Finally, her results indicated that
"the end point of sex-role development proceeds beyond the
mere acceptance of conventional notions of masculinity and
femininity" (1976b, p.44). At her top level, she believed
individuals were trying to construct standards of behaviour
which were universal, and "consistent with principles of
equality and human freedom" (1976b, p.45) Ullian's conclu-
sions reflected her commitment to the Kohlbergian view that

a unitary 'justice structure' governed the child's develop-
ing reason. Turiel and Damon have argued against this point
of view, demonstrating that children do distinguish between
conventional and moral reasoning, and although I find her
first and second conclusions plausible, I find no compelling
reason to set the child's developing knowledge of gender
roles in a moral frame.

As a final point, I believe Ullian has tried to cover
too much ground in her study. She titled her work 'The
Development of Conceptions of Masculinity and Feminity,' and
under this umbrella, discussed the influences of masculine
and feminine concepts on identity, developing concepts of
sex-stereotyping of abilities, traits, and behaviours, and
children's justifications for those stereotypes. Clearly
these areas are all related, but her tendency to use terms
interchangeably made parts of her discussion rather confus-
ing (see especially 1976b, p.44). Still, though, Ullian's
study was an important departure from the usual type of re-
search about gender and gender roles, and must be commended
for its focus on the children's own thoughts about gender
and gender roles.

A Study of Children's Reasoning About Gender Roles

We come now to my research, and an examination of the
ways in which I have dealt with the issues raised in the
literature.

First, in contrast to Turiel and Damon, but in accord
with Ullian, I do not regard gender roles as something 'out

there' to be acquired by the child, and do not accept the as-
sumption that these roles will appear the same to both adult
and child.   I believe that conceptions of appropriate gender
roles are not static, and will be redefined and reinterpreted
by the developing child through the framework of his/her
everyday experience.   Thus, my method has been to gather the
children's impressions of appropriate and inappropriate
gender roles at the outset, and then have them comment on the
information they volunteered.

Second, my method has made it possible for me to by-
pass the a priori classification of gender roles as social
rules, or conventions.   I believe I have allowed the children
to display their own conceptions of what a gender role is,
in line with my feeling that conceptions of gender appropriate
roles may differ both in content and meaning between children
and adults.

Finally, I have tried to avoid 'muddying the waters' of
my study by sticking to the investigation of the children's
developing justifications of gender roles.   Although the
study raises issues such as the acquisition of this know-
ledge, its relevance to conceptions of masculinity and femin-
inity, and its connections with the development of gender
identity, I will comment on these considerations in separate
sections.   These distinctions have been made for the sake
of clarity in the reporting of results.

Assumptions and Aims of the Study

To make explicit the assumptions underlying my study,

they are:

1)   Accepting the aforementioned rationale for the construction of a developmental model of children's reasoning about the social world, I believe that it will be possible to construct a similar model to describe the evolution of children's justifications of gender roles.

2)   Children's conceptions of appropriate and inappropriate gender roles are qualitatively different from the conceptions of adults.

Therefore, the aims of the present study are as follows:

1)   Through part one, to obtain a picture of the children's conceptions of appropriate social roles for women and men.

2)   Through part two, to obtain information about the ways in which the children justify the roles they see as appropriate for women and men.

3)   To describe as faithfully as possible the types of justifications employed by the children in a developmental model.

Method

Subjects:

Overall, eighty-one children took part in this study. In Scotland, a total of forty-eight children participated in both parts of the study. Subjects were divided into three age groups - 5/6 years, 8/9 years, and 11/12 years - the age range being suggested by my earlier work, and the relevant literature, as reviewed above. Sixteen children, eight female and eight male, were in each age group.

In the United States, a total of thirty-three children

participated in both parts of the study. In the 5/6 year
age group, nine children - five female and four male - took
part. In each of the 8/9 and 11/12 year age groups, twelve
children - six male and six female - took part.

The Edinburgh children all attended the Broughton Pri-
mary School, and most of them had working class backgrounds.
A few came from the middle class. I interviewed the same
5/6 and 8/9 year olds as described in the previous chapter,
and the participating 11/12 year olds were randomly selected
from class attendance lists, after permission had been ob-
tained from the head teacher.

All but five of the American children attended a public
primary school in Short Hills, New Jersey, and had upper
middle class backgrounds. All parents received a note ex-
plaining the study, and those who wanted their children to
take part returned 'permission slips' to the school. The
children were then randomly selected to be interviewed.
As equal numbers of children in the three age groups could
not be obtained from the school, a further attempt to solicit
subjects was made at a local community center. The study was
advertised in posters, and interested children contacted
me. Five children were located in this way. These five
also attended public primary schools, and also came from
upper middle class families.

Materials:

For the first part of the study, typewritten forms were
used to record the children's responses. When the responses

were collected, they were made into the statements presented to the children on five inch by seven inch file cards. The children's responses to these statement cards were then recorded using a Sony cassette machine with a built in microphone. These responses were later transcribed verbatim.

Procedure:

Part I.

After the subjects were selected, I was introduced to each class and explained that I was going to be asking some of the children to help me with my research project. The 5/6 and 8/9 year olds were then taken one at a time to a separate room in the school and given the following instructions. "What I'd like you to do today is finish off some sentences for me with as many different answers as you can think of. For instance, the first sentence is 'I am...' and I want you to tell me about yourself by finishing that sentence. So suppose you were that chair over there and I asked you to do this. You could say 'I am...a chair. I am...brown. I am...on the floor.' Do you see what I'm after?" If the child understood, we began. If not, another example was given, most often concerning a person known to myself and the child. The children completed the following sentences with as many answers as they could think of.

1) I am...

2) Boys are...

3) Girls are...

4) I like to...

5) Boys like to...

6) Girls like to...

7) When I grow up I can be...

8) When boys grow up boys can be...

9) When girls grow up girls can be...

I would always read out the sentences to the child, and write down their responses myself. If they had trouble with a sentence, I would gently prod them, asking "anything else?", or I would read back their answers and say "that's good - can you think of some more?" A maximum of ten responses could be collected for each sentence, with four to seven being the average number obtained. When the sentences were completed, I asked a few general questions about the child's favorite books, magazines, and TV programs, and asked for information about their father's and mother's occupations and the age and number of brothers and sisters.

The 11/12 year olds didn't require this kind of personal attention, and preferred to fill in the forms themselves. I would take four of them at a time to a separate room and seat them at a table so that they couldn't see anyone else's paper. They were given the same instructions as the younger children, with the following addition.

> Finish off all the sentences with as many
> answers as you can - try to think of ten
> answers for each, but don't worry about it
> if you can only think of five of six. When
> you've finished the sentences, you can fill in
> answers to the questions at the bottom of page
> two - just a few books, magazines, and TV shows.
> For 'family info' could you please tell me what
> job your dad does, what job your mom does, and
> if you have any brothers or sisters, could you
> write down how many of each, and how old they
> are. Any questions? If you get stuck during
> this, or have questions, just raise your hand
> and I'll come over. When you finish, check what
> you've written, make sure your name is on both
> pages, and bring me your paper.

I encountered no problems with any of the children, with either individual or group administration.

Once these responses were collected, I separated them
according to age group, and then worked out lists of what
each group of children thought were appropriate traits
(I am), activities (I like to), and occupations (when I
grow up I can be) for girls, boys, or both. The answers to
the last set of questions were put aside for later use.
From these age specific lists, I devised a set of fifteen
statements for the children to comment on. All statements
had two parts. Statements 1-3 contained   'girl only'
terms, 4-6 had   'boy only' terms, 7-12 mixed boy and girl
terms, and 13-15 had   'neutral' terms. Trait, activity,
and occupation terms were mixed in the statements as well. [1]

Part II.

The statements constructed for each age group are in
Appendix B. These statements formed the basis of the inter-
views conducted approximately one week after the first set
of responses was obtained. I interviewed each child in-
dividually, regardless of age. I visited each class, col-
lected a child, and we proceeded to the room set aside for
the interviews. Upon arrival, each child looked at the cas-
sette and we chatted about various things until the child
felt comfortable. Each child was then told the following:

> Remember those forms you filled in last week
> for my project? This interview is the second
> part of my project. On these cards I've writ-
> ten fifteen sentences that describe people.
> I'll turn them over one by one and read them
> out. Then I want you to tell me if you think
> the person described on the card could be only
> a girl, only a boy, or if it could be both a
> girl and a boy. When you've decided that, I

want to talk about why you chose your answer.
Do you understand?

If the child appeared not to understand, I repeated the
instructions, but no examples were given this time. Often,
the procedure would become clear after the first card had
been commented on by the child. I would read out the card -
or the child would read it to me, if she/he preferred - and
say "OK. Can this card describe only a girl, or only a
boy, or do you think this card could describe a boy and a
girl?" When the answer was given, I asked "Why?," and the
interview proceded from there, with my trying to encourage
the child to say as much as possible about each card.

Parts I and II were repeated as written in the United
States, with the following exceptions. Due to the small
number of 5/6 year olds participating, and the small num-
ber of responses obtained, only twelve statements could be
constructed for them. Statements 1-3 contained 'girl only'
terms, 4-6 contained 'boy only' terms, 7-9 contained mixed
boy and girls terms, and 10-12 contained neutral terms.

Results:

On the basis of the interview data, the children were
first assigned a 'prescriptiveness rating' (P), which was
calculated thus. P = the number of statements out of the
total of fifteen that the child assigned solely to one gen-
der. Thus, if a child felt that five of the statement cards
described girls only, five cards described boys only, and
five described a girl and a boy, that child's prescriptive-
ness rating would be 10. Put another way, P = 15 - the num-
ber of statements which described both girls and boys. (The

scores for the American five and six year olds were converted
with respect to the fifteen statements other children com-
mented upon.)

Next, after reading through all the transcribed inter-
views, I developed a four level model to describe the types
of reasons used by the children to justify their responses
to the statement cards. Once these levels were worked out,
I coded twenty-four interviews, assigning each child to a
particular level. The same twenty-four interviews were then
coded by two different people, and at best, inter-coder
agreement of 91.5% was reached.[2] I then coded the remaining
fifty-seven interviews. It is important to note that for the
most part, there were no pure types to be found. That is,
few of the children reasoned solely at one level. Thus,
when I assigned children to one specific level for the pur-
poses of analysis, I placed them at the level which most often
characterized their thinking. A description of each level
of reasoning and examples to illustrate these levels follows.

A Model of Children's Reasoning About Gender Roles

LevelI: Pre-justification - a statement of what exists.

At this level, the child has very clear ideas about
which gender does what, and their responses tend to be a
statement about a state of affairs as it appears to them.
Gender roles are remarked upon, but in general they are ac-
cepted without question, and no justification for these roles
is presented. Responses are couched in very general and
very absolute terms. When contradictions between different
responses are presented to the children, they find them dif-

ficult to deal with, and will often refuse to recognize the contradictions as such. Children at this level find it hard to reconcile masculine and feminine traits in a single in-dividual. The children may or may not include themselves in statements about their gender group.

Typical responses:

Non sequitur:	'It's a girl because I say so' 'I don't know why it's a boy'
General Statements:	'It's a boy because boys play rugby' 'girls aren't mechanics' 'both boys and girls can ride bicycles'
Specific duties:	'It's a lady because ladies are secretaries' 'men are plumbers'

Level II: The beginnings of justification - qualifications and exceptions.

Here, the absolute statements which characterized the previous level begin to break down, as the child modifies those assertions by introducing qualifiers. Experience remains the primary criterion for both judgement and the new justifications, with the child constructing general theories about gender based on specific incidents about which she/he has knowledge. Children will now allow that masculine and feminine traits may co-exist in one person, and are much more willing to deal with any contradictions raised.

Typical responses:

Generalize from self:	'It's a girl because I sew, too' 'It's a man because all the joiners I know are men'
Generalize from other:	'It's a boy because my father is a bank manager' 'girls can be police because there's lady police on TV' 'boys can sew because the boys in this class sew'

```
Group
Preference:     'It's a boy because boys like to fight'
                'It's a girl because girls like to knit'

Qualifiers:     'usually girls are secretaries'
                'some boys knit'
                'you see more men MP's than women'
                'It's mostly girls that play hopscotch'
```

Level III: Increasing sophistication - 'innate differences'
              as justification.

When the child reaches this level, the justifications she/he employs are no longer necessarily rooted in his/her experience. That is, the child may use as justifications 'commonsense' notions of appropriate gender roles, even though she/he has had no direct experience on which to base that justification. Justifications at this level tend to take on an absolute tone again, especially when comparisons between boys and girls are drawn. These comparisons highlight the level III idea that certain innate differences between boys and girls are thought to exist, and are thought to influence an individual's ability to carry out a given task, etc. At this level, the child is also able to generate very specific incidents in which gender inappropriate behaviour is acceptable, and will refer to gender specific traits which preclude girls' or boys' participation in opposite gender activities. The presence of masculine and feminine traits in one person is tolerated in such specific contexts.

Typical responses:

```
Physical
attributes:     'boys are stronger than girls'

Character
attributes:     'girls are more polite than boys'
                'boys are noisier than girls'
```

Lack of
'know how'   'boys wouldn't know how to sew'
               'a girl wouldn't do a good job as a joiner'

Specific
incident: 'boys skip rope to get in shape for boxing'
               'girls aren't mechanics because they don't want
               to get dirty'
               'girls can be tough when....'

Level IV: A new perspective - historical and contextual
            justification.

This level is characterized by the development of a new

perspective on gender roles, and the child begins to regard

those roles as ideas, not behavioural mandates. There is com-

ment on the social and/or historical roots of presently ac-

cepted gender roles, and an acknowledgement that ideas of

gender appropriate behaviours can vary with the context in

which they occur. Justifications focus on the individual's

interest and abilities as opposed to the popular ideas of

the attributes of one gender group or the other. That mas-

culine and feminine traits co-exist in an individual is taken

for granted.

Typical responses:

Individual
preference: 'being a veterinarian depends on if you're
               smart and like animals'
               'girls and boys can be accountants if they are
               good at maths'

Roles as
ideas: 'people used to think that girls didn't do
               sports but that isn't true now'
               'in olden times...'
               'people expect boys to be rougher than girls,
               but that isn't always true'

Keeping the above descriptions of the different levels

of reasoning in mind, let us now turn to some examples of

the ways these levels manifest themselves in the thinking
of particular children. The purpose of setting out the fol-
lowing examples is primarily to illustrate the above model.
Beyond that, however, the examples should reveal individual
differences in the justification of the statement cards,
and make clear my earlier point that very few, if any,
children reason solely at one level. These individual ex-
amples will also display general trends in the results to
be discussed in the next section.

Level I

Jill, age 6, prescriptiveness rating: 12

1) THIS PERSON IS NICE AND CAN BE A SECRETARY..."It's a girl."
    (Why?) "'Cause girls are nice, and they can be secre-
    taries." (Could a boy be a secretary?) "No." (Why not?)
    "Cause they can be the person who <u>works</u> at the big desk."

2) THIS PERSON IS AFRAID OF SPIDERS AND LIKES TO JUMP ROPE...
    "Girl. Girls are afraid of spiders and they really like
    to jump rope." (Are you afraid of spiders?) "No."
    (Would a boy be afraid of spiders?) "No." (do boys
    jump rope?) "No." (What would happen if a boy jumped
    rope?) "He'd prob'ly fall down."

3) THIS PERSON LIKES TO DO MATH AND CAN BE A TEACHER... "A
    girl." (Why?) "There's mostly girl teachers in our
    school." (Why aren't there many boy teachers?") "Cause
    boys like to ride motorcycles and we aren't allowed to
    have motorcycles at our school."

These answers suggest that Jill has very clear ideas
about appropriate gender roles, and thinks in rather absolute
terms. She takes no notice of the contradiction in ex. 2 -
that she says girls are afraid of spiders, but she isn't.
This seems to be quite common at this level, and many chil-
dren excluded themselves from their judgements about same
gender peers. Jill also exhibits other characteristics of

this level, in that her 'justifications' are really state-

ments of what exists, and do not consider underlying influ-

ences at all. Thus, when pushed further, the reasons she

does offer are idiosyncratic.

Harry, age 6, prescriptiveness rating: 10

1) THIS PERSON LIKES TO FIGHT AND CAN BE A BUS DRIVER...
   "Boy." (Why do you think so?) "Cause boys only fight
   and men only fight." (Do girls fight at all?) "No."
   (Could boys be bus drivers?) "Yes." (Could girls be
   bus drivers?) "Yes."

2) THIS PERSON IS TOUGH AND LIKES TO PLAY WITH DOLLS...
   "A girl and a boy." (Could girls be tough?) "No."
   (Then how could this be about a girl - the person in this
   card is tough.) "This is hard." (Maybe it isn't so
   hard - could it be about a boy?) "Yes." (Do boys like
   to play with dolls?) "Nah." (Hm...do you think it's
   more like a boy or like a girl?) "Boys are tough.
   Girls play with dolls." (Could girls be tough?) (No."
   (Why not?) "They're just not like that."

3) THIS PERSON IS A BULLY AND CAN BE A DANCER... "A big
   boy can be a bully and a girl can be a dancer." (OK,
   can a boy be a dancer?) "No." (Why not?) "Cause I've
   tried and I'm no good at it."

In Harry, we see again the same sort of absolutist

thinking that Jill displayed, as well as an unwillingness

to deal with contradictions. In ex. 2, Harry exhibits

another tendency common to this level - an unwillingness to

tolerate both masculine and feminine traits in one person.

It seems as though in his world, girls do girl things while

boys do boy things, and never the twain shall meet. Notice,

though the vague beginning of a Level III justification -

'They're not like that.' Finally, in ex. 3, we see the be-

ginnings of a Level II justification, where Harry assumes

from his own lack of ability at dancing that 'boys aren't

good at dancing.'

Dylan, age 5, prescriptiveness rating: 8

1)   THIS PERSON LIKES TO FIGHT AND CAN BE A BUS DRIVER...
      "Boy." (Why?) "Cause girls don't fight and they can't
      be bus drivers." (Why not?) "Cause girls don't know
      how to drive." (Some girls do. Would they be good bus
      drivers?) "No." (Oh. Do girls like to fight?)
      "Only boys." (Why do boys like to fight?) "Cause when
      someone hurts them."

2)   THIS PERSON IS TOUGH AND LIKES TO PLAY WITH DOLLS...
      "It's a girl likes to play with dolls." (Can girls be
      tough?) "No." (But it says this person is tough. Can
      it still be a girl?) "No. Boys are tougher than girls."
      (Do boys play with dolls?) "No." (Could you make up
      your mind about this card and decide if it is about a
      girl or a boy?) "Girl."

3)   THIS PERSON IS A BULLY AND CAN BE A DANCER..."A boy."
      (Why?) "Cause girls are kind." (Can a boy be a dancer?)
      "No. They're not so good at it as girls."

It is interesting to compare Dylan's and Harry's re-
sponses. In ex. 1, both maintain that only males fight.
There is some divergence of opinion about bus drivers, though.
Harry believed that girls could drive busses, and Dylan
steadfastly maintained that girls couldn't, involving a
level III 'lack of know how' justification. In ex. 2,
both had trouble reconciling the existence of masculine and
feminine traits in one person. Again Dylan invokes a
level III type of justification, by making the comparison
between girls and boys re: toughness. Neither boy believed
that girls were bullies, nor that boys could dance. Dylan's
response implies a bit of a contradiction, however, in his
absolute denial (level I) followed by the qualifying state-
ment (level II). While maintaining the level I trait of an
unwillingness to resolve contradictions in his statements,
Dylan also used level II and level III justifications, the
continued use of which will mediate against his remaining so
absolute in his judgements.

Craig, age 11, prescriptiveness rating: 4

1) THIS PERSON IS ENERGETIC AND CAN BE AN ARCHEOLOGIST...
   "Could be a boy or a girl, also cause there are women
   archeologists and men." (OK. Who might be a better
   archeologist?) "They'd both be good." (Mm...What about
   being energetic?) "I think a boy would be more energetic."
   (Any reason why?) "Not really."

2) THIS PERSON LIKES TO READ AND CAN BE A DOCTOR..."Could
   be a boy or a girl." (Why?) "A girl or a boy can be a
   doctor, and boys and girls like to read." (OK. Why
   do you think there's more men doctors than women doc-
   tors just now?) "Maybe because women like to be nurses.
   To help doctors."

3) THIS PERSON IS NICELY DRESSED AND CAN BE A BIOLOGIST...
   "More boys would be biologists than girls." (Why?)
   "Because most boys would like to be a biologist, and
   only some girls." (Why is that?) "Girls stay home and
   watch the children, or be secretaries."

Craig is interesting as so many levels of thinking

emerge in his answers. Still, though, he has absolute

ideas about 'boys' jobs and girls' jobs' or jobs for both,

and this absoluteness is a characteristic of level I. In

ex. 1, he delivers a level I comment (There are women and

men archeologists) with a characteristic lack of justifica-

tion, followed by a level III comparison - with a level I

lack of justification again. In ex. 2, we have the same level

I comment that both can be doctors - again, no justifica-

tion - followed by a level II 'group preference' justifica-

tion. In ex. 3, we see a lot of level II reasoning - the

qualifiers and group preference - followed by a level I com-

ment on girls staying home, etc. It is interesting to note

this age 12 level I reasoner does differ in some ways from

the age 5 level I reasoner, yet both make similar absolute

statements without noting underlying influences.

LEVEL II

Jill M., age 6, prescriptiveness rating: 11

1) THIS PERSON LIKES TO FIGHT AND CAN BE A BUS DRIVER...
"A boy." (Why?) "Cause you don't really get lady bus
drivers." (Why don't ladies drive busses?) "Well, I
suppose men are a bit better at driving." (Why?) "I
don't know. My dad's a good driver." (Do boys fight?)
"Yes, alot." (Why?) "Don't know. It would take me a
long time to think."

2) THIS PERSON IS A BULLY AND CAN BE A DANCER..."Could be a boy
or a girl." (Why?) "A bully can be a girl or a boy -
and he can be a dancer. A dancer can be a girl or a boy.
But not that many girls are bullies." (Why? Why are
more boys bullies?) "They're tough. Tougher and stronger,
and they like to fight."

3) THIS PERSON LIKES TO WATCH TV AND CAN BE A TEACHER...
"A boy or a girl." (Why?) "Long ago in this school
there used to be men and lady teachers, but now its
just ladies." (Why is it just ladies now?) "I don't
really know." (Are men as good teachers as ladies?)
"Yes. There's plenty in the secondary school where my
brother goes." (Why do you think there's more lady
teachers in this school?) "They just like doing it."

Jill M. is an interesting type of thinker, combining
many levels in her justifications. In ex. 1, she shows level
II - You don't get many lady bus drivers - followed by a
level III comparison, and then a level II 'generalization
from other.' In ex. 2, she begins with a level I statement
of what exists, then injects a level II qualifier, followed
by a level III comparison. In ex. 3, she reasons solely
at level II, showing the 'generalize from other' and 'group
preference' types of justifications.

Catherine, age 6, prescriptiveness rating: 10

1) THIS PERSON LIKES TO SEW AND CAN BE A HAIRDRESSER...
"A girl." (Why?) "A girl sews, mostly, and they're
usually hairdressers." (Could a boy sew, or be a hair-
dresser?) "No." (Why not?) "It wouldn't suit him."
(What do you mean?) "He wouldn't like it."

2) THIS PERSON IS ROUGH AND LIKES TO PLAY FOOTBALL..."It's a boy." (Why do you think it's a boy?) "Boys mostly like to play football, if they want to." (Why are boys rough?) "They're prob'ly just made that way."

3) THIS PERSON IS ALWAYS DIRTY AND CAN BE A MECHANIC... "A man." (Why?) "A man is usually a mechanic, not a woman." (Why are men usually mechanics?) "A lady wouldn't like getting her dress dirty."

Catherine also shows the combination of levels in her justifications, but seems more of a consistent level II reasoner than Jill M. In ex. 1, she is using level II qualifiers, then the level II 'group preference.' Ex. 2 is similar. Qualifiers appear, and she is quite willing to admit that masculine roughness can be found in girls. In her last statement she dips into level III - suggesting that boys might be made differently than girls. Ex. 3 follows the level II pattern as well, with qualifiers and the group preference.

Jordana, age 8, prescriptiveness rating: 5

1) THIS PERSON IS ROUGH AND LIKES TO JUMP ROPE..."Both. Boys are rough, and girls like to jump rope." (Could a girl ever be rough?) "Yes." (Like when?) "Like when Robert F. says 'kiss me, baby!" (Oh. What about liking to jump rope? Would boys like to?) "Sometimes, but not all the time like girls."

2) THIS PERSON IS GOOD IN SCHOOL AND CAN BE A DENTIST... "Both." (Why?) "Girls and boys can be good in school, and girls and boys can be dentists." (Who might be a better dentist?) "I think a boy, because my father and my uncle are both dentists, and all the dentists I know are boys, but if I met a girl dentist, then I could judge. "

3) THIS PERSON LIKES MATH AND CAN BE AN ASTRONAUT..."This is strange. I think both." (Why?) "They both like math." (What about being an astronaut?) "Mostly a boy, because only one woman I know of has gone into space. She's a Russian lady, Valentina..." (Are men better astronauts than women?) "I think that the people who send astronauts into space think that men are better, so they won't send women into space. I think that if they knew it was wrong, they'd send women into space."

(Why do you think they <u>think</u> men are better?) "I don't know."

Jordana is a nice example of a level II+ reasoner. She tends to make use of qualifiers in her justifications, and as in ex. 1, will allow that girls can have the masculine trait of roughness in some situations. In ex. 2, we see her using the level II 'generalize from other' as well as indicating that she would judge a girl dentist upon meeting her - this seems to be a level IV emphasis on the individual. Her tolerance of exceptions to common stereotypes is clearly seen in ex. 3, where she allows that a woman could be an astronaut. She also displays some level IV thinking, in her reference to people's ideas of what women can and can't do, as being separate from their individual abilities as persons.

Evelyn, age 11, prescriptiveness rating: 3

1) THIS PERSON LIKES TO GO SHOPPING AND CAN BE A SECRETARY...
    "Boy or a girl." (Why?) "Anybody can go shopping or
    be a secretary." (OK. Who might be a better secre-
    tary?) "Girl." (Why?) "I don't know, really - I'm
    just used to seeing the secretary in our school."

2) THIS PERSON LIKES TO BOSS PEOPLE AND CAN BE A MECHANIC...
    "More likely to be a man. You don't get many lady me-
    chanics." (Why not?) "Cause it's a messy job." (Any
    other reason?) "Ladies probably wouldn't understand
    it."

3) THIS PERSON IS THOUGHTFUL AND CAN BE A JOINER..."Could
    be a boy or a girl. You get lady joiners now, but not
    often." (Why not?) "Cause it's usually a man's job."
    (Is it odd for a lady to be a joiner?) "Yes." (Why?)
    "It just is. There's a lady in our stair who's a
    joiner." (Does she do a good job?) "Yes." (Ok.
    What about being thoughtful?) "Both can be thoughtful."

Evelyn is another example of a multi-level thinker. In ex. 1, she employs a level I absolute statement, but in a non-prescriptive way. When asked who might be a better secretary, she uses the level III 'specific incident' justi-

fication, seeming to allow that it might not be a great
justification. In ex. 2, we see the level II qualifiers,
again coupled with level III justifications - 'specific in-
cident' (messy job) and 'lack of know how.' Ex. 3 again
shows her level II tolerance of exceptions to common stereo-
types, as well as the level II 'generalize from other' jus-
tification.

LEVEL III

Justin, age 9, prescriptiveness rating: 0

1) THIS PERSON IS ROUGH AND LIKES TO JUMP ROPE..."A person
    who is rough could be a boy or a girl. At my camp there
    was a girl who was rough, but when she got punched in
    the nose she wasn't rough anymore. Jumprope is more
    likely a girl's game, but men boxers jump rope to get
    in shape."

2) THIS PERSON IS GOOD AT MATH AND CAN BE AN ASTRONAUT...
    "Both." (Why?) "First of all, there's been a man in
    space and a woman in space. And in math, each study
    group in my class has boys and girls in it, so that
    should be the same." (Why do you think there's more
    men astronauts than women?) "Cause women don't have the
    thought of it." (Why is that?) "I don't know."

3) THIS PERSON LIKES SPORTS AND CAN WORK FOR THE POLICE...
    "For sports it would probably be boys, but girls can do
    sports like softball and basketball. Police...that
    would be a man or a woman." (Why do you think there's
    more men police than women?) "It's really that men are
    stronger." (Would a girl be a good police person?)
    "Yes, if she was a strong one."

Justin displays several characteristic traits of level
III. In ex. 1, he is able to generate a specific exception
to a role (the boxer). In ex. 2, there are level I comments
about what exists, and the level II 'generalize from self'
justification. His justification 'most women don't have the
thought of it' is hard to classify, but might be a level III
lack of know how. In ex. 3, he makes a level III comparison

of physical ability, and again generates a specific exception

as in ex. 1.

Iona, age 9, prescriptiveness rating: 6

1) THIS PERSON IS STRONG AND LIKES TO PLAY CRICKET..."Boy.
I've seen very few girls playing cricket, and girls
aren't as strong as boys." (Why should that be?) "Don't
know." (Why don't girls play cricket?) "I don't know."

2) THIS PERSON LIKES TO TEASE PEOPLE AND CAN BE A MECHANIC...
"Boy." (Why?) "Most mechanics are boys, and boys probably
like to tease, as well." (Why do you think there aren't
many girl mechanics?) "Ladies like to do other things."
(Like what?) "Shopkeepers, or that." (Do you think a
mechanic is more of a man's job?) "Yes, cause it's
messy. Ladies don't like messy jobs."

3) THIS PERSON IS HELPFUL AND CAN BE A PILOT..."Both."
(Why?) "Girls and boys can be helpful, and I've seen a-
lot of lady pilots, as well." (Who might be a better
pilot?) "They'd be the same." (Why do you think there's
more men pilots than women pilots just now?) "I really
don't think that women are as brave as men."

   Iona seems to be a level III- type of reasoner. Although

she frequently draws comparisons between girls and boys,

there are times when she cannot justify the comparisons, as

in ex. 1. In ex. 2, she displays mostly level II reasoning,

using qualifiers and citing group preference. In ex. 3, she

again draws a level III comparison, in terms of character

attributes.

Sara, age 12, prescriptiveness rating: 3

1) THIS PERSON IS ENERGETIC AND CAN BE AN ARCHEOLOGIST...
"Boys are a little more energetic than girls, I guess,
but I've seen girl archeologists. Both could be good
archeologists, but I think boys are a bit more energetic
than girls. I guess this could be either a girl or a
boy, then."

2) THIS PERSON IS STRONG, AND LIKES TO PLAY HOPSCOTCH...
"Boys are a lot stronger than girls, but boys aren't
so great at hopscotch. I think girls are better at that."
(Why don't boys like hopscotch?) "Hopscotch is mostly
for girls, and boys play with balls 'n that." (So
who does this card describe?) "I guess both."

3) THIS PERSON LIKES TO READ AND CAN BE A DOCTOR..."I
   think it would be both. I like to read and I know boys
   who like to read. Mostly boys are doctors, but I think
   girls can be doctors, too." (Might there be a differ-
   ence between boy doctors and girl doctors?) "Some people
   might think there is, cause a long time ago there were
   no women doctors, and a lot of people might not trust
   women doctors."

Sara, too, is a multi-level thinker. In ex. 1, we see
the characteristic level III comparisons, but without further
justification. The same is true in ex. 2, but she then goes
on to generate alternative activities for boys, in a level
I way. In ex. 3, we see a level II 'generalize from self' and
'generalize from other' set of justifications, as well as a
glimmer of the historical perspective characteristic of
level IV.

Steven, age 11, prescriptiveness rating: 7

1) THIS PERSON IS ROUGH AND LIKES TO BE LOOKED UP TO...
   "Boy. They're mostly rough, and like people to think
   they're great, and that they can do everything better
   than anyone else." (Are boys rougher than girls?)
   "Um, yes." (Why?) "It's just a hobby that they get."

2) THIS PERSON IS GOOD AT MATHS AND CAN BE A BANK MANAGER...
   "Both." (Are boys and girls equally good at maths?)
   "Yes." (Are there more women or men bank managers?)
   "Men." (Why do you think that is?) "They may be better
   at doing the job and sorting things out, 'n that."
   (Why might that be?) "Well, if something got rough in
   the place, the man could sort it out. Like arguments."

3) THIS PERSON LIKES TO BOSS PEOPLE AND CAN BE A MECHANIC...
   "A boy." (Why?) "Usually boys are mechanics and girls
   aren't and boys are bossier than girls." (Why aren't
   there as many girl mechanics as boy mechanics?) "A
   girl wouldn't be as good as a boy." (Why not?) "Some-
   times you have to be strong - not like a lady."

Steven is very similar to Sara in the way he reasons,
yet is a bit more prescriptive than she. He makes a level
II statement in ex. 1, and justifies the comparison I drew

re: roughness with a response that might be classified as
level IV. Ex. 2 sees him drawing level III comparisons, and
making a level III reference to the man's greater ability to
sort out quarrels at the office. In ex. 3, he follows his
level II qualified statement with a level III comparison,
justified by a level III reference to physical attributes.

LEVEL IV

Michael, age 11, prescriptiveness rating: 5

1) THIS PERSON LIKES TO BOSS PEOPLE AND CAN BE A MECHANIC...
   "Boy or girl." (Why?) "Usually boys are mechanics -
   you don't see many girl mechanics - and bossy people
   can be a boy or a girl." (Do you think a girl mechanic
   would be as good as a boy mechanic?) "Yes. I don't
   see any reason why she'd be any different." (Why are
   there more boy mechanics than girl mechanics just now?)
   "Don't know - maybe because women think it's not the sort
   of a job for them." (Is there any reason why they should
   think that?) "I don't know."

2) THIS PERSON IS UNTIDY AND LIKES TO SEW..."Um, if it's
   untidy it's prob'ly a boy, but I think it's a girl if it
   likes to sew, cause not much boys go in for sewing -
   it's like dancing. You know, it's just taken this at-
   titude if you go sewing people think you're a sissy -
   whatever that means - so it's more likely a girl than
   a boy." (Do you think it's a sissy thing for boys to
   sew?) "It's just what people think - I don't see what's
   wrong with sewing."

3) THIS PERSON IS THOUGHTFUL AND CAN BE A JOINER..."Thought-
   ful could be a man or a woman, and joiner, there's more
   men than women joiners, but I suppose there's a few
   women, so this could be either." (Why do you think
   women don't go in for being joiners?) "Well, I suppose
   the same reason why women don't go in for lorry driving,
   or being an industrial worker, 'n that - it's the same
   sort of thing. They think of it as a man's job, and it's
   only some women who say 'well I don't see why only men
   should do that - I'm just as good as them, so I'll go
   in for a joiner.'"

Michael shows the beginnings of level IV reasoning in
these examples, in that he talks about popular notions of
appropriate gender roles rather than viewing them as facts.

This is evident in ex. 1, when he notes that women might think that being a mechanic is a man's job, as well as in ex. 2, where he refers to 'that attitude taken again.' In ex. 2 he stresses that people might think a boy who sews is a sissy, without saying that the boy is a sissy. In ex. 3 he recaps his theme of what people think v. what they may do, again highlighting his tolerance of both masculine and feminine traits in an individual, and again, he is looking at gender roles as ideas, not necessities.

Scott, age 12, prescriptiveness rating: 1

1) THIS PERSON LIKES TO BOSS PEOPLE AND CAN BE A MECHANIC... "Could be a boy or a girl." (Why?) "Well, nowadays, boys usually still like to do the things that boys do, but girls are branching out into the things you don't usually find them doing." (Like being mechanics?) "Yes." (Would a girl mechanic be as good as a boy mechanic?) "Probably." (What about liking to boss people around?) "That would be both."

2) THIS PERSON IS UNTIDY AND LIKES TO SEW... "Generally you find girls like to sew." (And what about being un-tidy?) "Boy or girl." (Do the boys in your class sew?) "Yes." (Why do you say its generally girls who like to sew?) "Well it's just, sort of...what you'd expect." (Why?) "In ages gone past girls always used to sew in their spare time."

3) THIS PERSON IS STRONG AND CAN BE A HAIRDRESSER..."Strong is usually thought of as boys, hairdresser is usually thought of as girls. (Why do people think it's usually boys that are strong?) "Through the ages, it's always been the men who have won the great battles, etc." (Any reason why that was so?) "In ages gone past, women were always kept at home to look after the children." (Why was that?) "They were thought of as lesser mortals." (You said 'thought of' - does that mean they were les-ser mortals?) "No. It's just what people thought."

In Scott, we see the developing 'historical perspec-tive' on gender roles which characterizes level IV thinking, as well as the awareness of a difference between expectations of gender roles and individual potentials. Ex. 1 shows a

level II use of qualifiers, followed by the statement that girls are branching out, implying a level IV concept that gender roles are not fixed. Ex. 2 shows this level II use of qualifiers again, followed by a level IV reference to 'what you'd expect' and then the historical reference. This is shown in ex. 3 as well, where he talks about traditional roles, then justifies that state of affairs with a level III/ level IV reference to women being thought of as 'lesser mortals.'

Debbie, age 11, prescriptiveness rating: 0

1) THIS PERSON IS POLITE AND LIKES TO PLAY INSTRUMENTS...
   "A polite person is a man or a woman, and playing instruments is men or women. You can't really judge like that - like, a lot of people think more girls play instruments than boys, because they think boys like sports more. They think girls only wear dresses and pick flowers 'n stuff." (Where do you think they get those ideas?) "Because they do girlish things - no. I can't think of a good answer." (That's OK. Do you think most people think boys and girls are very different, or do they think boys and girls are mostly the same?) "Now, in the '80's, more girls are getting into sports - the people are thinking that girls can do sports. But in the olden days they would never have thought that."

2) THIS PERSON IS ACTIVE AND LIKES SPORTS..."That could be a girl or a boy, cause girls do like sports. A lot of people think only boys like sports, cause they're more athletic, but that's not true." (Where do people get those ideas about what girls do and what boys do?) "Well, I don't know. Maybe girls might not be as rugged."

3) THIS PERSON LIKES TO READ AND CAN BE A DOCTOR..."Either a woman or a man. They can both read and a man or a woman can be a doctor. A lot of people think that nurses have to be women and doctors have to be men, but that was really some time ago, and not now. There's lots of women doctors and men nurses."

Debbie is very keenly aware of the gap between expectations of gender roles and individual potentials, and also has that 'then v. now' perspective on gender roles. This is evident in all three examples, as she rarely dips into lower levels of justification. Ex. II is the exception, where

she tentatively grounds her level IV statement about expectations of appropriate gender roles in a recourse to a level III physical attributes comparison.

Jim, age 11, prescriptiveness rating: 0

1) THIS PERSON LIKES TO TALK AND CAN BE A DENTIST..."This person likes to talk...it doesn't go to either sex. Just some people love to talk. Can be a dentist - I don't think that sex matters here, either. (Why do you think there's more men dentists than women dentists?) "I don't know, really. Alot of girls have grown up thinking that girls are more supposed to be nurses rather than doctors. Only recently have they been thinking that they can be the doctors or dentists, too."

2) THIS PERSON LIKES TO COMPETE AND CAN BE A SECRETARY... "Compete, that could be in something like sports, or like a book report contest, so I think that could take up either sex. Secretary, even though most of the time you see women secretaries, you sometimes get men secretaries for special things. There are more women secretaries, but I don't really see why. Maybe its from what I said before about the olden times when people thought women couldn't do as much, so they couldn't be the bosses." (About competing - would boys and girls compete in different things?) "Not really. Since we're talking overall about the sexes, I think it goes by the individual what you do, and not by the sex."

3) THIS PERSON LIKES TO TALK ABOUT SPORTS AND CAN BE AN ACCOUNTANT..."Talk about sports...girls and boys play sports a' lot, but I find it's usually the boys who talk about sports and collect baseball cards...I still don't know why about that. Accountant...that would go to a certain ability in mathematics or bookkeeping. It wouldn't go to one sex or the other. This person could be anyone."

Jim is a good example of someone who integrates all four levels of reasoning into his thinking. He comments on what exists, (level I) and is careful to use the qualifiers which characterize level II. He also has the level III ability to make comparisons on specific traits, etc., and generates specific exceptions to popular notions of appropriate gender roles. Throughout, he is aware of the gap be-

tween commonsense ideas about gender roles and individual potential, characteristic of level IV, and he also has the historical perspective on gender roles, coupled with the idea that individual preference should have more influence on the selection of a role than gender.

General Trends in the Results

The above examples have pointed up some interesting individual differences in reasoning which will be discussed later. Let us look now at the more general points emerging from the results.

Table 1 - Level of Reasoning and Age

Looking at these results overall, there is obviously a trend which suggests that the child's level of reasoning does increase with his/her age. This trend is most marked in the results of the 5/6 and 8/9 year olds. The results for the 11/12 year olds were somewhat unexpected, at least according to standard Kohlbergian theory. These results argue against their assumption that the development of reasoning is a solely function of age, and that advanced modes of thought gradually replace primitive ones within a child. These results also suggest that development may not proceed in an invariant sequence. Clearly we must look to other areas for information about important influences on the development of reasoning.

Table 2 - Prescriptiveness and Age

Again, although a general trend toward diminishing pre-

TABLE 1   SHOWING AGE AND LEVEL OF REASONING OF SUBJECTS

AGE / LEVEL OF REASONING	5-6 yrs.	8-9 yrs.	11-12 yrs.
I	16	6	4
II	9	17	8
III	0	5	7
IV	0	0	9

TABLE 2   SHOWING SUBJECTS' AGE AND PRESCRIPTIVENESS
RATING

AGE / P. R.*	5-6 yrs.	8-9 yrs.	11-12 yrs.
0-5	4	10	14
6-10	10	16	10
11-15	11	2	4

* prescriptiveness rating

TABLE 3   SHOWING SUBJECTS' PRESCRIPTIVENESS RATING AND
LEVEL OF REASONING

P. R.* / LEVEL OF REASONING	0-5	6-10	11-15
I	8	12	6
II	8	17	9
III	3	7	2
IV	9	0	0

* prescriptiveness rating

TABLE 4   SHOWING SUBJECTS' PRESCRIPTIVENESS RATING AND
LEVEL OF REASONING, BROKEN DOWN BY AGE

5-6 years

P. R. * / L of R **	0-5	6-10	11-15
I	2	8	6
II	2	2	5

8-9 years

P. R. * / L of R **	0-5	6-10	11-15
I	4	2	0
II	5	10	2
III	1	4	0

11-12 years

P. R. * / L of R **	0-5	6-10	11-15
I	2	2	0
II	1	5	2
III	2	3	2
IV	9	0	0

* prescriptiveness rating   ** level of reasoning

scriptiveness with age is found, it is by no means clear-cut.
While most of the 5/6 and 8/9 year olds tend to fall into
the medium and high ranges of prescriptiveness - as one
might expect - with the 11/12 year olds, we find half in
the middle to high range, and half in the low range. Given
that a slight majority of the 11/12 year olds are in the top
reasoning levels, one might have expected that slightly more
than half would fall into the low prescriptiveness range.
Again, it seems that age is only one of several factors in-
fluencing a child's prescriptiveness.

Table 3 - Level of Reasoning and Prescriptiveness

Here, too, we find that although level of reasoning
does seem to have an effect on the child's prescriptiveness,
no clear or one-way trend has emerged, except at level IV.
Indeed, with the majority of children falling into the middle
prescriptiveness range, we see that three types of reason-
ing have been used to justify their answers. It is also in-
teresting to note that levels I, II, and III have been used
to justify high, middle, and low prescriptiveness responses,
again indicating the influence of other factors on the
child's prescriptiveness.

Table 4 - Level of Reasoning and Prescriptiveness, Broken
          Down by Age Group
    This table is included to further clarify the results
in tables 2 and 3. For the 5/6 year olds, we see that al-
though the majority fall into the medium and high prescrip-
tiveness ranges, level II and level I justifications have
also been used to support statements of low prescriptiveness.

For the 8/9 year olds, we see that most of them fall into the medium to low range of prescriptiveness. Again, the three levels of reasoning manifested by these children have been used to justify different ends, although interestingly no one used level IV or level III responses to justify high prescriptiveness. In the 11/12 year old results, we find a similar pattern - that no one used level I or level IV to justify high prescriptiveness. Still, it remains apparent that levels of reasoning can be used by different children to justify high, medium, or low prescriptiveness.

In appraising the results overall, then, the questions to be explored in the discussion become clear. First, what factors besides age influence the child's level of reasoning and prescriptiveness? How are the discrepancies between these results and those obtained by other researchers to be accounted for?

Discussion

The results of this study do fulfill the stated aims of the project. First, through the use of the 'I am' technique, I was able to obtain an age specific picture of the children's conceptions of appropriate gender roles. These responses were then transformed into the statement cards, which were used to elicit the justifications, in fulfillment of the second aim. Finally, given these justifications, I was able to describe four levels of reasoning about gender roles, in accordance with the third aim of the study.

I intend to discuss specific findings of my work and the questions they raise in the following ways. First, I will

cover the main trends appearing in this study. Second, I will consider these trends in light of the work of Turiel, Damon, and Ullian, looking for points of overlap and divergence between their models of reasoning and my own. Third, I will argue that my results raise questions about children's conceptions of gender and gender roles which cannot be accounted for in their models. This being the case, I will propose an alternative theoretical framework from which to study the development of children's thinking about gender and gender roles. This framework takes as its basis the idea that an alternative model of development, which casts the child as 'theoretician' might more adequately account for the development of reasoning about gender roles in children.

Trends and Questions

To begin, then, it is obvious from the examples given that few, if any, children reason solely at one level. On the contrary, it is quite common for the children to draw upon two or three levels of reasoning as they formulate their responses. This suggests that the levels of reasoning as I have drawn them coexist in any one child at a particular time, and that the appearance of a type of justification characteristic of a new level of reasoning does not necessarily replace another level of reasoning in the child. This coexistence of levels argues against the Piagetian/Kohlbergian view of cognitive development as discussed in the introduction to the thesis - that there exist primitive and advanced modes of thinking, and that with age, the increasingly

differentiated (or advanced) modes of thinking replace the
'primitive' ones, thus enabling the individual to better
adapt to his/her environment. Instead, my results suggest
that Levi-Strauss'(1969) theory is a more appropriate means
of characterizing the development of children's reasoning.
He argued that modes of thinking are context dependent and
exist as distinct yet parallel means of coping with an en-
vironment. In my study, it does appear that the level of
reasoning employed by the child, while certainly influenced
by age and cognitive sophistication, is also influenced by
the individual context in which the reasoning occurs. That
is, in some cases and for some children, a level I 'state-
ment of what exists' will be all that is required, while
other situations may require that the child dig further and
consider the influences which underlie the particular state
of affairs in question. The level of reasoning employed
may also depend on the child's perception of the require-
ments of a given situation. Given this, it seems mislead-
ing to adopt the Piagetian/Kohlbergian view of cognitive de-
velopment with respect to these primitive and advanced modes
of thought. Clearly different levels of reasoning work
better in different contexts, and it then becomes an exer-
cise in arbitrary valuation to label some levels primitive
and others advanced.

My results also raise questions about some of the other
premises on which these models of reasoning rest. In con-
structing these models, a basic assumption seems to be that
the development of reasoning progresses in an age-related,

linear and sequential fashion, with more sophisticated modes of thought gradually replacing the less sophisticated modes. The coexistence of levels of reasoning in the child argues against this, as discussed above. However, additional support for an alternative point of view can be gleaned from my results. I have found that different levels of reasoning exist among all the age groups I have studied. That is, although my results do indicate a trend toward the 'higher' levels of reasoning as the age of the child increases, there is evidence to support the claim that age may not be the most important factor in the development of reasoning. Similarly, we notice that all levels of reasoning have been used to justify conclusions of both high and low prescriptiveness. This would not be predicted by any of the models I have discussed, and I must question the emphasis those studies place on age and cognitive sophistication as influences on the degree of prescriptiveness in a given child.

Next, models of children's reasoning tend to carry the assumption that the young child creates (or is made aware of) certain concepts of 'how the world ought to be,' and as she/he matures, is engaged in a process of refining and differentiating these basic concepts. In other words, although the child's perspective on certain issues changes as she/he develops, there remains a basic reality 'out there' (i.e., the reality endorsed by adults) to which the child must conform. Thus, it is the perspective on reality which changes, not the reality itself. Again, this is an

assumption I must question. If one considers the child's ideas about gender roles as hypotheses to be tested, then it is possible to see in my results a pattern of hypothesis generation - hypothesis justification in which the child alters not only his/her perspective on gender roles, but alters his/her view of the 'reality' of gender roles, as well. Hence level I could be viewed as a sort of pre-hypothetical stage, where the child sees no need to question or justify his/her world. Level II sees the first stage of hypothesis generation, then, as the old reality is called into question and static definitions are replaced with 'hypotheses.' Level III would then be a justification stage, in which the level II hypotheses are not significantly altered. In this stage the child's perspective on those hypotheses changes. Finally, level IV would be a stage of new hypothesis generation, as the child again alters his/her views of gender roles to accommodate the influence of individual preference and historical/social context on the selection and performance of social roles. This alternation of stages is roughly similar to the acceptance/rejection cycle found in the work of Turiel, Damon, and Ullian, and will be addressed again with respect to their findings. The generation - justification cycle also argues in favor of the position espoused by Kohlberg and Ullian that with regard to gender and gender roles, a child's thinking is qualitatively different from that of adults. As suggested earlier, these results indicate that the child's conceptions of gender and gender roles may differ from adults' in both content and

meaning.

Finally, these results show a general shift in the focus of the children's reasoning between the first three and the fourth levels. I find that while in levels I - III the child's justifications are framed in terms of the gender group, at level IV, the justifications are framed in terms of the individual. This seems to indicate that for younger children, although ideas about gender may be useful conceptual tools for defining the world around them, the older children reach a point where gender is no longer of primary importance to the children's definitions of the world. In other words, it may be that within a particular child, conceptions of gender may gradually cease to be important as they are joined or replaced by a developing concept of individuality or personhood.

From these results, four main questions are raised.
1) Is it appropriate to conceptualize the development of reasoning in terms of a move from primitive to advanced modes of thought?
2) Is age the most critical factor in the development of reasoning, and does development proceed in a sequential, linear manner?
3) Does the child's <u>perspective</u> on gender roles change as reasoning develops, or do the child's concepts undergo significant change?
4) Is conformity to the popular conceptions of gender appropriate roles and behaviours the end point of a child's

individual and social development? Or does development proceed beyond such conformity to a point where the child acts in accordance with a concept of him/herself as a person? Will the child develop to a point where gender concepts are useful only insofar as they serve as components of a superordinate concept of 'selfhood' or 'personhood?'

Response to Damon and Turiel

The findings of Turiel and Damon will be considered together, as their studies overlapped considerably. Turiel and Damon shared assumptions about the nature and course of the development of children's reasoning, and their studies brought to light three points which will be considered here. First, as noted before, both men regarded gender roles as social conventions, or rules, which the child may or may not elect to follow. This, in turn, led to the development of the acceptance/rejection cycle which characterized their models of reasoning.

Second, given their emphasis on gender roles as rules, they implied that these roles/rules are a defined and static reality which the child would come to endorse.

Third, Damon, using his own and Turiel's work, concluded that "levels of social knowledge develop in children slowly, as a function of age and that there is generally forward movement along the knowledge sequences between the ages of four and ten." (1977, pp.342-43)

Clearly, my results make it difficult for me to accept these premises and conclusions. In the first place, I consider it inappropriate to assume gender roles appear to a

young child as social rules or conventions. Gender roles
as observed and commented upon by the children in my study
were seldom seen as behavioural rules. Behavioural options
seems a more accurate way to describe the children's percep-
tion of gender roles. Although in some cases, a child would
say that 'a boy would be a sissy if he jumped rope,' im-
plying (as per Turiel and Damon) that a violation of a
social convention would result in social censure, this oc-
curred too infrequently for me to give credence to Turiel
and Damon's characterization of gender roles as social rules.

Regarding my second objection to their work, there is
evidence both in Ullian's work and my own to make a case
for regarding children's concepts of gender and gender roles
as qualitatively different from adults. That is, I think
it plausible to argue that children's conceptions of gender
and gender roles undergo important changes as the child's
reasoning develops, and that the end point of the child's
development in this area is not the acceptance of adult con-
cepts of appropriate gender roles. I will pursue this point
again when I discuss Ullian's research below.

Finally, I hesitate to accept Damon's conclusion that
children's reasoning develops primarily as a function of
age. My results indicate that age may not be the most impor-
tant factor influencing cognitive development, and I be-
lieve we should begin to consider the influence of the in-
dividual context in which the reasoning takes place.

Thus, although the Turiel and Damon studies do have
merit in that they acknowledge the child's participation in

the construction of his/her social world, other assumptions of theirs must be questioned. Their work endorses the model that the development of reasoning proceeds in a linear, sequantial way, as the child replaces primitive modes of thought with more advanced ones; the models they have constructed cannot account for the result I obtained, and it is necessary to look for a new model to accommodate this data.

Response to Ullian

In many ways, the model proposed by Ullian is more satisfactory. As will be obvious from the earlier discussion of her work, in theoretical outlook, our studies are very similar. I accept Ullian's assertions that "masculine and feminine identities are not stable, invariant phenomena which persist unchanged throughout development," and that "conceptions of masculinity and femininity undergo significant changes as a result of cognitive and social development." (1976b, p.31)

Following on from this, my data support her conclusion that "masculinity and femininity are not unitary concepts acquired in a linear way through development," (1976b, p.44) although, as stated above, I did not find the pattern of alternating acceptance/rejection of gender roles. I also failed to find support for Ullian's claim that children's conceptions of masculinity and femininity reflected a sequantial focus on biological, social, and psychological factors as determinants of masculinity and femininity. The

results from this study indicate a sequential focus on gender group and the individual as factors influencing the child's reasoning about gender roles. It should be noted, however, that the results of my exploratory work on gender attribution do offer support for Ullian's biological/social/psychological sequence; the cues employed by children making gender attributions do seem to change in focus in the way Ullian has indicated.

My last point about Ullian's work centers on her belief that the end point of sex-role development was a child's attempt to formulate a set of "ideal standards which have universal validity and which are consistent with principles of equality and human freedom." (1976b, p.45) While I do agree that the end point of sex-role (sic) development is not the acceptance of conventional notions of masculinity and femininity, I am not at all sure that development does proceed toward 'ideal standards' as Ullian saw them. Although such a trend might be similar to the 'gender group to individual shift' found in my work, I would not like to commit myself to such a position.

On the whole, I do find that Ullian's model can and does address the four questions raised by the results. However, given that we do differ on certain points, I find it difficult to completely accept her account of the development of reasoning about gender roles in the child.

The Child as Theoretician

In the preceding sections, I discussed specific points

of convergence and divergence between my model of children's reasoning and the models of Turiel, Damon, and Ullian. I would like now to address the basic conceptual differences between their work and mine - differences which have led me to propose an alternative framework from which to view the development of reasoning in children.

Turiel, Damon, and to some extent, Ullian, conceive of development as "the spontaneous emergence of new modes of operation for which the environment merely provides the information necessary for the organisms to make their selections." (Riegel, 1979, p.340). This point of view leads all three researchers to implicitly or explicitly endorse the idea that stages of development are universal, and manifest themselves in similar (that is, age-related and sequential) ways in all individuals.

On the other hand, I conceive of development as a process of interaction between the individual and his/her social environment, in the course of which both the individual and the social environment may be altered. Thus, the environment is not merely something 'out there' to be increasingly understood by the individual. While it is indeed an 'objective reality,' it is also a 'subjective reality,' in the sense that it is subject to change as the individual constructs and reconstructs his/her ideas of the social environment. Given this view of development, then, I cannot agree that universal stages manifest themselves in similar ways in all individuals. Instead, I feel that universals manifest themselves in persons in particular ways, influenced

by the social context and individual interests of the person.
(See Markova, 1982 for a more complete account of universals
and particulars.) With this in mind, I have constructed a
theory of development which casts the child as a theoretician,
who constructs and tests hypotheses about the world. I
will develop it first with respect to the development of
children's reasoning about gender roles, and then with re-
spect to theories about gender identity.

The Reasoning Process

If this concept of 'child as theoretician' is to prove
a workable one, it will have to account for the four points
which arise from my results. A quick review of these points
is in order.

1) The levels of reasoning as I have drawn them may co-exist
in any child at a particular time. Hence, it does not seem
as though primitive modes of thought are replaced by ad-
vanced ones as the child matures.

2) In my results, children's reasoning does not seem to
be proceedingsolely as an age-related development, nor does
reasoning seem to develop through an invariant sequence of
stages.

3) An alternating pattern of hypothesis generation/hypo-
thesis justification has arisen in which the children's con-
cepts of gender roles undergo significant changes.

4) Concepts of gender roles seem to develop to a point where
they are joined or replaced by a concept of personhood, in
accordance with which the child will then evaluate and select

traits and behaviours.

In espousing this view of child as theoretician, I am assuming that

> we have deliberately made it our task to live
> in this unknown world of ours; to adjust our-
> selves to it as well as we can;...and to ex-
> plain it if possible (we need not assume that
> it is) and as far as possible, with the help
> of laws and explanatory theories. If we have
> made this our task, then there is no more ra-
> tional procedure than the method of...conjec-
> ture and refutation. (Popper, 1963, p.51)

I also assume that this construction and refutation of

theories (or hypotheses) is not an activity unique to adults,

but is practised by children as well. Given this, my model

of child as theoretician can account for the points above.

1) Depending on the social environment, personal interests,

and cognitive sophistication of a particular child, she/he

will have access to many types of information from which

theories about the world may be constructed. From this in-

formation, different, but not inconsistent theories may be

generated and held within a person. The particular theory

or theories utilized by an individual to explain a situation,

then, will depend on the individual's perception of the situa-

tion and the type of explanatory theory it requires, as well

as the information originally available to the child. Within

this framework of child as theoretician, it is not necessary

to assume that new theories about gender roles must be in-

compatible with and therefore replace, old theories. Each

type of theory has its own explanatory uses, and may be used

in different ways by different children. Given my emphasis

on the context in which reasoning occurs, the coexistence

of theories (or levels of reasoning) within a child is understandable.

2) Within the framework of child as theoretician, emphasis is placed on the effects of the child's interaction with the social environment on the development of his or her reasoning, and not on the effects of his/her age. While in some senses this development may be age related, it is not age dependent, as other theories of development seem to imply. I would place more importance on the individual context within which the child is formulating his/her responses, and owing to this shift in focus, age is viewed as a secondary, rather than a primary influence on the development of a child's reasoning. Given that each child interviewed came from a particular personal context, there is no reason to assume that age alone would account for their level of reasoning, or indeed that the development of reasoning should proceed in an invariant sequence from child to child. As Markova (1982) noted: although universal patterns of development may exist, "they will express themselves in individuals in particular and unrepeatable ways." (p.5)

3) Accepting that children construct theories about gender roles, then the appearance of information inconsistent with the original theory may occasion the construction of a new theory, or the construction of a new justification for an old theory. Again, the solution a child chooses will be influenced by his/her social environment and his/own interests. The generation/justification pattern in my results may be understood in this way.

4) If the child is a 'theoretician,' then his/her aim will be to construct a theory or set of theories that can explain the persons and situations she/he encounters as fully as possible. I would suggest that as the modern child develops, she/he comes to realize that theories which include gender linked definitions of traits, abilities, or behaviours are too easily falsified. Thus, these theories are gradually modified until traits, etc. are defined in nongender linked terms. With respect to identity, concepts of gender become components of a superordinate concept of the self as person, and will be incorporated into that self as individual need or desire indicates. Of course, development need not proceed in this way - the theoretician may never find it in his/her interests or required by his/her situation to develop this concept of self. This could explain why I found some twelve year olds to be level I reasoners.

To recap briefly, this view of the child as theoretician attempts to locate each child in a particular social, temporal/historical and biographical context and to emphasize the important influence of that context on the child's developing reason. The child, interacting with the environment, is viewed as a creator and tester of theories to explain the world. In the course of development the child and the environment may be altered. As the individual context of each child differs, so will the development of reasoning in each child differ. In this theory of development, age is given secondary rather than primary emphasis, and it is not necessary for development to follow an invariant sequence from child to child.

The Development of Gender Identity

We have seen how the view of child as theoretician can account for the results obtained in this study. To continue, let us see how the child creates and tests theories about his/her identity; let us translate the view of child as theoretician into the context of the development of gender identity.

To begin, it is most important to define identity. In this discussion, I will consider identity to be socially constructed. To paraphrase G. H. Mead (1934), individual identity is formed by social processes, and does not exist except in relation to a broader social environment. Berger (1966) felt that individual identity was "produced by the interplay of organism, individual consciousness, and social structure. Conversely, the identities produced by this inter-play...react upon the given social structure, maintaining it, modifying it, and even reshaping it." (p.194)

In conjunction with this definition of identity, the following four points influence the model of the development of gender identity proposed here.

1) Concepts of masculinity and femininity are not static, but change as the child develops.

2) In constructing theories about itself, the child will progress through a phase of playful experimentation with various gender roles.

3) The selection and performance of gender roles may not be a critical influence on the child's developing identity at all stages of development.

4) The end point of identity development is not acceptance

of or conformity to, popular conceptions of gender appro-
priate traits and behaviours.   Rather, development may pro-
ceed toward the creation of a concept of the self as person,
without regard for gender.   This is not to say that the
child transcends concepts of gender as Rebecca et al (1976)
suggest, or that the child might proceed toward some concept
of androgyny (Bem, 1974), but that the child redefines and re-
combines concepts of gender to develop an individual identity.
In this process, the child's concepts of itself are changed,
as are its concepts of masculinity and femininity.   With
these points in mind, the development of gender identity may
be schematically represented as on the following page.

The advantages of applying this concept of child as theo-
retician to a model of the development of gender identity are
many.   First, this alternative model takes into account the
assertion that children's concepts of gender differ from
adults' in both content and meaning, as it allows for a period
of playful experimentation with gender roles.   This model
has no difficulty accounting for the assertion (Thompson and
Bentler, 1971) that genital cues for gender attribution have
no real salience for the young child, or that the child's
views and choice of appropriate cues for gender attribution
seem to vary with age.   Second, the model is able to take
into account an individual's construction of a personal iden-
tity with regard to the requirements of his/her social environ-
ment and personal interests.   It is 'universal' in the sense
that the levels of reasoning described here may express common
features which will manifest themselves in particular ways in

ALTERNATIVE MODEL OF THE DEVELOPMENT OF

GENDER IDENTITY IN CHILDREN

1

OTHERS' AWARENESS OF GENITALS
AS DICHOTOMIZING FEATURE ——————>
(sex assignment)

2

LABELLING BY OTHERS OF
CHILD AS MALE OR FEMALE ——————>
(gender assignment)

3

SELF-LABELLING BY CHILD;
PLAYFUL REFLECTION OF
CONCEPTS OF GENDER
('play' - Mead)

4

CHILD'S COGNIZANCE OF SOCIAL
CONCEPTIONS OF GENDER; AWARE-
NESS OF GENITALS AS DICHOTOMIZING
FEATURE; SELF IDENTIFICATION ——————>
IN ACCORD WITH SUCH KNOWLEDGE;
STABLE GENDER IDENTITY
('the game' - Mead)

5

DISSATISFACTION WITH POPULAR
CONCEPTS; RESELECTION OF
GENDER ROLES IN ACCORD WITH
INDIVIDUAL PREFERENCE ——————>
('transcendence')

6

DEVELOPMENT OF CONCEPT OF
SELF AS PERSON; REDEFINITION
OF CONCEPTS OF MASCULINITY
AND FEMININITY WITH RESPECT
TO THIS; CONTINUED RESELECTION
OF GENDER ROLES TO SUIT THE
INDIVIDUAL

particular individuals. Finally, this model bridges the chasms between Freudian, social learning, and cognitive developmental models of the development of gender identity, taking points from each and reworking them into an alternative description of the developmental process.

This model is based upon children's own ideas about gender roles, as obtained in this study. As I noted at the outset, faithful description and reflection of these ideas was my purpose. If we accept that a "reflection of the psychological reality it purports to explain" (Berger, 1966, p.198) is a criterion for judging the adequacy of a particular model, then we may hope that this model of development is adequate.

In this chapter, then, an alternative conception of development, as a process of interaction between the individual and his/her social environment in the course of which both may be changed, as been suggested. Given this, and the results of the current study, which call into question several previously acceptable models of the development of reasoning, it has been argued that it may be useful to adopt a view of the child as theoretician, as we consider theories of child development. The utility of this new viewpoint has been assessed with regard to the development of children's reasoning about gender roles, and the development of gender identity in children.

CHAPTER FIVE: RECREATING GENDER

> Man tries to make for himself in the fashion that
> suits him best a simplified and intelligible pic-
> ture of the world. He then tries to some extent
> to substitute this cosmos of his for the world of
> experience, and thus to overcome it...He makes
> this cosmos and its construction the pivot of his
> emotional life in order to find in this way the
> peace and serenity which he cannot find in the
> narrow whirlpool of personal experience.

> -Albert Einstein[1]

In this thesis, I have been considering the ways in
which people create, justify, and maintain concepts of
gender, and then use these concepts to create a simplified
and intelligible picture of the world. I have also indi-
cated some of the drawbacks incurred by the use of gender as
a means of differentiating people's characteristics and be-
haviours. We have seen how concepts of the 'essential dif-
ferences' between women and men have changed over time, in
accord with particular social and historical contexts. We
have also seen how some psychological research both in-
fluenced and reflected these varying concepts of the differ-
ences between women and men. Moving out of the theoretical
realm, the alternative approach to the study of gender de-
scribed in the introduction was applied to the study of
gender attribution in children, and we began to examine the
process through which children created a body of knowledge
about gender. The 'product to process' shift incurred by
this alternative approach was also apparent in chapter four,
as we focussed not on the produced reality of gender roles,
but on the process through which the children in the study

created ideas of appropriate roles for women and men, then justified the gender roles they saw as appropriate. A model of the development of children's thinking about gender roles was then constructed, to account for individual variations in the process which other models tended to leave out. It was suggested that we reconceptualize development as a process of interaction between an individual and his or her environment, in the course of which both may be changed. This reconceptualization fit with the redefinition of universals noted in the introduction, and allowed us to account more fully for the thoughts and behaviours of the individual child. In keeping with this, it was proposed that the view of 'child as theoretician' be considered, and that we begin to focus attention on the social, temporal/historical, and biographical context in which the child develops, and therefore that we look for common features of experience to be expressed in unique ways in particular individuals.

In this research, I have tried to demonstrate the utility of an alternative approach to the study of gender. I have posed and attempted to answer some questions about the process through which concepts of gender are created, justified, and maintained. Not surprisingly, though, my work has generated further questions, and I would like to highlight some of the specific points raised by my work.

Implications of the Research

In chapter two, I focussed on the varying concepts of the essential differences between women and men, or the

'myths of masculinity and femininity,' as Dornbusch (1966)
would say. My main concern was the way in which psychologi-
cal research both reflected and was influenced by popular
conceptions of gender. I noted throughout the chapter that
the information most psychologists were generating concerned
male and female <u>differences</u> and insofar as male - female
similarities were largely passed over, psychologists tended
to present distorted pictures of the nature and capabilities
of women and men. Along similar lines, I noted that much
of the research yielded information about male or female
<u>types</u>, and as such could not tell us much about individual
men and women. This research supported rigidly segregated
concepts of masculinity and femininity, and helped maintain
popular notions that gender was a useful dimension along
which to differentiate people's abilities, traits, and be-
haviours. I suggested in chapter two that these sorts of
findings and their interpretations were in part the result
of the influence of social interests. It is also possible
that these same social interests affected the particular
psychologist's choice of research methods. That is, perhaps
particular methods were used because they would yield the
desirable, 'newsworthy' sex difference results. It is pos-
sible that methods which did not yield strong sex difference
results were set aside as 'unscientific' or 'unreliable.'
This suggested relationship among social interests, choice
of method, and sex difference findings could be further in-
vestigated.

Given the effects of social interests on psychological research, though, can we expect any change within psychology? Can we expect psychology to offer us much needed information about individual people, instead of information about types of people? I would suggest that such a change of focus would require a redefinition of what psychology (especially social psychology) is, and what it is that psychologists do. We would have to redefine psychology along the lines that Markova (1982) suggested, and shift the focus of our research away from a quest for universal laws of behaviours, and toward the goal of understanding the processes through which we create ourselves and our society. With respect to gender, our task would not be to prove, once and for all, what the essential differences between women and men are, or that females are either superior or inferior to males. Instead, our task would be to understand as far as we are able, how individual people understand and approach the world, and what factors influence their thinking and behaviour. This cannot be done if we continue to involve ourselves in nature/nurture types of debates, where as Ashley Montagu (1974) has noted, we tend to mistake our prejudices for laws of nature. (p.ix) As defined above, what lies before us is "...an extremely difficult job which requires both hands, and cannot be done well if the scientist involved is carrying a banner in one of them." (Weyant, 1978, p.382) What will make the job less difficult, though, is a theoretical framework which will allow us to integrate several types of knowledge and account for the ways in which the thoughts and behaviours of an individual may change and develop over time.

(Weyant, 1978, Markova, 1982, and McHugh, 1974 have all made suggestions about theoretical frameworks which would make this type of research possible.)

Turning now to the research chapters of the thesis, the most significant point to emerge from chapter three was that criteria for gender attribution seemed to vary with age, indicating that different types of cues, or different types of knowledge, might be important to children's concepts of gender at different ages. The main question arising from chapter three was, does this apparent focus on different types of knowledge reflect significant changes in the ways in which children of different ages conceptualize gender?

Chapter four investigated that question with a study of children's thinking about gender roles. This study broadly echoed the findings in chapter three, in that concepts of gender roles did seem to undergo significant change and development as the child developed. These changes seemed to be energized by the child's desire to construct theories which explained as fully as possible, the people and events in his/ her world. While age was an important influence on the child's developing reason, it was suggested that the social/ historical and biographical context in which the child existed played a more important role in the development of reasoning than was previously thought. It was also suggested that concepts of gender seem to develop to a point where they are joined or replaced by a concept of 'personhood.' That is, a child may eventually come to realize that gender linked

definitions of individual traits, abilities, and behaviours
are too easily falsified, and substitute nongender-linked
definitions.

Clearly, the question arising from this study is, will
this development continue past age twelve? Ullian (1976a)
would say yes, and I would have to agree. Concepts of gen-
der and of oneself as a woman or man will continually be
revised throughout adolescence and adulthood as individual
circumstances require.

To examine this question more closely, and to gain some
information about parental influences on children's reason-
ing about gender roles, I sent questionnaires to the British
and American parents of the children in my study. These
questionnaires, although they focussed mainly on the types
of job the parents felt were suitable for their children,
did contribute information about the parents' reasoning
about gender roles.

The results may be broken down into two areas of con-
sideration. First, was gender an important influence on
parents' ideas of appropriate jobs for their children?
With the exception of jobs that traditionally have demanded
more strength, such as bricklayer or builder, or those
jobs such as police or pilot, which tend to be seen as more
dangerous, and which were seen as more suitable for males,
gender seemed to be relatively unimportant as an influence
on the parents' ideas of appropriate jobs for their children.
Their main concerns seemed to lie with the particular
child's interest in, or ability to do the job in question,
and with the economic security the job might provide. "Job
doesn't pay well enough," or "child likely to be made re-

dundant if she/he takes this sort of job, were common re-
sponses to the question 'would you like your child to be X
when she/he grows up.' Other popular responses were "S
is too active to sit in an office all day," or "P seemes to
like science, and would probably enjoy being a doctor." With
answers such as these, revealing a concern for individual
preferences and abilities, the adults do appear to be reason-
ing at level IV, but their concern with economic security
over the gender appropriateness of the job would have to be
factored in elsewhere. We might consider another level of
reasoning where concern about socio-economic level replaces
gender as an indicator of ability to do a certain job. Per-
haps at this level, socio-economic stereotypes replace gen-
der stereotypes in a practical sense.

The second question we may consider is, what did these
parents see as the important differences between girls and
boys? Although we must consider the possibility that the
parents might have decided to give me the most liberal,
'liberated' answers they could think of, and thus not re-
ported their real thoughts, I think that in most cases, the
answers I received accurately mirrored the parents' per-
sonal views. My discussions with the children, with
teachers who knew the parents, and in some cases with the
parents themselves, led me to believe that the parents took
the questionnaire seriously, and answered sincerely.

Most parents answering the questionnaire felt that there
were very few important differences between girls and boys.
As one parent said, "I doubt very much if boys have any par-

ticular personal characteristics which could not also be attributed to girls and vice-versa." Other parents focussed on social differences or inequalities between males and females, noting that these differences did not seem to stem from innate differences between girls and boys, and could be changed to allow females more opportunities in society. Most parents felt that all children should grow up to be "responsible, caring members of society, able to discriminate between what is right, good, and useful for themselves and others, and what is merely expedient or socially acceptable." They seemed to have concepts of what a good person should be, not what a good man or a good woman should be. Given the wide differences in social, cultural, and economic backgrounds of the parents replying to my questionnaire, I found this consistency of person-oriented responses most interesting.

The parents who did feel girls and boys were different tended to focus on physical differences between males and females, stating that boys were generally bigger and stronger than girls. Other parents said that there were differences in the likes and dislikes of girls and boys, and that boys seemed to be more aggressive than girls. As might be expected, a few parents said that females were "biologically programmed to nurture the children they bear," and that females "had to concern themselves first with the home and children, and then with an outside job." Despite the differences they cited, most of these parents acknowledged that individual exceptions did occur, and that in a prac-

tical sense, few if any of these differences affected a person's ability to do a particular job.

Just as their children did, these parents seemed to be reasoning about gender and gender roles on a variety of levels. Again, no pure types emerged. While the greater cognizance of individual exceptions to gender stereotypes and their ability to distinguish between theoretical and practical differences between males and females seem to require an extension or modification of the model of reasoning I developed, I would say that in general terms, the types of reasoning I found in children existed in their parents. Although their concepts of gender and appropriate gender roles differed, the way in which they reasoned about those concepts appeared to be broadly similar.

One important similarity in the reasoning of parents and children should be mentioned. We noticed in chapter three that references to biology or anatomy were strikingly absent from the children's comments about differences between males and females. The same tendency was noted in chapter four, where, with the exception of vague references to differences in size and strength, the children did not rely on biological knowledge to support their assertions about gender differences. This in itself is not particularly remarkable, for the reasons noted in chapter three, and one could also easily argue that children of the ages I interviewed didn't know enough about biology to link male/female biological differences to gender role differences. Could one argue as easily that the parents were similarly unaware

of any links between male and female biology and the social roles that men and women perform? I think this is highly implausible in a society where popularized versions of biological theories of the development of gender differences appear fairly frequently in all types of journals, magazines, and newspapers.[2] Why then did both parents and children omit references to the biological bases of gender and gender role differences? Is it that in day-to-day interaction recourse to biological knowledge to account for gender differences is relatively unnecessary? No doubt Garfinkel (1967) and Bower (1980) would say so.

While I have no definite answer to that question, it does raise an interesting point. What exactly is the role that biological knowledge plays in our construction of concepts or gender and gender roles? This question, and the question 'do biological differences between women and men necessitate social differences?' have long been debated both within and outside psychology. Can we, and should we make the leap from discussions of sex differences to discussions of gender differences, as some writers have proposed, or are any biological differences between males and females relatively unimportant influences on observed gender and gender role differences? While it would be too much of a digression for me to consider these questions in depth - indeed, a thorough consideration could be the topic of an entire thesis in itself - a brief consideration of biological influences on gender and gender role differences is certainly appropriate.

Sex, Gender, and Biology

When we consider the popular beliefs about the nature
and capabilities of women and men which flourish today,[3] it
is tempting to look to biology to provide some explanation
of the gender and gender role differences we observe. Thus,
we turn to the biologist or physiologist, hoping to discover
what the essential differences between males and females are.
We ask, do women and men hold unequal positions in society
because their different biological constitutions equip them
to perform different social roles?

In chapter two, we observed the close relationship be-
tween psychological theories about gender differences and
biological theories about sex differences. I isolated par-
ticular socio-historical contexts in which biological ex-
planations of psychological differences between women and
men were popular. We observed that psychological research
was and is subject to the influence of social interests. I
would now suggest that research in other, 'hard' scientific
disciplines is also influenced by social interests.[4] Thus,
within biology (and I will use the term biology in its broad-
est sense, to include genetic, hormonal, physiological, and
physical characteristics of women and men) we find that in
accord with prevailing social interests, not only have inter-
pretations of biological facts varied, but the facts them-
selves have varied, too. (See Kessler and McKenna, 1978,
chapter 3) This variation in the biological facts should
cause us to question the popular belief that the biological

differences between men and women influence in a consistent and definite way the social differences that we find.

Biological knowledge enjoys a special place in our culture; if we are able to ground an assertion in biology, we tend to assume we have proved the truth of that assertion, and have demonstrated that the stated occurrence, process, etc., is 'natural.' Thus we find that many assertions about women and men and their proper social roles are grounded in biology. For example, it is often assumed that as women bear children, they are the best people to rear children. Not surprisingly, given the rise of the women's movement over the past twenty years, there is also to be found a large body of writing which refutes such claims that in a broad sense, biology is destiny.[5]

In this section, my concern is not with the specific biological arguments various scientists and social scientists have used to support their particular assertions about men and women, and the differences between them. Rather, I would like to point out some general, conceptual problems which arise when we rely on biological knowledge to support particular theories about the origins of gender differences. I will deal primarily with two issues. First, biology is often used as a general explanatory system which, depending on one's social/political/theoretical bent either does or does not ground the gender role differences found in our society. Second, biological 'facts' are thought of as 'natural' and therefore inevitable, unchanging, and right. (Chodorow, 1978) This frequently translates into everyday terms

as something like 'women and men are made differently, so they must be meant to serve different purposes,' or 'the differences we find in gender roles are 'natural' and shouldn't be altered.' Again, my aim is not to affirm or deny the validity of any particular argument, but to consider the assumptions on which these arguments rest, and to detail the general, conceptual problems they incur.

The first problem to be considered is the tendency of some scientists and social scientists to overextend biological facts, to generalize on those findings in a potentially misleading way. Some researchers have used biological models of the development of sex and gender differences as general, or universal explanatory systems, and have emphasized biological explanations of human behaviour and psychology to the extent that social and cultural explanations have been over-looked, or summarily dismissed.[6] Of course the same charge of exclusivity and over-generalization could be levelled at some proponents of the opposite view (see Ortner, 1974, for example), but leaving this aside for the moment, let us return to the problems of using a biological theory to explain social differences between men and women.

What is at issue here is the use of biological knowledge as a general law or system to explain sex, gender, and gender role differences. It seems to be assumed by researchers such as those mentioned in footnote six that as humans share a similar biological/physiological structure, relationships between this structure and behaviour will be consistent between members of the same sex, regardless of the environment

of the individual. To refer back to the ideas of Markova
(1982) mentioned in the introduction, it would seem that
those employing biological knowledge in sex and gender dif-
ferences research assume that our common characteristics (in
this case, our similar biological structure) will manifest
themselves behaviourally in common ways in all individuals
of the same sex. On the whole, accounts based on this assump-
tion take no notice of the variety of patterns of gender dif-
ferences among social groups, let alone any individual varia-
tions that may emerge. By using biological knowledge as a
general explanatory system in this way, the complexity and
individuality of human behaviour is disregarded, and the im-
portance of environmental influences on behaviour is under-
estimated. John Archer (1976) has noted that while Hutt
(1972a,b) and others (see also Freedman, 1964, and Gray,
1971) have created a simple and readily understandable model
of the development of gender differences, that model is none-
theless inappropriate, and lends itself to misinterpreta-
tion. For example, Archer notes that the overgeneralization
of the biological model, as used in the instances cited, im-
plies that our biology imposes definable limits on our be-
haviour, and that social influences can only accentuate or
heighten sex differences already existing in the genome
(p.252).

Although the biological model presents simple and
straightforward answers to questions about the origins of
gender differences, that model is really too simplistic to be
of much use on its own. Lloyd and Archer (1976) among

others, have called for an interactionist approach to the study of sex and gender differences. This is one viable solution to the problems raised by the use of biological models in the study of human behaviour and psychology, and will be considered in more detail later in this section.

Another problem stemming from the use of biological models of the development of sex and gender differences as general explanatory systems, is the confusion in terms evident among the published research. It is one thing to use biological knowledge to account for the development of sex differences, and to explain what biological/physiological differences exist between women and men. It is, however, another thing entirely to use the existing sex differences as prescriptions for gender differences, or to apply concepts of gender to biological/physiological differences. Kessler and McKenna (1978) have noted that the biological and social meanings of the terms male and female are quite different, and that in much of biological writing the terms are used to imply differences beyond those purely reproductive, or structural ones. They caution readers to remember that although the biological study of gender has its foundations in the process of reproduction, it often goes far beyond those foundations. Thus, gender differences are stated or implied where it is only appropriate to discuss sex differences (see Bardwick, (1971), Dawkins, (1976) or Hutt, (1978).) Moreover, we find that researchers use value-laden concepts of gender to interpret sex differences, often assuming that some ideal of male and female behaviour exists

independent of our classification of it as such (see Hutt, 1978, p.176).

The confusion in terms evident in the published research on sex and gender differences, and the tendency of some writers to overemphasize the importance of biological influences on the development of gender differences are not the only problems which arise when biological theories about sex differences are transposed to a discussion of gender differences. In addition to these problems, and the tendency of some writers to overgeneralize on the biological facts to support their theories about gender differences, we must consider that biological knowledge has a special place in our society. This 'special place,' and our habit of regarding biological knowledge as a key to things 'natural,' act to make simple biological theories appealing in a way that other, more complex theories are not. We will now consider the specific factors which give biological knowledge its special place in our society, and we will consider the implications of viewing this knowledge as a key to things 'natural.'

When we look back at how knowledge about the world, and about ourselves has developed in Western cultures, it is clear that our explanations have shifted, broadly speaking from the mythological to the scientific (see Campbell, 1971). For example, in our society, we tend to attribute ill health not to the machinations of an evil spirit, but to a virus or some other problem within our own bodies. The causes of our problems are increasingly located within our-

selves, and correspondingly, as scientific, medical, and technological breakthroughs occur and give us more knowledge about ourselves, those with access to such specialized knowledge have gained more and more respect. They seem to hold a special understanding which is unavailable to most (Toffler, 1971).

We view these experts with respect precisely because, as Kessler and McKenna have noted, biological factors tend to be seen as the most basic and primary of causes (1978, p.42). We tend to assume that if we can isolate some biological cause for an individual illness, or for a pattern we observe in society, then we have found the 'truth.' Kessler and McKenna suggested that we tend to forget biological 'facts' have changed with time, and that it has usually been the case that we view what we know at any given time as the final truth, not as another step in a process of understanding ourselves and the world we live in.

Notwithstanding this variation in the 'truth,' however, it has also usually been the case that we have regarded biological knowledge as a key to things natural, and therefore as somehow best for us. Once we have discovered a biological basis for a particular behaviour, or set of behaviours, then, we have been quick to label those behaviours 'natural' and assume that it would be unwise to tamper with them. But, as Barnes and Shapin (1977) have noted,

> any perceived pattern or organized system in
> nature is liable to be employed to express and
> comment upon social order and social experience.
> In being so employed, the perceived pattern is

> itself liable to be developed and recon-
> stituted to better fit its functions (p.15).

Again, the varieties of behaviour which may be called 'natu-
ral,' and our tendency to alter our conceptions of things
'natural' to fit the behaviours or processes we wish to de-
scribe, seem not to have any effect on the ways in which we
use the term. Before we look at instances in which the con-
cept of 'naturalness' has been invoked, then, it seems wise
to examine what we mean when we say something is 'natural.'

This question of what is natural is particularly impor-
tant to those involved in the study of sex differences. As
we saw in chapter two, the quest to discover the real, es-
sential, or natural differences between women and men has
been energized in part by the popular belief that if we dis-
cover what the natural differences between women and men
are, we will know what roles they are best suited to occupy
in society. However, as Radcliffe-Richards (1982) has pointed
out, while we need to know about the material we have to
work with, knowing about the material does not determine
what ought to be done with it (p.64). The translation of
biological knowledge into value-laden social prescriptions is
not especially wise. It is a mistake to derive statements
of value from statements of fact. We cannot deal with this
by ignoring the knowledge biology provides for us, but
neither can we continue to use this knowledge inappropriately.
As Osler (1980) has written, "science will tell us many
things about what we can and cannot do; it cannot, however,
free us from the fundamental human task of making value
choices" (p.286).

This distinction between biological statements of fact and social statements of value should not be taken to mean that biological science is value-free. On the contrary, biology is subject to the influence of social interests just as much as any other discipline, as indicated earlier in this section. In a sense, then, biological science never offers us objective, unbiased facts. We must always be aware of the socio-historical context in which particular facts arise, and be aware of the effects of social interests within a discipline. We must take this into account when we consider the is/ought distinction, and realize that not only must we question the way in which biological facts are interpreted and used in a particular argument, we must ask about the origin of those facts and examine the context in which they arise. In this section, I will briefly sketch out some of the social contexts in which 'natural' explanations of gender differences become popular, as an in-depth account is beyond the scope of this thesis. Let us return to the discussion of what we mean by the word natural, then, bearing in mind the two prongs of the is/ought distinction just mentioned.

Radcliffe-Richards (1982) noted a few of the meanings 'natural' carries, and her observations are summarized here. First, she wrote 'natural' may mean free from outside influence, which could account for those wanting to find out the nature of something to support particular views of what is natural for it. However,

> if natural for...means stemming from its nature
> alone, without outside influence, then it fol-
> lows that nothing can possibly be in a natural

>   state...what everything is <u>must</u> be a product
>   of its own inherent nature <u>and</u> the environ-
>   ment it finds itself in (p.68).

It becomes apparent, then, that if this definition of 'natural' is used, arguments stating that some social roles are 'natural for' women or for men are meaningless. We must look elsewhere to find out why what is 'natural' is to be recommended.

A second meaning of 'natural' has been mentioned before, that 'natural' may mean something right or good, with the implication that if we alter something natural, the result will be wrong or bad. Radcliffe-Richards concluded that 'natural' may mean many different things, and that none of its possible meanings may be taken as a guide for distinguishing right from wrong. "We seem forced to conclude," she wrote, "that in no readily understandable sense of the word 'natural' does there seem to lie any reason at all for acting according to nature rather than against it" (p.71).

Why, then, if the word 'natural' does not appear to have any sensible meaning in the context of biological arguments about differences between women and men, is it used so frequently, and why does it carry such force?

As noted in chapter two, psychologists often take recourse to 'natural' or biological factors to support various accounts of gender differences when other accounts no longer appear credible. Biological accounts also re-surface in times of social flux, as they seem to contain an element of permanence. Lloyd (1976) provided further support for this view, citing the work of Crook (1970), who suggested that some people have found a substitute for orthodox religious beliefs in simple theories of biological determinism.

Lloyd also cited Strathern (1976), who felt that "attributes which have their origins in nature may appear more personal and immutable while those of cultural origin are artificial, arbitrary, and changeable since they are man-made" (p.16).

Other responses to the questions above were provided by Radcliffe-Richards. She called attention to the fact that those employing the word 'natural' in their arguments tend to capitalize on the fact that the good connotations of 'natural' are so firmly rooted that it is usually unnecessary to provide further information to prove that the 'natural' thing in question is indeed good. She also noted that owing to its multiple meanings, 'natural' may be applied to anything at all; therefore, a skilled writer may prove anything at all to be unnatural and undesirable. Finally, following on from this, she observed that 'natural' was not generally used to mean without any influence, but was used to imply the absence of a particular influence or group of influences. The particular influence in question, then, could be "determined entirely by the intentions of the speaker in a particular context" (p.79). That is to say, what is viewed as natural or unnatural is context dependent, and is easily manipulated by a writer or speaker wishing to drive home a particular point.

All of these points may help to explain why arguments about what is natural for women and for men arise so frequently in a discussion of sex and gender differences, and why these arguments carry such force. Examples of work in which authors have attempted to make use of the special position biological knowledge holds in our society to advance

their arguments are relatively easy to find, as are works which try to demonstrate that certain roles or behaviours are natural for women and men. For instance, the majority of the literature on mothers and mothering relies heavily on the force of biological arguments to demonstrate that women are 'naturally' the best people to rear children. This claim has frequently been challenged, though.[7] Sociobiological accounts also rely on biological theories to support their claims that certain features of human sexual relations and social organization are heavily influenced, if not dictated by biology. As with the literature on mothering, these claims, too, have been challenged.[8]

What the debates over these accounts suggest, is that on their own, biological accounts of the development of gender differences are inadequate. While I would not like to go as far as biologist Richard Lewontin of Harvard, who said this endless debate about the 'natural' differences between men and women was just "the garbage can of barroom speculation presented as science,"[9] it does seem fruitless to pursue these one-sided nature or nurture approaches to the investigation of human behaviour. Used in isolation, biological explanations of human behaviour may be overgeneralized upon and simplified to a point where writers imply a sort of genetic determinism. This, coupled with the misuse and misapplication of concepts of gender to experimental work on sex differences, and the confusion in the literature and in everyday life about the meaning of the word natural, has enabled the biological theories advanced to be used to justify a particular social structure in which men are 'natural'

leaders, the dominant ones, and women are the submissive ones, 'naturally' meant to bear and rear children.

What is suggested, therefore, is that we abandon this type of one-sided approach to research, and begin to ask new questions about the interaction of various factors which influence human behaviour. (See Lloyd, 1976, or Archer and Lloyd, 1974, for a description of an interactionist approach to research.) Perhaps, too, we should alter our conception of what it means to look for universal laws of behaviour. Perhaps we should take account of the way in which humans make use of the knowledge available to them to structure and define their worlds, and in so doing, look not for common features to be manifested in similar ways in all people, but for the ways in which these common features are expressed in particular ways in individuals. (See Jodelet, in press, for an example of this type of research.) This would lead us away from the fruitless pursuit to establish essential or natural gender differences, and toward a consideration of individual differences in behaviour, and the ways in which an individual may come to regard gender as a meaningful influence in his/her construction of the world. A concentration on how different types of knowledge are used by particular individuals to justify their own and others' behaviour would lead us away from this endless search for basic and primary causes, and would render this search for things 'natural' meaningless. We would be free to investigate other, potentially valuable, questions which might lead to the reconciliation of the nature/nurture debate and help us formulate a more integrated picture of ourselves as human beings.

Where Do We Go From Here?

Taking into account my survey of psychological litera-ture on sex differences, which suggested that concepts of gender and gender roles vary with the social and historical climate, and considering the suggestion that similar varia-tion in gender concepts exists in biological literature, it would seem as though, as Kessler and McKenna (1978) suggested, no ultimate and inviolate criteria for defining gender exist. When we look at the results of the studies in chapters three and four, we seem to arrive at the same conclusion: concepts and definitions of gender are socially constructed and con-text dependent. Thus, the terms masculine and feminine may mean just what we want them to mean, and will be used as de-fining characteristics of persons only so long as we continue to use them in this way.

Stated like this, the conclusion seems obvious, and the prescription for change is equally obvious - all we have to do is stop using gender as a means of classifying people's abilities, traits, and behaviours. Unfortunately, this is easier said than done. Before I go on to suggest possible means of changing the popular views of the nature and capa-bilities of women and men, let us pause for a moment and con-sider the implications of a change in our concepts of gen-der. Let us consider a world where gender is virtually ir-relevant.

For these examples, I must turn to a work of science fic-tion, Ursula LeGuin's The Left Hand of Darkness. She describes

a people called Gethenians, who do not exist as female or
male except for a four-day period each lunar cycle. Only
then do these people become female or male, and acquire the
ability to reproduce. They have no way to foretell which
sex they will be. After this four-day period, the non-
pregnant Gethenians once again become androgynous, while the
pregnant Gethenians remain female to carry and bear children.
After the birth of a baby, the females become androgynous
again. No precedent is set, and the mother of several chil-
dren may be the father of several more.

The existence of these androgynous individuals is
radically different from our own, and the glimpse of a so-
ciety set up without regard for gender, which LeGuin offers
us, is intriguing.

> Consider: Anyone may turn his/her hand to anything. This
> may sound very simple, but its psychological effects are
> incalculable. The fact that everyone between the ages of
> 17 and 35 or so is equally liable to be...tied down to child-
> bearing implies that no one is quite so thoroughly tied down
> here as a woman elsewhere, or are likely to be - psychologi-
> cally or physically. Burden and privilege are shared out
> pretty equally. Everybody has the same risk to run or choice
> to make. Therefore nobody here is quite so free as a free
> male anywhere else.

> Consider: A child has no psycho-sexual relationship to his/her
> mother and father. There is no myth of Oedipus.

> Consider: There is no unconsenting sex, no rape. As with most
> mammals other than men, coitus can be performed only by mutual
> consent; otherwise it is not possible.

> Consider: There is no division of humanity into strong and weak
> halves, protective/protected, dominant/submissive, owner/chattel,
> active/passive. In fact the whole tendency to dualism that per-
> vades human thinking may be found to be lessened or changed.

Is the world LeGuin describes unattainable for us? In
a physical sense, yes. It is unlikely that we would evolve
into people like the Gethenians. In a psychological sense,

though, I believe that we can reconstruct our concepts of gender so that it will become possible for us to say 'anyone can turn his/her hand to anything' and no longer construct societies in which different roles are considered the province of women or men. I have tried to show that concepts of gender are socially constructed, as is our social order which rests on this male - female dichotomy. Having constructed all of this, I see no reason why it would be impossible to reconstruct our ideas and our society.

Of course, the crucial question is always how are we to do this? How can we effect change? As always, the answer is not easily found.

Within biology and psychology, I have suggested that we reconceptualize our goals, and focus our attention on the individual, and the process through which individuals create their worlds. In this way, we might provide a psychology or biology which more closely reflects individual experience. We might also try to incorporate a more historical perspective into our research, and look at the ways in which certain ideas, theories, etc. have changed and developed over time. Then, too, we should take account of contextual influences on specific ideas, and look at the connections between a given theory and its main proponents, the social and political interests of the period in which it arose, and the time or times in which it was most popular.

In a more general arena, Radcliffe-Richards (1982) has suggested that what is necessary is "to insist on <u>splitting up the packages</u>, looking at the good and bad aspects of tra-

dition and keeping what is good whenever we can" (p.348).
This may sound like a rather simple remedy to a complex
problem, but it is a valuable suggestion and its implica-
tions are many.

If we 'split up the packages' of gender, we will have
to re-examine popular stereotypes and begin to consider the
tremendous variation in allotment of roles, traits, and
characteristics which exists among social and cultural
groups, and among individuals. If we begin to relinquish
harmful and restrictive stereotypes of women and men, it
will become difficult to justify the differential treatment
women and men receive in virtually all areas of society.

If we 'split up the packages' of gender, we will have to
stop teaching our children that gender is a useful dimension
along which to differentiate people and their characteris-
tics and abilities. We will have to teach them to think
about individuals, not types of people. We will also have to
teach them to be wary of 'facts,' that 'facts' change, and
that they must look at the context in which any given facts
arise. We should encourage them to see more than one side
of a question, and to tolerate multiple interpretations of a
given situation. (This needn't impair their ability to de-
cide what is right and wrong, as some have suggested - being
able to see many sides of an issue doesn't mean one is un-
able to decide which point of view would be most workable
or desirable.)

Finally, if we 'split up the packages' of gender, we
could begin to form more integrated pictures of ourselves
as human beings. Individuals could be encouraged to develop

all aspects of themselves, not just those which are deemed
appropriate for members of their sex. We could break down
the polarized definitions and concepts of masculinity and
femininity, and begin to do away with the potentially harm-
ful myths of masculinity and femininity which have been, and
are so prevalent.

My intention in this thesis was to raise some questions
about our ways of thinking about gender, and to suggest
and implement an alternative approach to the study of gen-
der. In so doing, I have raised more questions, and per-
haps demonstrated the utility of this alternative approach
to research. Most importantly, though, I would hope that I
have left the reader with a sense of possibilities, with the
feeling that we can change the ideas and structures we have
created. I would hope I have made the task of redefining
ourselves as <u>individuals</u> seem both important and appealing,
and made the task seem as exciting and challenging to readers
as it is to me.

APPENDIX A: CHILDREN'S DRAWINGS

B IV ✓

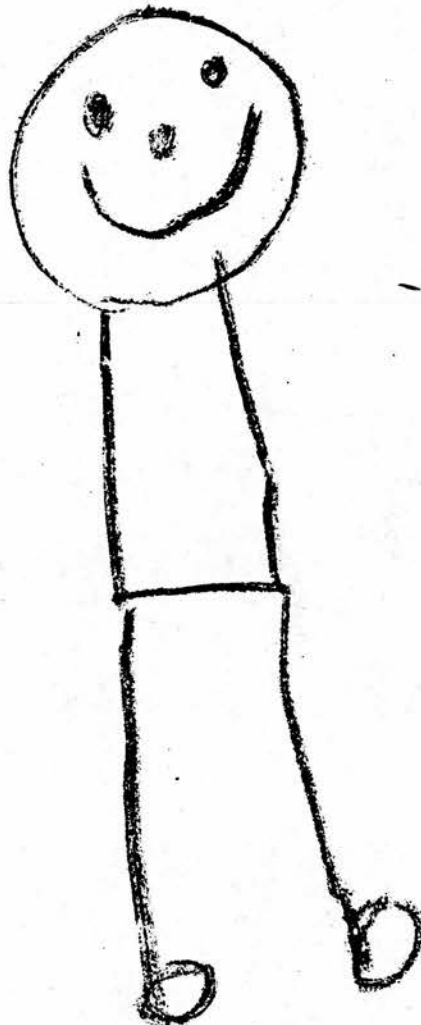EXAMPLE I A
GROUP I WOMAN

216
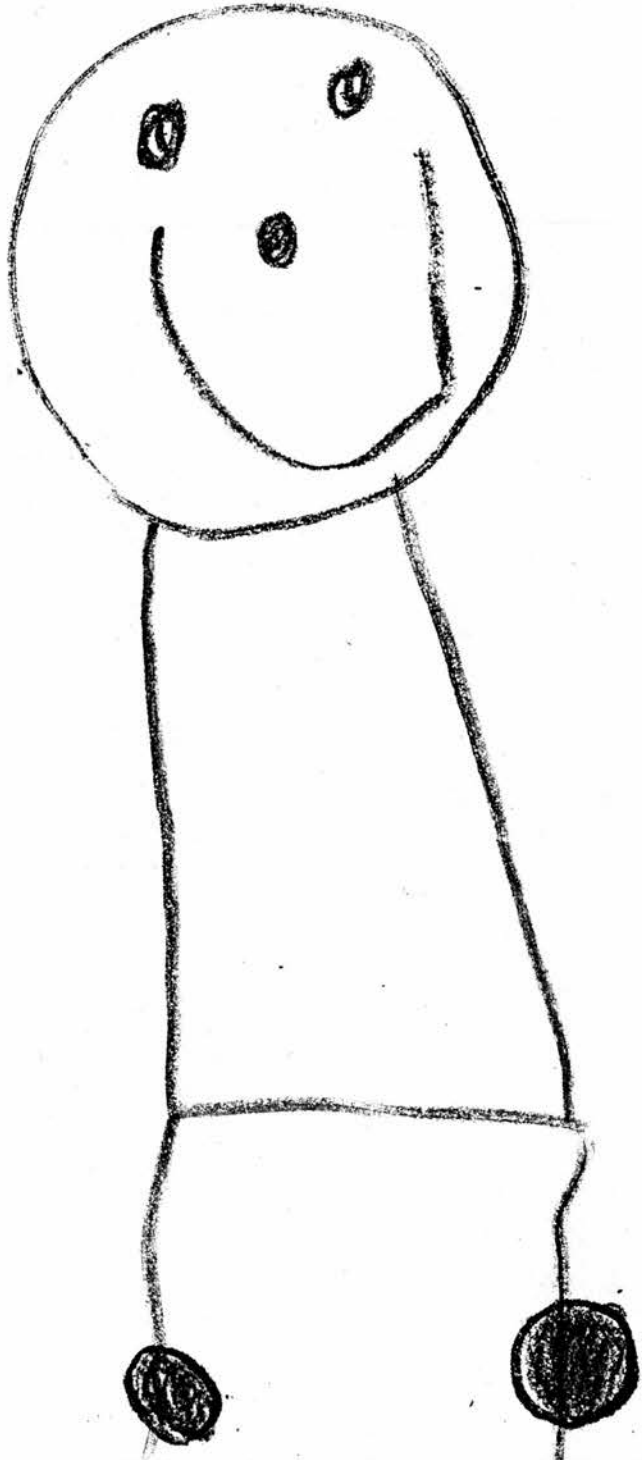
B IV +

EXAMPLE I B
GROUP I MAN

B IV +

EXAMPLE II
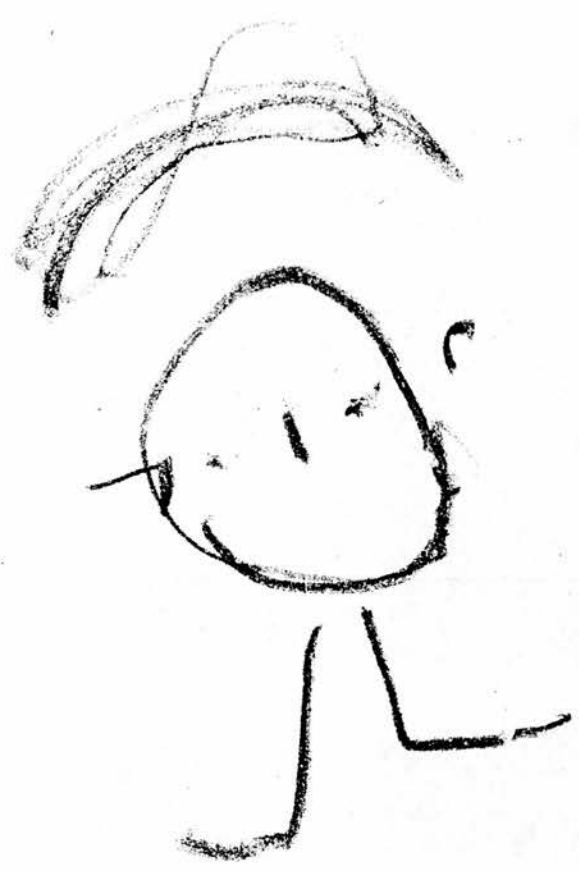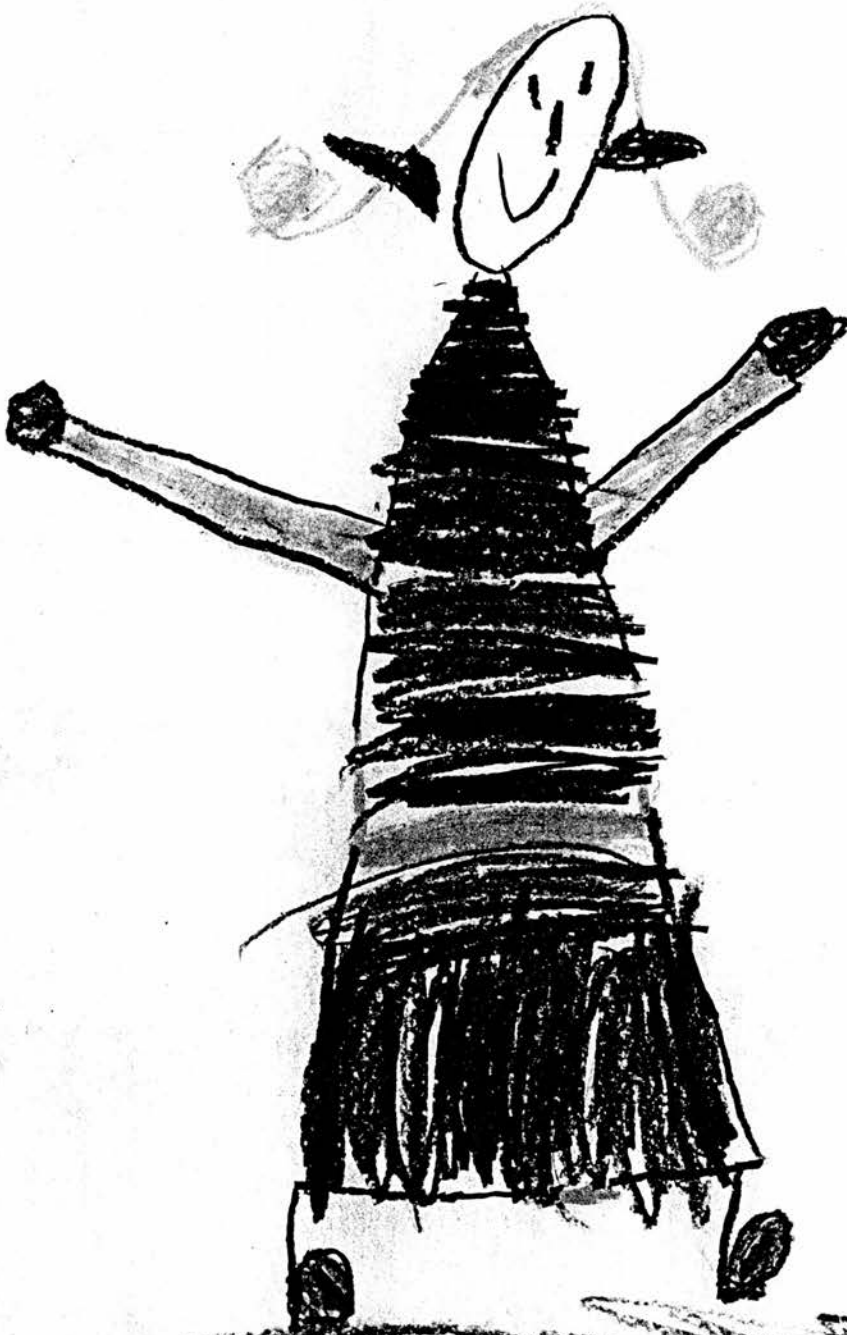GROUP I MAN

218

5 ✓

EXAMPLE III   219
GROUP I WOMAN

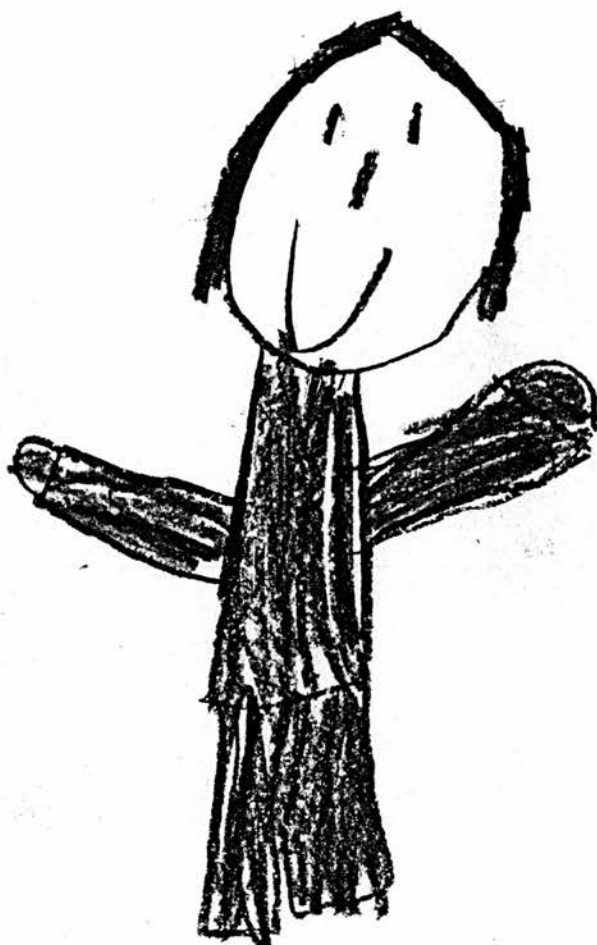EXAMPLE IV A
GROUP II WOMAN

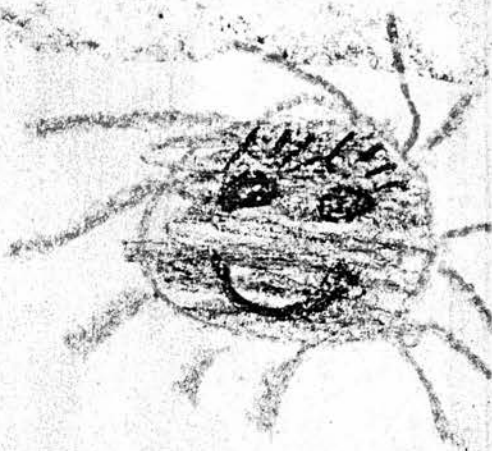EXAMPLE IV **B**   221
GROUP II MAN

B Ⅲ +

EXAMPLE V A
GROUP III WOMAN

222

EXAMPLE V B
GROUP III MAN
223

APPENDIX B: CHILDREN'S STATEMENTS - CHAPTER FOUR

APPENDIX B: STATEMENTS CONSTRUCTED FROM CHILDREN'S
RESPONSES TO 'I AM' INTERVIEW, CHAPTER FOUR

Following are the statements which were copied onto
file cards and then presented to the children for comment.

SCOTTISH CHILDREN:
Group I - 5/6 years

1. This person wears a dress and likes to sing.
2. This person isn't rough and can be a typist.
3. This person likes to sew and can be a hairdresser.

4. This person is rough and likes to play football.
5. This person is always dirty and can be a mechanic.
6. This person likes to fight and can be a bus driver.

7. This person is tough and likes to play with dolls.
8. This person is a wee bit bad and likes to play Space
    Invaders.
9. This person is a bully and can be a dancer.
10.. This person isn't rough and can be a pipefitter.
11. This person likes to play Indians and can be a cook.
12. This person likes to wash dishes and can be an engineer.

13. This person is nice and likes to paint.
14. This person is good and can work for the police.
15. This person likes to watch TV and can be a teacher.

Group II - 8/9 years

1. This person is bossy and likes to skip.
2. This person is neat and can be a hairdresser.
3. This person likes to play with dolls and can be a dancer.

4. This person is strong and likes to play cricket.
5. This person is tall and can be a plumber.
6. This person likes to tease and can be a mechanic.

7. This person is tough and likes to play with dolls.
8. This person is tidy and likes to play rough games.
9. This person is daring and can be a singer.

SCOTTISH CHILDREN:

Group II - 8/9 years (cont.)

10. This person is helpful and can be a pilot.
11. This person likes to bully and can be a nurse.
12. This person likes to help around the house and can be an engineer.
13. This person is clever and likes to go to films.
14. This person is good and can be a TV star.
15. This person likes to swim and can be a shopkeeper.

Group III - 11/12 years

1. This person is shy and likes to knit.
2. This person isn't strong and can be a model.
3. This person likes to go shopping and can be a secretary.
4. This person is rough and likes to be looked up to.
5. This person is good at maths and can be a banker.
6. This person likes to boss people and can be a mechanic.
7. This person is untidy and likes to sew.
8. This person is fussy and likes to fight.
9. This person is strong and can be a hairdresser.
10. This person is thoughtful and can be a joiner.
11. This person likes to shout and can be a dancer.
12. This person likes to dress up and can be an MP.
13. This person is clever and likes to do sports.
14. This person is annoying and can be a shop assistant.
15. This person likes to work and can be a vet.

AMERICAN CHILDREN:

Group I - 5/6 years

1. This person is afraid of spiders and likes to jump rope.
2. This person is nice and can be a secretary.
3. This person likes to make things and can be a nurse.
4. This person is strong and likes to play soccer.
5. This person likes to play baseball and can be a boss.

AMERICAN CHILDREN:

Group I - 5/6 years (cont.)

6. This person is tough and can be an electrician.

7. This person is short and likes to eat.

8. This person is a good writer and likes to play tag.

9. This person is good and can work for the police.

10. This person likes to swim and can be a doctor.

11. This person likes to do math and can be a teacher.

12. This person likes to ride bikes and can work in an office.

Group II - 8/9 years

1. This person is talkative and likes to play hopscotch.

2. This person is playful and can be a gymnast.

3. This person likes to make books and can be a singer.

4. This person is curious and likes to do science.

5. This person is picky and can be a coach.

6. This person likes to play chess and can be a banker.

7. This person is rough and likes to jump rope.

8. This person is helpful and likes to collect Matchbox cars.

9. This person is big and can wait on tables.

10. This person is good in school and can be a dentist.

11. This person likes to play baseball and can be a secretary.

12. This person likes to do gymnastics and can be a psychiatrist.

13. This person is good at math and can be an astronaut.

14. This person is a good athlete and likes to ride bikes.

15. This person likes to do sports and can work for the police,

Group III - 11/12 years

1. This person is polite and likes to play instruments. /

2. This person is nicely dressed and can be a reporter.

3. This person likes to gossip and can be a real estate agent.

4. This person hates school and likes to fish.

AMERICAN CHILDREN:

Group III - 11/12 years (cont.)

5. This person is energetic and can be an archeologist.
6. This person likes to talk about sports and can be an accountant.

7. This person is strong and likes to play hopscotch.
8. This person is sweet and likes to collect Matchbox cars.
9. This person is interesting and can wait on tables.
10. This person is nicely dressed and can be a biologist.
11. This person likes to talk and can be a dentist.
12. This person likes to compete and can be a secretary.

13. This person is trustworthy and can be a vet.
14. This person is active and likes sports.
15. This person likes to read and can be a doctor.

APPENDIX C: PARENTS' QUESTIONNAIRE

UNIVERSITY OF EDINBURGH

DEPARTMENT OF PSYCHOLOGY

7 George Square
Edinburgh EH8 9JZ

15 april 1981

Dear Parents,

As you will know, I have been working at the Broughton Primary
School for the past few months, talking to 5-6 and 8-9 year olds
to find out how they view men's and women's roles. As a result
of these interviews, I have become interested in the influence of
parents' ideas and beliefs on children's ideas about appropriate
jobs and activities for men and women today. To study this, I
have drawn up the attached questionnaire, and I wonder if you
would help me by completing it and returning it to me in the
enclosed envelope. Needless to say, all answers will be kept
strictly confidential.

The questionnaire consists of a list of 15 jobs and some
questions about each one. I want to know 1) if you think the
job is suitable for a man or a woman, or either one, and why -
a few brief words will do - and 2) if you would like your child
to do this job when s/he grows up, and why. For this
last 'why' question, you may use the following abbreviations,
repeated at the bottom of each page: CNI = your child would not
be interested in this job JNS = the job is not suitable for a
person of your child's sex JND = the job in itself is not desirable.
If none of these answers seems appropriate, you may write a brief
explanation of your own in the box.

This study is important for the completion of my research,
and I hope you will complete the questionnaire and return it to
me by 1 May at the latest.

Thank you very much for your cooperation.

Sincerely,

Nancy Donehower

JOB	JOB SUIT			WHY	YOUR CHILD		WHY
	W	M	E		Y	N	
LIBRARIAN							
ENGINEER							
PILOT							
NURSERY TEACHER							
PLUMBER							
HAIRDRESSER							
BANK MANAGER							
MECHANIC							

KEY: job suit = is job suitable for W= woman M= man E= either tick one

your child = would you like your child to do this job when s/he grows up Y= yes N= no (tick one)

last why = CNI= child not interested in job JNS= job not suitable for person of child's sex JND= job in itself not desirable (write in one, or explanation of your own – use back of sheet if necessary)

If you need extra space to answer any of the questions, please use the back of the sheet.

JOB	JOB SUIT			WHY	YOUR CHILD		WHY
	W	M	E		Y	N	
DOCTOR							
SHOPKEEPER							
NURSE							
VET							
JOINER							
SECRETARY							
POLICE							

KEY: job suit = is job suitable for W= woman M= man E= either (tick one)

your child = would you like your child to do this job when s/he
grows up Y= yes N= no (tick one)

last why = CNI= child not interested in job JNS = job not suitable
for person of child's sex JND= job in itself not
desirable (write in one, or explanation of your own)

If you need extra space to answer any of the 'why' questions, please use
the back of the sheet.

PLEASE ANSWER THE FOLLOWING BRIEFLY ON THE BACK OF THE SHEET

1. What would you like your child to be when s/he grows up?

2. Speaking generally, and with regard to personality, in what ways are
girls and boys different? How are these differences important?

NAME:

APPENDIX D: NOTES

NOTES TO CHAPTER ONE

1 This view of reality is common to most of the propo-
   nents of the sociology of knowledge approach. For a
   further explication of this point, see Berger and
   Luckmann (1966). Mehan and Wood (1975) also give a
   succinct account of this type of approach.

2 Archer and Lloyd (1982) have elaborated upon this point,
   while Terman and Miles (1936) and Broverman, et al
   (1972) have produced lists of male and female traits
   in which many of the so-called 'feminine'traits seem
   less desirable than the 'masculine' traits. This view
   that women and men are 'naturally' different, and that
   women are in some way inferior to men is also prevalent
   in biological writing. See chapter 5 for a further dis-
   cussion.

3 Kessler and McKenna (1978) are a notable exception to this,
   and Archer and Lloyd (1982) have also made steps in a
   similar direction.

4 Miller (1976) has argued this point, as have various
   other authors. See Wollstonecraft (1792), Mill (1869),
   Friedan (1963), Firestone (1971), or Greer (1971) for
   fuller discussions of the point.

5 Chapters 2 and 5 offer further discussions of this point.

6 My decision not to use statistics in this research also
   reflects my feeling that quantitative methods would not
   add much to the descriptions I was constructing. Quali-
   tative analyses revealed that there were differences
   between groups of children and between individual children.
   These differences are reflected in my descriptions of the
   levels of reasoning, and in the extracts from the inter-
   views. I did not use statistical methods to analyse the
   data because it was not of primary importance to discover
   whether or not the groups were significantly different,
   but to discover how they differed. I was interested in
   individual differences in reasoning, and the influence
   of social context and the perceived requirements of the
   situation in which the reasoning occurred, and neither
   of these points of focus lends itself in a straightforward
   way to quantitative analysis.

NOTES TO CHAPTER FOUR

1 It is worth commenting here that the differences between
the older girls' self and general descriptions noted in
chapter 3 (see pgs. 124-126) occurred in the first part
of this study as well. Similarly, the lack of difference
in the older boys' self and general descriptions was
also noted here.

Briefly, I found that among the 5-6 year old boys
and girls the responses to the 'I am' and 'boys/girls
are' sections didn't vary much. That is, the girls'
'I am' and 'girls are' descriptions showed agreement, as
did the boys' 'I am'and 'boys are' descriptions.

Among the older children, though, differences did
emerge between the 'I am' and 'boys/girls are' descriptions.
For the boys, the differences were mostly in elaboration;
the 'boys are' descriptions generally contained more activity
terms than their 'I am' descriptions. These activity terms
(such as fishing, riding bikes, playing football) broadened
the descriptions given in the 'I am' section, without
differing in tone.

On the other hand, the differences which emerged
between the older girls' 'I am' and 'girls are' descriptions
were those which arose earlier. Both the 8-9 year olds
and the 11-12 year olds seemed to perceive differences
between themselves and some general female type. As before,
the 'I am' descriptions contained a greater variety of
responses than did the 'girls are' descriptions, further
supporting the inference that the girls perceived differences
between themselves as individuals and a female 'type.'

This recurring difference raises questions about the
process of identity formation, and it would be interesting
to see if this disparity was resolved as the girls grew
older, as well as how it was resolved. Would the girls
feel it necessary to mould themselves to the perceived
female type, or would they modify their descriptions of
this female type to take more account of individual
differences? My research would suggest that the latter
option would be taken up, and it would be interesting to
extend this work to further investigate these points.

2 Once I had worked out the descriptions of the levels of
reasoning which appear in the thesis, each of my coders
was given transcripts of 24 interviews, a copy of the
descriptions of the levels, and a set of typical responses
for each level. (These typical responses also appear in
the body of the thesis.) The coders were then given the
following instructions.

I am working on a study of children's reasoning
about gender roles, and have found that the
following levels of reasoning seem to charac-
terize their thinking. On the basis of the
descriptions and typical responses I have
given you, I would like you to assign each
child to one of the four levels of reasoning.

I would suggest that you read through the
interviews and rate each numbered response
separately, then at the end, decide which
level most accurately characterizes each
child's style of reasoning. If you have any
problems with this, please make note of them
and we can discuss them afterwards.

After giving these instructions, I went through roughly
half of one interview with each coder, to make sure that
they understood the procedure, and to sort out any
difficulties they might have had with the symbols I had
used in transcribing the interviews.

Neither coder had any trouble with the task, though
both - independently - decided to make use of "+" and
"-" when assigning a level of reasoning to a child, as
they found that no child reasoned consistently at one
level.

After the coding was completed, we met to discuss
the results and any difficulties they encountered. The
problems they mentioned were common to all three of us,
and are noted in the thesis. Briefly, none of the children
appeared to reason solely at one level - no 'pure types'
were found. Therefore, when assigning a child to a
particular level, we chose the level which most often
characterized their thinking.

NOTES TO CHAPTER FIVE

1 Quoted in Pirsig, (1975, p.196).

2 Theorizing about connections about biology and behaviour
is not a pursuit reserved for academics. See, for example,
the media coverage of the November, 1981 trials of Christine
English and Sandie Smith, who both cited premenstrual ten-
sion as a means of defense. British papers from the Times
to the Mail were full of articles and letters explaining the
biological differences between women and men, and their im-
plications for social organization. TV and radio coverage
delved into the same issues. In the USA sex and gender
differences are popular topics for magazine articles and
TV programs, and it would be difficult to argue that most
adults would be totally unaware of the theorized connections
between human behaviour and biology.

3 With some variations, these beliefs tend to run along the
lines that men are aggressive, dominant, strong, assertive,
competitive and logical. Women, on the other hand, tend to
be seen as emotional, passive, home-oriented, submissive,
dependent, and somewhat irrational. (See Broverman, et al,
"Sex Role Stereotypes: A Current Appraisal" in the Journal
of Social Issues, v. 28, 1972.) Archer and Lloyd (1982)
offer a more current, but still similar, appraisal of the
reputed characteristics of women and men.

4 See Bloor (1976) or Barnes and Edge (1982) for discussions
of how such fields as mathematics, physics, botany, and
chemistry have been influenced by social interests. Donald
MacKenzie (1981) has examined the relationship between
statistical theory in Britain from 1865 - 1930, and the so-
cial context in which those theories arose. Closer to the
topic under discussion, Janet Sayers (1982) has examined the
play of social interests on biological facts in her discus-
sion of sex differences in the brain. See also Rose and
Rose (1973) for a discussion of the influence of social
factors on biological research.

5 Archer (1976), Reed (1978), and Money (1981), among others,
have all argued persuasively against the claim that in a
broad sense, biology is destiny, and all of these authors
give a complete list of references which enable the in-
terested reader to find further support for their claim that
it is difficult, if not impossible, to draw specific con-
nections between human biology and human behaviour.

6 The late Corinne Hutt was a major proponent of the view
that an understanding of the biological differences between
women and men would lead us to an understanding of the psy-
chological differences we find. (See 1972a, b, and 1978,
for examples.) "In much developmental and social psycho-
logical writing," Hutt wrote, "too little cognizance is taken
of the structure and function of the brain, much less of
the constraints set by the nature of its organization. I

make no apology, therefore, for stating the case for the bio-
logical bases of sex differences" (1972, p.17). Her feel-
ings have been echoed by writers such as Eysenck (1980) and
Bardwick (1971). A fuller discussion of these types of
'determinist' views may be found in Lloyd (1976) and Archer
(1976). Their views coincide with mine, and both argue
that writers who have stressed the importance of biological
variables in development in order to redress what they con-
sider an imbalance in the literature "fail to appreciate the
danger of their approach" (Lloyd, 1976, p.19).

7 For arguments supporting the view that women are naturally
the best people to rear children, see Hutt (1976), Bowlby
(1953), or Erikson (1964). Rossi (1977) also presents ar-
guments favoring this view. Chodorow (1978), presents use-
ful summaries of theories concerning the biological bases
of women's mothering. These theories have been challenged
in the works of Chodorow (1978), Mead (1954), Rubin (1975),
Friedan (1963), Lancaster (1976), and Money (1981), among
others. These authors argue that it is unnecessary to view
women's mothering as 'natural,' and that our continuing
tendency to do so polarizes our conceptions of the abili-
ties of women and men.

8 The numerous and lengthy debates over sociobiology cannot
be completely referenced here. The references I am pro-
viding should be used as a starting point by interested
readers. Dawkins (1976), and Barash (1979) provide very
readable accounts of sociobiological theories, and Wilson
(1975) has written the discipline's manifesto. Critiques of
these theories are many. Sayers (1982) offers a succinct
rebuttal of the sociobiological theories, and Reed (1978),
and Archer and Lloyd (1982) also refute claims made by so-
ciobiologists that observed gender differences are 'natu-
ral' and rooted in biology.

9 Quoted in the Sunday Times, 27 September, 1981, p.39.

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