

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

SEX ROLE DEVELOPMENT IN GIRLS: A COGNITIVE THEORY

Denis Garrett

A thesis presented in partial fulfilment
of the requirements for the degree of

MASTER OF ARTS
in Education

MASSEY UNIVERSITY

1971

P R E F A C E A N D
A C K N O W L E D G M E N T S

Freud once said that his concern for family dynamics owed much to his unusual status as first son of a second marriage, with nephews older than he. The concern of this study for rather neglected areas: the development of girls, sibling interaction and peer influence, also owes much to the situation of its author. To have had a daughter and a son (the FM constellation) was to be faced with the issue of sex difference, in a way which prior experience as MN2M in my family of origin did not prepare me for. Therefore the influence of my own children (as well as their tolerance in a father-absent situation during the writing of this study) is acknowledged. My wife contributed both the close support, and the objective questioning of sex role assumptions, to be expected of an FM. Dr Stewart Houston (M1F with an FPM family) lent his genial criticism and his deep acquaintance with the field, in its long gestation.

Dr Robert Stewart has supervised it with the added and valuable insights of an experienced editor and a cross-cultural specialist; and the sympathy of one who has recently slaved through an infinitely more demanding investigation.

ABSTRACT

This study reviews current theory and research relevant to the sex role development of girls. It starts with some examination of the explanation of motive in identification, and then looks at the way in which theories of identification typically account for sex differences in personality and development. This argues that all conventional theories of identification are tied, in one way or another, to drive-reduction theory: if an intrinsic motivation theory is assumed, then "identification" as a consequence of secondary reward value need not be adduced. Some difficulties of explaining sex role development in girls on conventional theory are examined before moving to the social context. Society is assumed to be typically seen as according male status more reward. This has consequences for sex role preference theory and research, which are examined. Data on sex differences (both cognitive and personality) are reviewed in order to elucidate the nature of any theoretical account of the differences. Two significant related theories are reviewed and evaluated: those of Lynn and Kohlberg. The latter providing a theory of sex role learning on a Piagetian basis. However, both theories are argued to be defective in omitting or understanding the role of siblings and peers in sex role learning; theory and research in these fields is noted. A specific (and somewhat new) sequence is proposed for important peer-interaction differences between boys and girls. Included in some more explicit hypotheses is one (on sex differences in intelligence-test behaviours) of interest to educators.

A NOTE ON
ABBREVIATIONS USED

It will often be necessary to refer to "masculinity" and "femininity" scales, especially in the latter sections. "M" for masculinity and "F" for femininity are customary. M/F scales are those which measure on both dimensions.

It will also be necessary to discuss ordinal position studies in some detail, and family constellation patterns. It saves much verbiage to use what is now the accepted practice and abbreviate thus:

F1M: a girl with a younger brother, in a two child family.

MM2: a boy with an older brother, in a two child family.

MF2M: a girl in a three child family, with both an older and a younger brother.

That is: M is a male sibling; F a female sibling; the number denotes the ordinal position of the child referred to, and is placed after the symbol.

CONTENTS

	<u>Page</u>
Preface and acknowledgments	i.
Abstract	ii.
A note on abbreviations used	iii.
Tables of contents	iv.
PART I: GENERAL BACKGROUND AND THEORY
Chapter 1. Introduction	1.
2. On motivation	10.
3. Comment on some theories of identification	13.
4. The identification process and sex differences	33.
5. Identification as social learning	47.
- Bandura and his collaborators	47.
- Brim	54.
PART II: THE SOCIAL CONTEXT OF DEVELOPMENT FOR GIRLS
Chapter 6. Women as "the second sex"; social values and their consequences	59.
7. Sex differences as role expectations	72.
8. Sex differences: some data	90.
PART III: TWO THEORIES OF SEX ROLE LEARNING
Chapter 9. A critique of Lynn	106.
10. Kohlberg's theory	120.
PART IV: THE ADDED ELEMENTS
Chapter 11. Introduction: a note on salience	139.
12. The salience of siblings	141.
The salience of peers	158.
PART V: TOWARD A SYNTHESIS
Chapter 13. The development of girls: a synthesis	166.
14. Toward operationalising some hypotheses	183.
Appendix One: On motivation; a fuller statement	188.
Bibliography	208.

PART ONE

GENERAL BACKGROUND AND THEORY

The aim of this study is to clarify some of the issues involved in understanding and exploring the sex role development of girls.

In part, it is consciously designed to complement Dr Stewart Houston's recent empirical study on the sex role development of boys, and therefore to clear the ground for a parallel empirical analysis with girls. For this reason, the present study does not retrace some of the more detailed examination of concepts and methods which was included by Houston in his longer doctoral dissertation (Houston, 1968).

The genesis of some of the ideas here contained lay to an extent in early discussions with him, particularly through 1964-66. It shares his awareness that there has too long been too little attempt to elucidate sex role development as differential processes for boys and girls.

While this is not, therefore, a contribution to the Millett or Friedan Womens' Liberation Movement, it should serve to highlight some of the theoretical and empirical issues often obscured by polemic, prejudice, or neglect.

A social context

A fundamental starting point for this study is that the nature of the separate process by which girls develop into a feminine sex role, or into sex appropriate behaviour, cannot be understood except in the social context which determines sex role expectations. The social nature of such role expectations

is only briefly indicated here, supported by some key studies. More to the point, and discussed in more detail, is work such as that of Kagan and Moss (1962) in which psychological development is seen to be meaningful only insofar as certain key personality factors are consonant or dissonant with the appropriate sex role prescriptions, and where psychological conflict is demonstrably the consequence of dissonance.

Therefore, the present analysis, while primarily psychological, lies within a particular social context. To this extent, it is an ethnocentric view.

Mead's classic studies of the Arapesh and Tchambuli have long lent support to the view that masculinity/femininity are at least very largely a matter of social definition rather than fixed verity. Her arguments may have tended to obscure the point that even if such definitions have no necessary or inevitable quality about them, there is a great deal of commonality about the way in which most societies, throughout most of history, have defined differential sex role expectations. It is not necessary to agree with Parson's argument that the proper course of psychological development and social stability requires that children perceive a high degree of sex differentiation; it is sufficient to agree rather with Simone de Beauvoir that vested interest, and the inertia of social habit or conditioning, sufficiently explain such common differentiation.

So that, although this study may be ethnocentric, the social assumptions which (it is argued) underlie sex role learning in New Zealand as in other western societies are not so dissimilar from those of other societies - or of this society at other times. While Hartley mildly disputes the point (and her case must therefore be examined later) this study assumes that western societies are or tend to be male-oriented, and adduces some relevant empirical data on sex role learning to support the case.

This is not to deny biological or genetically determined differences. More recent work (only some of which is here discussed) clarifies some of these differences. It is certain that within the next generation, further vast strides will be made in our understanding of such biological correlates of behaviour. But it must be remembered that to the extent that they are "determinants" they are necessary rather than sufficient. There is a brief later discussion of relevant research on sexual abnormalities of genetic origin, e.g. Money (1965) and Hampson, in Beach (1965) which paralleling the conclusion reached by Kagan and Moss, above, supports the view that sex-gender behaviour is not to be understood apart from the psychological and social expectations which impinge on the individual. Like argument is adduced (e.g. from Eichorn, 1963) as to the interplay of biological and socially prescribed sex role expectations in adolescence.

It is certain that biologically determined physiological or sensory factors to some extent dispose males and females to perceive, respond, and so develop differently; some such factors are later discussed. Therefore, were the process of sex role learning identical for boys and girls so far as external influences bearing on them could be decided, the outcomes could be wholly different because the processes were phenomenologically different.

But it is a major postulate of this study (following Freud, Mowrer, Sears and others though along diverging lines) that the processes are significantly different as to the external factors, the situation, the timing or phasing, and the outcomes. Therefore (it will be argued) plausible antecedent conditions in the process of sex role learning may be found to explain many of the differential characteristics which have often been explained on biological grounds. But, on the evidence, this study can take neither an extreme hereditarian position, nor one of extreme environmentalism.

A consequence, often ill regarded in both theoretical and empirical material on sex role learning, is that this study does not accept masculinity/femininity as polarities. Too much theory, and too much research, obscures the extent of within-group difference for either sex. Fortunately, (at least in research) this temptation is increasingly resisted, and some of the more useful implications of within-group difference analyses are becoming obvious (e.g. Bieri, 1960, later discussed). However, because Houston has also discussed in more detail the methodological issues involved, this study does not directly discuss operational problems of defining "masculinity" and "femininity" - except again to note that most "M" and "F" scales contain a concealed but implied social-definition factor.

Certainly nothing in this study disputes the point that, in most key factors, differences within either sex may be greater than mean differences between the sexes; on the other hand, it does not dispute the fact that considerable mean differences between the sexes do exist and that they appear to have ascertainably different antecedents, correlates and consequents. Some of the key differences are later discussed, but these are selected for their relevance to the general theory put forward. No exhaustive survey of sex difference is attempted.

The order of argument

On the basis of the foregoing argument, this study will first examine some of the conventional theories (both psychological and sociological, particularly on "identification". This cannot be an exhaustive analysis of identification theory. It should be clear at the outset though, that the study assumes "identification" to be a term past its usefulness, too confused and variable in meaning to be retained; which is why it is avoided in the title of the study

itself. There is no space to support other than a brief case against the term.

The chief reason for starting with an examination of identification and like positions is to analyse their defects, particularly in the light of more recent work on motivation.

Motivation reassessed; identification reassessed

Conventional theory, it will be argued, has been based on a reactive theory of motivation. That is, in behaviourist language, they have assumed some such process as the formation of secondary drives deriving from the association of the model with the reward/gratification of primary drives. They have tended to be both homeostatic and reductionist. The Freudian and neo-Freudian position (it is argued later) is essentially the same even though as with theories like that of Whiting (1960) the language may be different.

It is later argued, however, that some of these theories of identification are unacceptable (e.g. Whiting, 1960) because they do not adequately account for sex differences either in process or outcome; while those which account for both (as, notably, in Freud himself) are unacceptable or unnecessary if we revise our views on motivation.

Therefore, this study briefly reviews the more recent reassessment of motivational theory e.g. Hunt (1960,1962,1965) in order to examine the consequences of assuming that significant behaviours may be sufficiently accounted for on the basis of intrinsic motivation. It argues that since extrinsic motivation, particularly on a basis of homeostatic drives, is implicitly assumed in all conventional theory, such theories are either deficient or superfluous.

If, after all, there are significant aspects of behaviour which do not have

to be accounted for by the formation of secondary drives, then it is not essential to postulate the same role in the process for the external "source of satisfaction", which then becomes an inadequate or superfluous mediating explanation of sex role learning.

A "cognitive-developmental analysis"

This study uses the analysis put forward by Kohlberg (1967) which superbly develops the argument. It remains the only such argument known at this time to have so consistently expanded on the "cognitive" position. Some statements, like that of Bau (1960) discussed later, use some cognitive language; others, like Parsons (1955) and Maccoby (1959) have analysed role learning. But none has, like Kohlberg, derived a cognitive argument which stands the Freudian theory of identification on its head by asserting that the desire to "identify" precedes rather than succeeds attachment and arises from cognitive or intrinsic motivation.

Application and implications

This study will then go on to amplify these implications with special reference to the development of girls (though naturally, with some necessary contrast with that of boys). Therefore it involves some review of empirical data on sex differences, especially in cognition and cognitive style.

Lynn, whose 1962 article is later to be analysed, has proposed that important cognitive differences between the sexes are explicable as a consequence of the different learning contexts for boys and girls so far as sex role is concerned. This present study agrees with Lynn in emphasising the critical importance of these process differences, and of sex differences in general, to

any adequate explanation of the empirical data. But it differs from him (and is with Kohlberg) in seeing cognitive elements significantly as antecedents rather than only as consequents of the process.

The final section expands on a most important implication both for theory and research of taking this specifically cognitive view of sex role development.

Selectivity needs to be explained

The point of taking a cognitive stance is that it emphasises the active role of the learner in selectively perceiving and attending to stimuli; in this case, in imitating or modelling upon only selected aspects or sectors of the model's behaviour. Too much theory goes no further than seeing identification as "global imitation" or "stimulus generalisation" and gives no adequate account of the factors involved in selection, which must be accounted for. Kohlberg, very explicitly, does so; his case together with other supporting studies (e.g. Bandura, Ross and Ross, 1963) will be reviewed.

But selection may also involve selection of the model as a model; that is, an active choice among models rather than only within the range of behaviours from a given model. This is an aspect which Kohlberg does not adequately consider. The present study therefore goes beyond him, to postulate the importance of other models selectively attended to at different points in the sequence.

Siblings and peers

Houston's study which stresses the salience of siblings is clearly relevant, and is backed with much other work. Here, only certain major studies (e.g. Brim, 1958; Sutton-Smith and Rosenberg, 1964 and 1965) will be considered.

Houston has more extensively reviewed other sibling material.

However, this study goes yet further (and into rather new territory) in positing specific, functionally and sequentially different, roles for peer-groups in the sex role development process. Certain defects in other theories, it is argued, are better accounted for by consideration of peer-group interaction.

Sibling and peer-group interactions are, in effect, added to a general position based on Kohlberg and Lynn, and qualify these cases considerably. Empirical data to support the argument for peer-group interaction, and to differentiate its function for boys and girls, is adduced.

The general theory here postulated may be summed by saying that, in sex role development, the significant and more critical task for boys is learning, and for girls accepting, the sex role; and that siblings and peers perform different functions at different times for the two sexes in those separate tasks. In order to present this amplified theory of sex role development, it is necessary to examine more closely some commonly used terms (such as sex role learning, sex role preference and sex role acceptance).

Such a formulation does something to overcome the long-standing dispute in identification theory between Freudian theory which postulated that the process could be more difficult for girls, and the developmental position which argues that discontinuity in the male process is more disadvantageous. The present study argues that attention should be paid to different "disadvantages" at different points in the learning sequence, and proposes that this formulation also accounts for more recent empirical data (e.g. Mussen and Rutherford 1963), which does in effect support the Freudian view.

Toward operationalising

Finally, the study is aimed toward formulating some operational hypotheses derived from this theory. These should serve to clarify the points at which specific contrast needs to be obtained with data now available for boys, in particular that of Houston.

Necessarily, there are qualifications to be added: for example, there is only a brief indication of obvious socio-economic status variables which demonstrably and differentially affect sex role learning. These are considered to some extent as test-cases, and to some extent as necessary qualifications of the general process proposed.

In sum

This study aims to review both theory and research; to put forward a theory which is partly a synthesis but to some extent novel, and thereby to assist in the long-overdue demise of the exclusive parent-child, one-way-influence paradigm which has continued to dominate theories of identification and sex role learning.

It is designed specifically to clear the field for a part replication of Houston's material aimed - it is hypothesised - to demonstrate that his analysis, while consonant with the present theory as to boys, requires very substantial modification to apply to girls.

In Appendix 1, a longer analysis of the argument for adopting intrinsic motivation rather than a conventional stimulus/response basis is given.¹

This leads to the conclusion that a Piagetian approach applied to learning will be much more fruitful.

The general implications of the argument outlined in the appendix may be summed:

1. There is at least reason to suppose that the conventional S-R line is defective in explaining human behaviours, especially human behaviours involving cognition.
2. The limitations of the strict drive-reduction or homeostatic model are generally recognised. The notion that stimuli or responses may follow curvilinear patterns is one variant; that some drives may be positive or non-satiating is another; that some behaviour is intrinsically motivated is another. All imply a reconsideration of S-R formulations in which the explanation of motivation proceeds on the basis of primary drive/reward leading to associated secondary drive/reward - the conventional basis for explaining identification.
3. The close correspondence between Freud's basis of motivation and S-R drive reduction is outlined in detail; the same reservations may therefore be applied to Freudian explanations as to standard S-R explanations. However, as will be clear in the succeeding chapter, there has been a great deal of overlap, with

¹ References and detailed supporting argument for this chapter therefore occur in the Appendix.

many American attempts to reformulate Freudian ideas of identification in S-R terms.

4. The revised "intrinsic motivation" approach assumes an essentially active rather than reactive organism, actively seeking to understand its environment. This provides a more parsimonious explanation than using conventional S-R theory, which may originally have had the virtue of simplicity, but has now so many borrowings, modifications or ramifications that this advantage is lost. S-R theory itself has had to borrow large elements stressing cognitive, structural, and social behaviours.

5. Rather than borrow any one of the new labels for "drives", it may be best to see that the implication of an active organisation is a movement toward independence. That is, not in the normal anthropological meaning of "independence behaviours" stemming from training, but the tendency for the organism to want to "do it yourself". This is White's "effectance". (White, 1959).

6. A major implication of this is "the search for the stimulus", or "stimulus selection", rather than the S-R emphasis on learning as response selection. Piaget, as well as Hebb and many other more recent theorists, assume such a process. It has important implications for the relationship between a child and the model; we need to explain not only the "swallowing whole" or introjection which Freud implies, but also those elements which are not swallowed, not imitated, not modelled upon. We need to understand that there may be some use of models in the assimilation/accommodation process (and Piaget himself notes that imitation is a necessary part of accommodation assimilation); but that this will involve an active selection from the totality of the behaviour preferred to the child as a model. We shall later note that the implications

of this in explaining sex role learning in girls, and its correlates in cognitive style, are quite different from (and more intricate than) that in boys.

7. The implication is also that explanation should be concerned with the process or transaction as a whole; and that a developmental analysis rather than an atomistic one will be more fruitful.

8. To accept an active organism, involved in stimulus selection is at least in substantial part to argue also for a phenomenological examination of motivation and its developmental process. This accords well with the basic approach and assumptions used operationally in Houston's study (Houston, 1968, 3; 44 et seq) with which this present study is closely allied. He does not, however, outline quite the same relationship as is here given in Appendix One between assuming intrinsic motivation and accepting a phenomenological basis both for analysis and operational definition. Nevertheless, it seems difficult to avoid the implication.

COMMENT ON SOME

CHAPTER THREE

THEORIES OF IDENTIFICATION

It is not intended yet again to contribute a general review of identification theory or research. Bronfenbrenner (1960) has done this succinctly and definitively for Freudian theories and their derivatives. Mussen (1967) has related theory to research in a longer analysis of the concept, as an explanation of socialisation. Marwell (1964) has extensively - and ruthlessly - reviewed the problems of operationalising "identification" and some closely related concepts. Bronfenbrenner has also (Glidewell, 1961) discussed models of parent-child relationships in a social context. Houston (1968) has reviewed some major theories in relationship to sex role learning. Kohlberg (1963,1964) has analysed the posited relationships between identification and moral development.

In fact, "identification" is now a generic name for a field of study, somewhat loosely organised, but one which in the last two decades has developed extensively. This chapter does not attempt to survey it, but merely to sample it with special reference to those concerns central to the present study, particularly:

1. the motivational bases assumed to operate; this is in order to link with the consequence of adopting a cognitive, or intrinsic-motivational stance.
2. the explanations offered of sex differences, either in process or consequence.

The need for the concept

This study assumes (with Kohlberg, cited below) that adequate explanation

is possible by talking of role learning rather than identification. In part, this assumption is for the reasons implied by Marwell - that the concept is almost the most confused in psychology. This is not a new view.

Knight asked in 1940:

why not agree that identification is not an explanatory concept and that as a descriptive one it is too vague to be useful?

Sanford (1955) who cites this, agrees with the view expressed. At most, he wishes to keep the term in the therapeutic context to describe a rigid tendency to behave like the object of choice (a view based on one of Freud's own formulations; see below). Significantly, in view of later argument in this study, Sanford said that identification is not a developmental process; the child is not, and does not try to be, identical with his parent(s):

when we compare him and his parents, the most we note is a generalised similarity (op cit, 110)

This is precisely the reason why identification theorists usually wish to retain the concept. Bronfenbrenner puts the case:

...we would lose sight of an important phenomenon as well as an intriguing theoretical issue...in concerning himself with identification, Freud was not asking why and how a child might learn an isolated piece of behaviour from his parents. He was interested in what he felt to be a more sweeping and powerful phenomenon - the tendency of the child to take on not merely discrete elements of the parental model, but a total pattern (1960, 27).

It is true that this generalised element in identification is one most frequently stressed. Such theories speak of identification as a normal type of "global" social learning (Kohlberg, 1963, 296). Piaget also uses the term, and contrasts it with imitation in precisely Kohlberg's sense:

...the child does not merely copy others while continuing to be himself. He identifies himself completely with others... (Piaget, 1962, 127)

In a succeeding chapter, it will be argued that incidental learning in the role context is sufficient to explain the process, and the implications of cognitive development will be analysed later. Here, it is sufficient to record a query: does the "global" element in identification explain too much - or not enough? Sanford is undoubtedly correct in saying that the child does not attempt to be identical to his parent; but is the emphasis on the wrong point in stressing a "generalised" resemblance? As with Sherlock Holmes' dog which did not bark in the night, the essential point may be to explain the resemblances which do not take place. On a cognitive theory, assuming learning to be an active and selective process initiated by the child, it becomes essential to account for this selectivity of learning as well as its generality. This, conventional identification theory does not adequately do. It explains too much. Therefore, although Mussen (1967) and Houston (1968) wish to retain "identification", this shortcoming appears serious. In passing, as it were, identification theorists will sometimes introduce a recognition of selectivity. Mowrer (1960, 615) speaks of the child reproducing "bits of the beloved and longed for parent". Kagan (1958) speaks of the copying of "some behaviours". It is the contention of the present study that an active/cognitive theory accounts integrally for selectivity in the learning process, as a function of the learner, and is therefore to be preferred. Bandura, Ross and Ross (1963) will later be cited to demonstrate precisely this "selectivity" in operation. Conventional identification theory always introduces, as a mediating variable, some degree of dependency or attachment. This is clear, say, in Parsons and Shils (1965) speaking of "attachment (to) the model in a generalised sense". It is clear in Mussen (1967):

the mother who gratifies her infant's needs promptly and effectively, handles him gently and fondles him, acquires reward value - That is, she becomes a stimulus... associated with basic need satisfaction. Subsequently the infant seeks her out and approaches her whenever he needs something... (my emphasis).

This is couched in S-R language (as are many other important statements of identification; e.g. Sears (1957), Kagan (1958). The paradigm of primary drive/reward leading by association to secondary drive/reward is explicit. c.f.

(identification is) a secondary drive, the goal response for which is 'behaving like the parent' (Sears, 1957; cited in Rau, 1960, 77-78)

or:

Identification is defined as an acquired response within a person (S). The content of this response is that some of the attributes motives, characteristics and affective states of a model (M) are part of S's psychological organisation. The major implication of this definition is that the S may react to events occurring to M as if they occurred to him (Kagan, 1958, 298). (my emphasis).

McCandless (1963, 339) talks of the child assuming "many of the attitudes, values and beliefs" of the model figures. Attachment, then, may be seen in this formulation to result in a secondary drive to take over "some" behaviours (Kagan), "many" behaviours (McCandless) or to seek out mother "whenever he needs something" (Mussen). There is agreement on the originating motive but not on the extent of the outcome (see the objection above to "global" imitation).

It would be possible to describe selectivity in S-R terms as an intricate process of discrimination learning, but this approach is still subject to the queries about the primary/secondary reward paradigms here expressed.

Freud can be assumed to have posited the same originating process (though on Oedipal theory). He assumes an "original form of emotional tie with an object" (Podor and Gaynor, op cit, 79) leading to introjection. This is

clearly seen as a global process; "one ego...imitates" the second; it "as it were takes it into itself" (Freud, 1933, 86) a process he compares to "cannibalistic incorporation" (ibid).

Congruity

Freud, however, also implied identification as an outcome as well as a process. Following introjection¹ there is a state in which:

thirdly it may arise with every new perception of a common quality shared with some person who is not an object of the sexual instinct (Fodor and Gaynor, op cit, 79)

or elsewhere

when the boy identifies with his father he wants to be like his father... (1933, 86)

Identification with the parent may be said to exist when an individual aspires to be the kind of person he perceives his parent as being. (ibid, 92)

This Freudian strand, which assumes a motive for congruent behaviour, has become one of the major operational elements in modern psychological theory on identification. c.f. Block and Turula (1953).

this conception of identification (that is, Freud's statement above. DG) finds a ready and reasonable operational definition via an index of the congruence between an individual's description of his real self, and his description of his parent.

However, as well as Marwell's analysis of the complexities of operational definition, Gage and Cronbach (1955, 62) have thrown serious doubt on the system of self-rating compared with father rating, for example, frequently used in identification procedures. They clearly imply a "halo" effect stemming from the learner's cognitive processes (Tagiuri and Petrullo, 415).

¹ Freud is inconsistent. Sometimes, as here, introjection is the same as identification, sometimes contrasted with it.

Significantly, Lundy (cited, Annual Review of Psychology, 1960, 482) confirms that we tend to attribute similar characteristics to those we like, especially ideal or acceptable characteristics.

Moreover, Block and Turula's comment (above) possibly distorts Freud's views in any case. Freud elsewhere speaks of identification as aspiration to be like the "ideal" parent; here he speaks of the "person he perceives his parent to be", but there is at least a possible confusion, stemming from Freud himself.

Marwell concludes that

By indicating the complexity of measures in this area of social perception, it is possible to understand why the vast volume of work, particularly on "empathy" and "identification" has contributed surprisingly little¹ to our knowledge of the phenomenon. (1964, 101)

This is truest insofar as identification theory postulates congruence. But Freud clearly gave this foundation for modern theories. It is clearly present in sociologically based statements, e.g. when Slater (1960a, 113) says that identification

here denotes any tendency for an individual to seek to maximise his similarity to another person in one or more respects

and in psychologically based statements, e.g. Kagan's (1958) "perceived similarities", Bronson's "behaviours and attitudes with the model as referent" (1959, 533) or in Rau's fuller statement that identification is

a psychological process by which the behaviour of an

¹ More extensive analyses of interpersonal perception are contained in Gage and Cronbach (op cit) and Tagiuri and Petrullo (1958) where Cronbach's essay has been described as "required reading for anyone who is tempted to ask x to describe or rate or judge y..." Annual Rev. Psych. 1960, 480.

individual which serves to confirm for that individual his perceived similarity to another person (in our case, the parent) becomes intrinsically rewarding and discrepant behaviour is non-rewarding or anxiety producing (Rau, 1960, 77).

There are many theoretical and methodological problems implied here, however. For example, taking Piagetian theory it could be assumed that the child in the early ego-centric phase demonstrably tends to attribute to others qualities/attitudes, and attributes he possesses himself, as a function of his own level of cognitive operation. "Perceived similarities" in this context, will be something quite different from the "reality" of the situation; yet this is the stage when early identification processes are in fact posited, on conventional theory.¹ Moreover (it has been argued)² especially at this early stage it cannot be taken that to perceive similarities and to perceive dissimilarities are of equal difficulty - as Rau at least implies they may be.

Nevertheless, the congruence-dissonance element has become essential as conventional theories have, in the past two decades, accommodated (possibly by a process of "defensive identification") to recent cognitive theory. Following Hebb, Berlyne, Festinger and others (see Appendix One) the relevance of this dissonance theory to the elements implied in some Freudian statements was bound to be seen and absorbed. Nevertheless, there are still difficulties, even in a theory so modified.

Rau says that congruity "becomes intrinsically rewarding"; it is implied that this is a secondary process, functionally autonomous. But Harlow (1953) asserts that conventional S-R theory has not demonstrated the process by which this autonomy occurs (see Appendix One).

¹ Except, perhaps in Whiting. See below.

² See Braine (1962).

The fault in the chain of reasoning, perhaps, is the assumption that the child has first to like, and then to wish to be like, a model. If it is possible that the child as part of his cognitive development first wishes to assimilate parts of a model's behaviour and then likes those models whom he perceives to be like him (which on theories of interpersonal behaviour should occur), then the need to derive congruity motivation from a secondary process is removed. This will be a basic assumption later in the present study.

The same difficulty is implied in Mussen's formulation (1967). Mussen says that the child "seeks his mother out whenever he needs something" (my emphasis). He adds that a child has to be "socialised for increased independence" (1967,69).

In a statement similar to Rau's "becoming intrinsically motivating", Mussen says

some new motives...are developing...curiosity, drives for independence, competence, mastery, autonomy

and

the development of complex significant social attitudes and motives - dependency, sense of trust, striving for independence, is rooted in the child's early experiences. These developments like the acquisition of many other kinds of responses may be most clearly and parsimoniously interpreted as the outcomes of direct learning and reinforcement. (my emphasis)

It is not denied that "early experiences" may affect the emergence of these drives, attitudes or motives. Mussen himself sees the link with Erikson's formulation. But Harlow (1953) has questioned the validity, in behaviourist theory, of deriving such motives from homeostatic crises by secondary reinforcement (see Appendix One). Moreover, in other contexts (e.g. as with his work on the sexual behaviour of the rhesus monkey: Harlow, in Beach, 1965) Harlow has demonstrated that motives which are certainly not

normally attributed only to "direct learning or reinforcement" (that is, sexual behaviour) may not occur in the absence of early experience if the preconditions for emergence are not met. Houston (1968) has also seen the possible parallel and relevance of work on deprivation.

It is not merely theoretical hair-splitting to say that there is a difference between proposing (as Mussen does, and as Rau implies) that such motives as congruity, mastery, competence and so on are derived secondarily, and proposing that these may be better taken as intrinsically arising in a Hebbian or Piagetian fashion from the organism's encounter with his environment provided that the preconditions for their emergence are met. That is, the antecedents will be as conventional research in identification formulates them; but it need not be taken that they support an S-R theory of "direct learning and reinforcement".

Mussen has chosen, in fact, to propose that precisely those behaviours which modern "intrinsic motivation" theory suggests to be primary are in fact secondary processes.

In a later section, it will be argued further that it is intrinsic motivation which provides the more parsimonious explanation. Or, in other words, it will be argued that it is more parsimonious to explain these behaviours, in Piagetian terms, as the child's attempt to "signify" the parent than in Freudian terms to "incorporate" the parent. Since what is involved is (in Freud's words) the child's "perception of" the parent it seems reasonable to seek to use directly that modern theory - i.e. Piaget's - which has most to say about the development of early perceptions.

Status envy theory

Whiting (1960) has postulated a somewhat different theory, the "status envy" theory. It appears to bridge "role practice" theory (later discussed), Mowrer's earlier formulations, and Freudian defensive identification theory while introducing some new and specifically cognitive elements.

Source: Mowrer

Mowrer's early statement (1950) was essentially a power theory. It implied sequential differentiation of "social objects", and a process which is identificatory (but which is scarcely different from imitation; Mowrer is unusual in not sharply distinguishing between them). Since the object had the power to act, the child reproduced "bits of" the model's behaviour in his absence, thus completing action sequences. As will be seen later, Sears' (1957) and Maccoby (1959) have taken over other sections of this theory.

Whiting appears to base his position on something like Mowrer's earlier summary (1950, 577)

From the standpoint of the small child an adult human being is a model of efficiency, power and know-how... the young of the species find that by (imitating or identifying) they can often dramatically shortcut the tedium and hazard of independent search and discovery...¹

In Whiting's version we meet a new set of specific terms. "Resources" are anything a child wants, or needs. The "resource mediator" may withhold or deprive these (more correctly, may be seen to be able to withhold or deprive).

¹ While within the identificatory camp, Mowrer foreshadows Kohlberg's cognitive position in the same passage : the child is seen as having "a kind of hunger which makes him go after these skills as exemplified by parents and other adults in a highly active, aggressive, spontaneous fashion. (my emphasis). However, this is an aside, as it were, rather than built into Mowrer's theory.

Insecurity about whether the resources will be withheld or not enhances their value (as would be predicted on S-R formulations of intermittent reinforcement). The key resources are those which the child can only get indirectly. Then the child learns to predict the parental behaviour, and match his behaviour to it.

The very young child does not identify (in this formulation) because his own role dominates.¹ Identification starts only when the resource mediator is envied because he withholds or deprives (i.e. is not identified with when he gives). The child then "covertly practices" the role of the other. It is implied that the child cannot perform any role, but only practices within roles ascribed.² Initiation rites teach masculine roles.³ "Positional" identification is implied (the child may identify with mother for love and father for power and authority; in this sense the argument is essentially Parsonian, using the expressive/instrumental distinction). Since some resources are contingent on "good" behaviour, covert or fantasy practice is frequent and this amounts to a type of introjection.

In this cursory account, the links with Whiting's group of Harvard or former Harvard colleagues (Sears, Maccoby, Levin, Allinsmith and others) are not always obvious, until, for example, it is seen that "withdrawal of love" is basic to all of Sears' statements.

Whiting recognises the S-R basis himself (though he does not use S-R language) but he stresses consistency as well as frequency (1960, 117). Parallels between Whiting and Sears also become clearer if we take Sears' comment (1957) that "acting like the mother" becomes "part of the reinforced

¹ c.f. the objection to conventional theory on the grounds of the egocentric perception of young children given above.

² Whiting's anthropological approach is clear throughout.

³ See Whiting, 1961, for an anthropological study of the relationship between early matrilocal sleeping away from father, and initiation rites.

sequence of behaviour";¹ or from Sears, Maccoby and Levin (1957) the definition that identification

is the name we choose to give to whatever process occurs where the child adopts the method of role practice i.e. acts as though he were occupying another's role. (1957, 370).

Whiting believes identification to involve a denial-pattern by the resource mediator (or a perceived denial-pattern at least). He thinks it necessary to explain

the numerous studies that have shown denial of love to predict identification (1960, 120).²

Whiting's is openly claimed to be a cognitive exposition:

we believe it may be governed by the laws of cognitive rather than instrumental learning (1960, 116)

and this is clearest in his emphasis on the prediction of the resource-mediator's behaviour. This is close to Maccoby's formulation (1959) which has it that the child "learns the other half of a habit" that is, he displays it because he has learned to predict the other half. Whiting himself notes that there are parallels, too, with Tolman's "cognitive maps".

Nevertheless, there are complications in adopting even Whiting's much more eclectic position. For example, it is not sure that he adequately distinguishes between personal and positional identification. He argues that identification will be closer in the nuclear family. But Clausen and Williams (Stevenson, 1963, 85) conclude that comparative studies show

the larger the number of adults in the house, the greater the likelihood of sex role differentiation...

¹ There is not much between Sears' "substitute satisfaction" and Whiting's "covert practice".

² But, apart from the doubts Kohlberg (1963, 1964) casts on this argument, Sears himself (Beach, 1965) says that it is not love withdrawal but punitive-restriction which antecedes prosocial aggression in girls, for example - a behaviour usually taken to evidence identification.

This difficulty can be resolved if we

- (a) assume different outcomes for personal as against positional identification, and
- (b) make much more specific situational statements based on social contexts (see Brim, 1960).

Whiting's analysis of moral development is, on his own admission, somewhat simple. It appears to imply positional identification:

If I wish to be a parent I must punish naughty children.
I am a child; therefore I must punish myself if I am
naughty (1960, 124), (my emphasis)

whereas Kohlberg's conclusions clearly point to the importance of personal rather than positional identification as the basis for moral motivation.

Whiting's then, may be a newly worded rather than a new formulation; it echoes, in some part, ideas as old and inelegant as Miller and Dollard (1941).¹ But the cognitive and role-practice elements in it are important; and as an example of a recent eclectic theory it has been discussed at greater length. It will be discussed again in passing, in connection with the later discussion of Bandura, Ross and Ross (1963).

Role practice

A final statement (not explicitly identificatory, and almost shading over into a straight role-practice formulation) is that of Maccoby (1959). It has something in common with the elements of the other theorists with whom she was long closely associated. It will not be here discussed in full, but only in that part where a fundamental distinction between her statement and the

¹ Or as Helen Keller. The records of her own experience make it clear that her teacher started by making the child dependent, then depriving her. Recent practice in the treatment of autistic children appears to assume the same "resource mediator" approach. Perhaps the virtue of Whiting is that it is commonsensically phrased?

Piagetian position becomes explicit.

Maccoby is concerned with the child's own perception of his own "attitudes, motives, characteristics and affective states"; i.e. it is a strongly cognitive statement. She explains the nature of "imitatory conditioning" in a way somewhat parallel to Piaget, accepting the idea of "training in imitation".

As she puts it

he had to imitate the child before the child would imitate him.

Association by contiguity causes repetition (Piaget's, or Holt's circular reflex), a self-stimulation which is the basis of speech. Training is required e.g. for facial expressions, which the child cannot see on itself. Here, Maccoby appears to follow Mowrer also; an internal/external circular reflex is involved (1959, 240). Maccoby takes Piaget explicitly as a basis, but one study of his which Maccoby analyses is treated here as significant.

The case of language, which she uses, might seem to be suitable as a paradigm of the imitatory-socialisation process generally.¹ There is an objection, though, which Piaget makes. Piaget says:

the reply to this is to be found in our observation 10 (page 22) which shows clearly that the child, far from passively associating a signal with an action, actively tried to make the sound go on, and to that end used by turns any vocal 'device' including imitation. Thus, in such cases, imitation does not seem to be an association, but an active process i.e. intentional assimilation (1952, 22).

Admittedly, in analysing this Piagetian observation, Maccoby distinguishes between the first occurrence of the imitative response, which can be explained on the basis of simple association by contiguity, and the continuation of that

¹ Ervin and Miller (Stevenson, 1963, 110) show that the prelinguistic sounds of hearing and deaf children are the same till 3 months; thereafter the hearing are socialised, the deaf become idiosyncratic. This would be expected on an internal/external feedback reflex.

response by instrumental learning (which she guesses occurred because Piaget showed pleasure at the successful imitation, i.e. Maccoby introduces secondary reward concepts). But Piaget's analysis seems to cover both processes. Secondary reward theory should predict that the child would repeat only what the parent last said. Further reference to Piaget's full original observation shows that, the child sometimes did this, but then she returned spontaneously to her own pattern; and at other times she ignored the parent's verbalisations. By non-reinforcement (on secondary reward theory) the child should have stopped. Therefore, Piaget appears to be correct in proposing that

in such cases, imitation does not appear to be an association, but an active process i.e. intentional assimilation. (ibid)

This small element in Maccoby's argument has, again, been taken at length to support the case that more is involved in behaviour than the identification theorists usually accept - even in an otherwise very fruitful formulation, such as Maccoby's; and that the missing element is in fact the active element introduced by the Piagetian approach.

Some comments on Piaget and imitation/identification

It has been shown that identification theories have tended to move toward absorbing two new elements: cognitive and social or role learning elements. To some extent, these overlap. The importance of the cognitive element cannot be understood without looking at Piaget; and he, not without then looking at other theories stressing imitation.

Imitation in Piaget

Imitating, copying, or "matched-dependent behaviour" were first put forward by Miller and Dollard (1941). But for them, the first imitative act was only

a chance one which then received reinforcement. In more sophisticated theories of "imitation" (like Mowrer's) this simple basis is dropped. But nevertheless, such theories of imitation have only some elements in common with Piaget's formulation.

Piaget does speak of "identification", as in

...the child does not merely copy others while continuing to be himself. He identifies himself completely with others (1962, 127).

This appears to be precisely the same as the normal assertion, in identification theory, that identification is "global". It is not wholly so. It may be better to see Piaget's view¹ summed up in words which (surprisingly) come from Mowrer:

Imitation may be said to be the non-verbal equivalent of studying (1950, 578, footnote).

Speaking of the early years, Piaget says that "imitation is never an end in itself..."

it does, of course, always result from accommodation to a given model, but it is through being assimilated directly or indirectly to a schema with which it is identical or analogous...in other words, imitation is always a continuation of understanding (1962, 73).

Imitation is "an early form of image making..."

May it not be that the image i.e. the symbol when it is the interior copy of the object, is merely the interiorisation of imitation (ibid, 70).

Piaget appears to come close to identification-theory statements of motive when he proposes that the "inferior" imitates the "superior" from "compulsion, authority and unilateral respect" or his equal from "mutual respect" (ibid, 73),

¹ No general account of Piagetian theory is given here. It is assumed that the reader is familiar with his terminology.

but even this is in the context of seeing imitation in its functional context; in Flavell's words:

...(imitation is) an important developmental product of the general accommodation function...that is, the active accommodatory replication by the subject of some event serving as model (1963,152).

Accommodation-as-imitation is the function which supplies the child with his first signifiers. They stand for the event, as it were, in the way a word will later stand for it; imitation is the beginning of symbolic representation of the event, in the sensori-motor phase by motor means (c.f. Lunzer, 1961). It is at first "a kind of photographic negative of the object accommodated to" (Flavell, 1963, 153) but throughout, the process is one in which the child is "trying to cognize the world symbolically". That is, imitation is not an attempt to be or to be like, but an attempt to signify.

Since identification-theory has more recently stressed cognitive elements, it is inevitable that some of them will bear resemblances in formulation to Piaget c.f.

(identification is) the discovery and learning of new actions by observing what others do and then practising to be the other person (Sears, Maccoby and Levin, 1957).
(my emphasis)

The distinction lies in the difference between "to be" (as in this statement) and the intricate Piagetian structure which assumes this to be the primitive form of symbolisation or signification.

For Piaget, the "circular reaction" (which concerned Maccoby, see above)

¹ Kimball Young long ago (1947, 99) distinguished between three categories of action: overt, covert and symbolic. Identification-theory, as Whiting's term makes clear, is concerned with covert action. Piaget is concerned with symbolic action.

is not explained by "passive association"¹ or "by repetition of associations"

association is...not a primary fact but the result of a complex set of elements characterised by the pursuit of an aim (1962, 17).

It is the "elements" and the "pursuit of an aim" which are primary, and need not be assumed to be secondary or derived. In fact

(it is) the assimilation which provides significance and interest, and this gives rise to repetition (ibid)

For Piaget, imitation is merely an instance, a sensorimotor exemplification, of primitive symbolisation, of the assimilation to schemata and of the modification of schemata. These schemata will increasingly be cross-modal. Gibson (1963, 162-3) has discussed cross-modal perception, including (a) the fact that haptic as well as visual/aural cues are involved in the sensory perceptions which Maccoby is concerned with; and (b) that retarded children show less cross-modal transfer, as would be expected if a central factor were involved, as the Piagetian schema posited.

Piagetian imitation, then, does have more in common with Mowrer, who speaks of his birds "developing a kind of image of the trainer's sounds and then, quite independently...reproducing or copying them (1950, 58n). Piaget speaks of "the interiorisation of imitation" in a very similar way (1962, 66):

The child was able to produce for the first time in the absence of a model a movement or sound never before imitated, the imitation being apparently based on a memory unaccompanied by actual perception. (ibid, 67)

But this is for him "the symbolic evocation of absent realities" and fits, as has been stressed, into the whole Piagetian cognitive theory.

¹ Though Piaget is sometimes fairly accused of not knowing recent developments in American S-R theory, Maccoby was deriving her argument from Holt i.e. earlier connectionist rather than Hullian S-R. Connectionism is "passive association".

It is a necessary implication of the Piagetian analysis that the assimilation/accommodation process will proceed by differentiation and articulation.

In this, there are again some parallels with identification-theory statements. It was noted above that Whiting, though for different reasons, excluded from strict identification the earliest period of development. Bronson (1959) following Freud posited a similar type of continuum from diffuseness to differentiation/articulation. And Parsons (1951) has amplified this element. This is not surprising because (though he has a strongly Freudian base) Parsons criticises Freud, on the grounds that:

the structure of (his) theoretical scheme prevented him from seeing the possibilities for extending (his) analysis from the internalisation of moral standards... to the internalisation of the cognitive frame of reference for interpersonal relations... (cited, Bronfenbrenner, 1960, 30).

Parsons is stressing cognition, and in particular cognition in "the internalisation of one's own sex role". He therefore talks of "a progressive differentiation of ever more complex relationships between the self, the parent, and ultimately society" (ibid, 34).

Bronfenbrenner comments:

Parsons makes explicit the thesis that the type of identification is a function of the developmental capacities of the child. Early identifications are more diffuse and related to concrete behaviour; later ones are more differentiated and organised round symbolic role entities. (ibid)

The parallels here with what would be posited in a wholly Piagetian analysis are striking; we shall see later that Kohlberg (1967) and Kohlberg and Zigler (1966) have both argued for and (in the latter) demonstrated such a relationship.

It can only be assumed that the failure of Bronfenbrenner and others to see the implications and relevance, of applying Piaget to identification phenomena is due chiefly to the fact that Piaget himself has not chosen to be concerned with the development of sex or other social role concepts. Social role concepts should be subject to the general principles of concept learning implied by the whole of Piaget's work, the process and stages of which have been so intricately amplified by recent Piagetian exegesis. Flavell and his collaborators have begun on what they call "role" understanding, but this is not in fact "social role concept" learning, though relevant to an understanding of it.¹

Piaget versus the developmental-identification approach

The "cognitive" or Piagetian theory, then sees

the environment as a social world which includes rules, and which the child understands through conceptually organised role taking. The mere process of role-taking the attitudes of others in organised social interaction is believed to transform concepts of rules from external things to internal principles. Variations in social environment are viewed as stimulating or retarding role-taking and hence, as stimulating or retarding sequential development, rather than as variations in effectiveness of stamping in rules through reinforcement or identification. (Kohlberg, 1963, 314)

This summary makes the distinction clear. The conventional theories with which we have thus far been concerned have all, in one or another way, assumed "the stamping in of rules through reinforcement or identification". Piaget does not.

¹ It is also due to the fact that Piaget is concerned to give a descriptive analysis, not an explanatory one. He is not therefore concerned (as most child development theory is) to elucidate antecedent-consequent correlates. The point is Flavell's (1963).

THE IDENTIFICATION PROCESS
AND SEX DIFFERENCES

CHAPTER FOUR

It is true enough to say, as Houston does, that Freud evades giving an adequate account of the identification process for girls. But Freud gives some explanation, although - as will be discussed - there are also major flaws in attempting to derive consequents from the Freudian theory for girls. For, as usual, Freud said contradictory things. At one time he said:

With the transference of the child-penis wish on to her father, the girl enters into the situation of the Oedipus complex. The hostility to her mother, which did not require to be created, now receives a great reinforcement, for her mother becomes a rival, who gets everything from her father that she herself wants. The girl's Oedipus complex has long concealed from us the pre-Oedipal attachment to her mother which is so important and leaves behind it such lasting fixations...

The boy's Oedipus complex, in which he desires his mother and wants to get rid of his father as rival, naturally develops out of the phase of phallic sexuality. The threat of castration, however, forces him to give up this attitude. Under the influence of the danger of losing his penis, he abandons his Oedipus complex, it is repressed and in the normal cases entirely destroyed, while a severe superego is set up as its heir.

What happens in the case of the girl is almost the opposite. The castration-complex prepares the way for the Oedipus complex instead of destroying it...the girl remains in the Oedipus situation for an indefinite period, she abandons it only late in life, and then incompletely. The formation of the super-ego must suffer in these circumstances. (Freud: New Introductory Lectures: cited, Fodor and Gaynor, 110)

At another, he retained some of the elements, but introduced quite new ones alongside:

Fear of castration is naturally not the only motive for

repression; to start with it has no place in the psychology of women: they have of course, a castration complex, but they cannot have any fear of castration. In its place, for the other sex, is found fear of the loss of love, obviously a continuation of the fear of the infant at the breast when it missed its mother... If the mother is absent or has withdrawn her love from the child, it can no longer be certain that its needs will be satisfied, and may be exposed to the most painful feelings of tension (Freud, 1933, 121).

Later he expanded this, to say that "identification with the mother can take the place of attachment to the mother" because "if one has lost a love object, the most obvious reaction is to identify itself with it, to replace it, as it were, from within by means of identification" (1949, 98).

Now this theory, postulated by Freud as applying specifically and differentially to girls, is in fact precisely the modern form of anaclitic or "developmental"¹ identification applied to both sexes, in which it is a basis postulate that the child can form a developmental identification only if he is initially dependent on the parent (e.g. Mowrer, 1950,1960; Sears, Maccoby and Levin, 1957; Sears, 1957; Kagan, 1958; Sears, Rau and Alpert, 1965; Mussen, 1967). It is close to the "status envy" theory of Whiting (1960) in which identification occurs because the parent holds resources; if we take love or approval as the most typical resource then it is clearly the same theory as those above - and stems from Freud.

It is worth noting, however, that modern anaclitic theory (i.e. based on that process which Freud postulated as specific to the development of girls) depends for empirical support extensively on studies of identification as conscience development. It is one of the two major aspects posited by Sears (1957) and forms two of the four stressed by Rau (1960) in describing the

¹ In the literature, "anaclitic" and "developmental" are used interchangeably. Hereafter it will be referred to only as "anaclitic" to distinguish it from Kohlberg's "cognitive-developmental" theory, and to avoid confusion.

outcomes of identification. The relationship of identification theory to a conscience development theory may be seen in Sear's comment:

It appears that the first stage in the growth of conscience is the development of a reasonably normal emotional dependence of the child on his parents. Then if the parents are warm and affectionate, if they maintain an atmosphere of mutual trust and esteem in the family, their stable and consistent use of love-oriented techniques and discipline produces self control.

The normally dependent and loving child must devise habitual ways of insuring the continuation of his parents' love. An obvious procedure is to adopt the parents' values and ideals, their controls and restrictions, as part of the child's own charter of conduct (Sears, 1960, 110).

The difficulty with this theory is that, if put alongside the "developmental-discontinuity" notion, it should again, on its own, predict a greater conscience development in boys and a lesser in girls, since the "shift" demands that the boy operate more without, and in the absence of the mother to whom this attachment first took place. Such a difference in morality, as was noted, is not demonstrated by the empirical data.

Freud could postulate that the development of girls was a more difficult process:

A comparison with what happens in the case of the boy shows us that the development of the little girl into a normal woman is more difficult and more complicated (Freud, cited Fodor and Gaynor, op cit, 24).

In this case, he saw it as a specific consequence of the different processes which he described for boys and girls; he rightly saw these processes to be quite assymetrical.

Anaclitic identification

Curiously, then, defensive identification as a general (rather than

neurotic manifestation) has been abandoned largely by modern identification theory, on grounds which are sufficiently traversed by Bronfenbrenner (1960)¹ and Mussen (1967, 101). In its place, both for boys and girls, is put anaclitic identification, resting on the process Freud postulated only for girls.

However, the consequence has been an inversion of the Freudian argument as to the consequences.

While developmental identification is assumed in all formulations to be a response to the withdrawal of love, affection or approval after the child has been conditioned to expect it by the early attachment to mother, most then assert that the boy has the harder tasks set as consequence. For him, the early attachment is to an opposite sex parent. Therefore at the time when specific sex role requirements are asked of him, he must withdraw from the mother, and a "developmental-discontinuity" is involved.

This position seems first to have been formulated by Mowrer (1950); it is specific in Sears, Maccoby and Levin (1957, 384) and in all major theories since. A typical statement of this "developmental-discontinuity" theory is that by Levin and Sears (1963, 289-290):

But with which parent does a child identify? By the age of 5 years most children may be assumed to have developed their strongest identification with the same sexed parent. This development is not the same for the two sexes because the conditions for establishing primary identifications are such that the mother is the initial identificand for both boys and girls. Only as the boy begins to perceive himself as a male "like" his father and "unlike" his mother can he begin to shift his identificand from mother to father. Hence identification is more straightforward

¹ c.f. Slater's comment that chronic punctiveness seems actually to impede identification. (Slater, 1961a, 300).

in the girl, and she develops a stable sex typing more rapidly in this respect than the boy. This latter assertion is supported by two findings from previous studies of dollplay.

Levin and Sears cite P.S. Sears (1953) as showing such a shift for boys' fantasy play; and Johnson as showing that "prosocial" rather than antisocial aggression increased as a function of age in both sexes,¹ but earlier and more sharply in girls.

There are some implications in this view, which need comment.

1. The "development-shift" theory assumes implicitly an active selection of models, by boys at least; it does not note explicitly that this is a consequence of the cognitive need to understand the male role; but it certainly implies it. The point will be expanded on in discussing Lynn's and Kohlberg's statements later.
2. The earlier tendency in girls to show "prosocial" behaviour appears, at first sight anyway, to conflict with Freud. If the super-ego is weak, or absent in females (he is explicit on the latter) then why the more rapid socialisation of girls? In fact, Freud described such a female pattern himself:

The little girl is as a rule less aggressive, less defiant and less self-sufficient; she seems to have a greater need for affection to be shown to her and therefore to be more dependent and docile...One gets the impression that the little girl is more intelligent and more lively than the little boy of the same age; she is more inclined to meet the external world half way, and at the same time she makes stronger object cathexes. (cited, Podor and Gaynor, op cit, 24).

This appears to amount to an implication that anaclitic identification

¹ Sears (in Beach, 1965) shows that prosocial aggression in girls is not related to "love withdrawal" which somewhat throws into question the orthodox explanation, and disputes the Freudian postulate of an anaclitic process for feminising girls.

is a stronger socialising force than defensive identification. The behaviour described appears accurate, and agrees with Bronfenbrenner's summary of "over-socialised" patterns for girls, cited below, but the question is whether, on Freud's theory, women are necessarily weaker moral vessels. He was clear enough:

...for women what is ethically normal is different from what it is for men. Their super-ego is never so inexorable, so impersonal, so independent of its emotional origins as we require it to be in men...(women) show less sense of justice than men...they are less ready to submit to the great necessities of life...they are more often influenced in their judgments by feelings of affection and hostility. (cited Bronfenbrenner, 1960, 18/19).

It appears true to some extent, if this can be regarded as a qualitative rather than quantitative statement about women's moral behaviour. But here, in this quotation, Freud uses the "super-ego" to describe the origin of moral behaviour; elsewhere he specifically denies this link:

I hope you will feel that in postulating the existence of the super-ego, I have been describing a genuine structural entity and not merely personifying an abstraction such as conscience (N.I.L.P., 88).

In that essay he admits that he does not "fully understand" the super-ego, but it can be seen as a "successful identification with (not introjection of ...DG) the parental model". The process here described is clearly and normally anaclitic, but he specifically says the outcome is neurotic (...it is normal in sick persons"). Therefore, the many recent theories and research studies which dwell on identification/conscience development may be pardoned their confusion.¹

¹ See Sanford (1955), Bronson (1959), Jacobson (1954). The matter could be further confused because Freud elsewhere speaks of identification as involving the introjection not of the perceived but of the ideal father; and that more confused again because it is not consistently clear whether it is the child's perception of the father's ideal self, or the father's own.

It is clear (e.g. Kohlberg, 1963) that the pattern of empirical data does not support a quantitative difference between the sexes, or at least not consistently in either direction, as a function of identification. However, there may be some problem here requiring an answer.

Mowrer specifically argues that the developmental shift in boys implies becoming a man (i.e. sex typing); and also being manly (i.e. taking the appropriate moral stance). Sex typing and moral behaviour should, for him, correlate perfectly. But Freud, quoted above, spoke of identification with "the parental model" as resulting in super-ego process. It is arguable that two separate types of identification are involved, though what these may be is not always agreed. Here, the distinction appears to be between "positional" identification (Freud's "parental model") and "personal" identification. In this form, the distinction is originally Slater's (1961). It can then be argued that sex typing is an outcome of positional, and moral development of personal identification (Slater, 1969; Lynn, 1959).¹ Kohlberg (1963) agrees that positional identification need not imply a desire to conform to the parents or to their values; merely the desire to play the adult role.² Personal identification on the other hand does link significantly with measures of conscience (Kohlberg, 1963, 306). But, as will be seen in looking more closely at Lynn's theory, the situation is not symmetrical for boys and girls.

The boy, unlike the girl, is forced (on the developmental or discontinuity theory) to shift positional identification; he ought to therefore make an

¹ In this form it flatly contradicts the surmise by Freud just quoted.

² Mowrer suggests that sex typing may depend on anaclitic identification, while conscience development may depend on defensive identification. Kohlberg (1963) tends to suggest that the data support neither view.

earlier and sharper distinction between positional and personal identification than does a girl. This point can be considered later in reviewing Lynn's argument on the cognitive effects of sex role learning.

Personal identification and conscience development

In the significant recent applications of anaclitic theories of identification, there nevertheless continue to be confusions between personal and positional identification. Mowrer originally said that

a person imitates or reproduces behaviour of a model in order to reproduce bits of the beloved and longed for parent (Mowrer, 1950, 615).¹

He could have said, person rather than parent. The confusion arises because of another element present in Freud. He asserted the salience of the father in identification. Modern theory does not agree; if anything the mother's role in conscience development appears somewhat stronger (e.g. Sears, Maccoby and Levin, 1957; Ritchie and Ritchie, 1970), though Kohlberg (1963, 309) makes it clear that empirical data argue for the equal importance of father, a fact explicable on cognitive perceptual grounds (309). See also Bronson, Katten and Livson (1961), Emmerich (1959).

But there is still confusion, as in Levin and Sears (1963, 293), about personal and positional identification

the identification process is necessary to the formation of super-ego or conscience, and...the amount of identification the child has with parental roles.
(my emphasis)

Is the child identifying with the mother as a mother, or with the mother as a

¹ The relevance of "bits of behaviour" as specified by Mowrer and also by Kagan (1958) was discussed above in arguing that selectivity is not adequately accounted for on developmental identification theory.

person? The distinction is important, the more so when we look at sex typing and any possible correlates with moral development or conscience formation.

The argument seems to be in favour of making a clear distinction between personal and positional identification, and regarding the former as the correlate of conscience development.

The motive

On anaclitic theory, there must be parental warmth (maternal, usually); if there is none, or too little, its withdrawal will mean nothing to the child (in Whiting's formulation, presumably, it is a "resource").

Sears, Maccoby and Levin (1957) clearly take from their empirical data that "love-oriented techniques" in maternal practice are a predictor of high conscience development in young children. Nevertheless after surveying the field Kohlberg (1963, 302) could conclude that

the evidence for identification as a basis for
the affection-morality relationship is not good.

That is, the affection/morality relationship may be demonstrated, but other correlates which assert an identificatory process may not be demonstrably present.

A closer inspection of Sears, Maccoby and Levin (1957) suggests that, on their own data, there may be other elements present. In fact, of the "love-oriented techniques" which they cite as correlating with conscience development, the highest is, in fact, "giving reasons and explanations". The affective factor appears to have been strongly contaminated, at source, with a cognitive one.

Anaclitic theory would also predict that withdrawal of love, as is implied, would result in conflict/anxiety. This is, in effect, the basis of the Mowrer formulation.

There are reservations about applying this concept of anxiety as a motive, e.g. Pinney's summary of his findings (1964, 46)

One approach to the reality of a concept is its usefulness in predicting antecedent or consequent events... By this criterion anxiety seems still a superficial variable, as the anxiety factor in the child correlates with almost nothing that was studied in the mother, and the anxiety factor in the mother correlates with nothing that was studied in the child...

Here, the demonstrable fact that girls tend to be higher on most tests of overt anxiety (Sarason, 1955; Ruebush, 1963) has to be accounted for. Does this confirm the anaclitic hypothesis? On, say, Kagan's formulation, strength of identification has to be accounted for. "Following a basic behavioural law", he says

this should be a function of the strength of the motive and the quality and frequency of the reinforcement. (1958, 303)

Girls certainly, on the anaclitic theory, have more frequent reinforcement; therefore their identification strength ought to be higher; anxiety consequent upon withdrawal could be postulated to be higher for girls than for boys. This situation needs looking at more closely.

The case of girls; "oversocialisation"

Sears, Maccoby and Levin (1957) are clear enough that discipline techniques involving "withdrawal of love" are used more often with girls than with boys; with boys, the techniques of punishment, threat, deprivation of privileges

are more often used.

But, though this seems to be a statement of the anaclitic position in discussing "withdrawal of love", more is involved. It is clearer in Bronfenbrenner's longer analysis: (Bronfenbrenner, 1968, 97)

As we have pointed out elsewhere (Bronfenbrenner, 1961) exposed to more affection and less punishment than boys, but at the same time are more likely to be subjected to "love-oriented" discipline of the type which encourages the development of internalised controls. And consistent with our line of reasoning, girls are found repeatedly to be "more obedient, co-operative and in general better socialised than boys at comparable age levels". But this is not the whole story.¹

At the same time...girls tend to be more anxious, timid, dependent and sensitive to rejection. If these differences are a function of differential treatment by parents, then it would seem that the more "efficient" methods of child-rearing employed with girls involve some risk of what might be called "over-socialisation".

It does look, on this argument, as though (for reasons wholly other than the Freudian Oedipal situation) anaclitic identification could be postulated for girls but not for boys.² But birth-order variables certainly contaminate it, as Schachter has demonstrated for first-born children (Schachter, 1959) where the same correlates in behaviour are found. It may be questioned, then, whether it is not sufficient simply to regard these as the learned outcomes of differential parental practices, rather than of any identificatory process.

¹ Kohlberg (1963, 310) however, takes from his extensive survey of the data that "there are no substantial differences between boys and girls in conformity to internalised moral standards "though" girls are more conforming to rules and authority than boys".

² This pattern is what Green, in his classic article, postulated for the over-socialised middle class boy.

Correlates of sex appropriate behaviour

In Mussen's view, warmth or nurturance strongly correlates with sex-typing as well as with conscience development.

P. Sears (1953) demonstrated this in doll play for boy/father and girl/mother projections. Mussen and Distler (1959) showed that high masculinity boys perceived the father to be more nurturant, rather than more masculine; the predictor of high M in boys was the nurturance rather than the masculinity of the father. Mussen and Rutherford (1963) showed that appropriately sex-typed boys and girls regarded mothers as nurturant. But in this study, there were additional findings, summed by Mussen himself (1967, 100) thus:

Other findings from the questionnaire responses of the mothers and fathers indicated that the young girl's feminisation was fostered by several factors in addition to warm mother-daughter relationships. (my emphasis) Mothers of the highly feminine girls tend to be more self-accepting than the mothers of the other girls. Furthermore, the fathers of the appropriately sex-typed girls were relatively more masculine in interests and orientation (in comparison with the fathers of the other girls) and gave their daughters significantly more encouragement to participate in feminine activities.

This study represents one of the most significant obstacles to accepting a simple statement of the anaclitic theory. The previous studies in the Mussen series had already showed that (in contrast to the Sears, Maccoby and Levin finding; 1957) sex-typed behaviour in boys was not correlated with maternal nurturance - as on any simple assumption of frequency on S-R lines it ought to be. Taken with Mussen and Rutherford's conclusion that "the acquisition of femininity by young girls is not...simply determined", (my emphasis) we are forced to look at the whole social context of sex role learning. This will be done, in discussing the major postulate of this present study; and further reference to Mussen and Rutherford will be necessary at that point.

Conclusion

The question, again, is whether identification as a concept assists greatly. Because the arguments for identification in the broad sense so often rest on conscience development; and because in the original Freudian formulation an association of the differential processes for the sexes with super-ego strength of "ethical conduct" was central, Kohlberg's conclusion will suffice, and is cited at length (Kohlberg, 1963, 306-7).

...the studies which show personal identification with the same sex parent to be related to conscience also tend to show personal identification with the opposite sex parent to be related to conscience.

The results of studies of direct measures of identification and conscience tend to reinforce our conclusions drawn from studies of parental antecedents. Like the findings on love and nurturance withdrawal, the positive associations between measures of personal (as opposed to a positional) identification and conscience offer some support for a developmental¹ identification theory of conscience. The apparent tendency for identification with parent measures to be associated with conscience, regardless of sex of child and sex of parent is also more consistent with a developmental theory of identification than with a power theory. Like the findings on childhood antecedents, these findings are readily explainable without the identification theory. (my emphasis)

This study therefore proceeds on the assumption that the explication of sex role learning can, in fact, be as well handled without the ramifications of motive explanation which the identification concept requires. As Kohlberg (1963) notes, anaclitic theory does fit the major facts in his survey of moral development. What it does not fit - or not fit so readily - is the complexity of the situation as suggested by such studies as Mussen and Rutherford. For such complexity, it is proposed, a cognitive/social theory will be more parsimonious.

¹ i.e. "developmental" meaning "anaclitic"

However, identification theory has served (as Bronfenbrenner rightly says) to draw attention to the asymmetry of the sex role development process for boys and for girls. Whether in the Freudian Oedipal or the anaclitic theory, quite contrasted processes are postulated. The situation implied by these theories requires explanation even if not in "identification" terms, and will be discussed more fully later.

A. IDENTIFICATION AS SOCIAL LEARNING: Bandura, et al.

Bandura and Walters (1963) have discussed fully, and supported with empirical data, a case for treating social learning in a straightforward manner. The burden of the argument there adduced is more specifically related to "identification" theory by Bandura and Huston (1961) also reported briefly in the longer book; that study is chosen here as a typical example of the "social learning" position. It is then followed with an examination of the most significant study, perhaps, for the whole case presented in this thesis: Bandura, Ross and Ross, 1963.¹ This section therefore gives a precis and commentary for these two key studies.

Bandura and Huston, 1961. "Identification as a process of incidental learning"

The authors compare their use of "incidental" learning to other terms employed in the literature: "vicarious learning"; "observational learning"; "role taking".

Much of a child's behaviour repertoire, (they say) is believed to be acquired through identification with the important adults in his life. (1961, 311)

Such a process, by whatever name, however

appears to be more a result of an active imitation by the child of attitudes and patterns of behaviour that the parents have never directly attempted to

¹ Mischel, in Maccoby (1967) presents a well reasoned and full case for the social learning theory of sex differences but the objections which may be made to it are explicit in the discussion here of these two studies.

teach than of direct reward and punishment of instrumental responses. (ibid, 311; my emphasis)

This is, in fact, the "global" element earlier discussed, the notion that children imitate not only specific behaviours but generalised patterns of behaviour. Bandura and Huston do not make this point. They propose, however, that

while elaborate developmental theories have been proposed to explain this phenomenon, the process subsumed under the term "identification" may be accounted for in terms of incidental learning, that is, learning which apparently takes place in the absence of an induced set or intent to learn the specific behaviours or activities in question... (ibid)¹

The child has "ample opportunity to observe and learn, even though he has not been instructed to do so" from his model. Research adequately documents the existence of incidental learning, they argue. They therefore tested the hypothesis that nursery school children, while learning a two-choice discrimination problem, would learn to imitate irrelevant behaviours of the model. On theories of identification, nurturance would promote incidental learning (the anaclitic theory, that is). They note that Mowrer accounts for this, in the original anaclitic formulation, by assuming affectional rewards to increase the secondary reward properties of the model; and that conditional withdrawal of affection would enhance secondary reward and the tendency to reproduce the model's behaviour, to achieve self reward. Their experiment therefore contrasted the affect of a warm, and a distant or cold model. All models were female.

In the results, no significant sex differences are found in the children's

¹ While the point will not be discussed further, it is possible that also involved here are something like Harlow's "learning sets". No discussion of this possibility is known, but the link may have been explored theoretically or empirically.

responses, but

the predicted facilitating effect of social rewards on imitation was essentially confirmed. Subjects who experienced the rewarding interaction with the model (gave demonstrably closer imitations of irrelevant behaviours) than those subjects who experienced the relatively cold and distant relationship. (ibid)

Performance on the actual test was not affected, but the "warm model" group exhibited more conflictful behaviour than the others in predecision activity. Bandura and Huston question the stability and permanence of the behaviours on a single learning situation; but this is not directly relevant to parent/child relationships extending over time.

However, some elements even in this formulation, which appears to show direct support for the usual anaclitic identification theory, raise questions. For example, Bandura and Huston note that clearly

A response cannot be readily imitated unless its components are within the subject's behaviour repertoire. (ibid)

The results clearly supported this view, which compares interestingly with Piaget's insistence, cited in the previous chapter, that imitation does not occur unless the action can be assimilated to an existing schema with which it is identical or analogous. The example cited by these authors

...several subjects imitated the motor component of speech by performing the appropriate mouth movement but (emitting) no sound... (ibid)

is very much like an "analogous" schema in the Piagetian formulation; clearly, structural/cognitive elements are present in this imitative behaviour, presupposing what Bandura and Huston earlier called "active imitation". (my emphasis)

As to warmth or nurturance, Piaget (cited above) does recognise the salience given to models by the child's general attitude to them; social learning theory, therefore, does not conflict with a Piagetian formulation, and the particular comments immediately above cited by Bandura and Huston look wholly consonant with Piaget.

Identification, then, is a term which these authors (and their collaborators in other studies by this team) see no reason to use. But the critical nature of the child's active perceptual response is more sharply shown up in their follow-up study, Bandura, Ross and Ross (1963).

"A comparative test of the status envy, social power and secondary reinforcement theories of identificatory learning"

"Power" theory as described here, is the usual identification nurturance assumption (e.g. Parsons, Sears); "status envy" is Whiting's theory (above) and "secondary reinforcement" is as in Bandura and Huston. For the purpose of the present argument, however the most significant finding of the study is its support for a cognitive theory, not hypothesised at all.

In sum, Nursery school children of both sexes were involved in an intricate permutation of conditions designed to test the stated theories in imitating behaviours either of a "controller" or an adult rival to each child for the rewards, carefully coached in the routine, and both jointly present in each experimental condition. Readily assessable "irrelevant" behaviours were included by both adult models, as well as complex patterns of reward or promised reward. The two-model team consisted of opposite sexes. Otherwise the general design was as in Bandura and Huston, though

all permutations of model and of child sex were carefully controlled for in the 1963 version.

Discrepant results: sex differences

Pairing the model with positive reinforcement did not (as it had in the earlier experiment) produce the greatest imitation incidentally.

Analysis of their carefully tabulated results showed them that boys significantly imitated the male "adult rival's" behaviour rather than the competing behaviour of the female "controller", even when the controller gave the boys rewards.

In the post-experiment interview a number of boys in this condition spontaneously expressed sympathy for the ignored male and mild criticisms of the (female) controller...

On a partial re-run, in which the controllers half way through merely offered to reward the "adult rival" as well as the child, imitation of the controller immediately increased.

The authors conclude that this effect was greatest

when the same-sex model mediated the positive reinforcers, and this effect was more pronounced for boys than for girls. (ibid)

Cognitive effects

The follow-up interviews cited showed that a significant number of children had, in the experiment

actually attributed rewarding power to the ignored or consuming (rival) adult despite the elaborate experimental manipulations designed to establish

power status. A number of these children were firmly convinced that only a male can possess resources, and that therefore the female dispensing the rewards was only an intermediary for the male model... (ibid)

The child's existing understanding of sex role behaviours appropriate to parents had been previously shaped within the "family constellation". Those children attributing resource ownership to the female demonstrated very clearly some difficulty in explaining why they did so,

perhaps because the power structure they depict is at variance with the widely accepted cultural norm. (ibid)

Implications

Not surprisingly, on the basis of their study, the authors conclude that

when children are exposed to multiple models they may select one or more of them as the primary source of behaviour but rarely reproduce all the elements of a single model's repertoire or confine their imitation to that model. (ibid, 445)

This was demonstrated.

Consequently, the children were not junior-size replicas of one or other model; rather, they exhibited a relatively novel pattern of behaviour, representing an amalgam of elements from both sides. Moreover, the specific admixture...varied from child to child. (my emphasis, throughout)

Comparison with their earlier experiment suggested to the authors that apparent support for simple learning processes in other research studies may be an artifact of a restrictive research design.

No experiment (and this one is in a high degree elegant in design)¹ could more conclusively have supported a cognitive approach to sex role learning and development. It exhibits precisely the elements such a theory requires:

1. congruity is motivating, but (a) selectively and (b) actively not merely passively.
2. existing cognitive structures are demonstrated to shape the child's perception, and override either simple imitation, or "secondary reward"/power imitation.
3. specific sex role understanding on the part of the children demonstrably conditioned whether they liked the model or not; that is, their cognitions preceded their affections.
4. the differential tendency of boys to prefer a same sex model and of girls to be open to imitate either model (as is implied by the later argument in Chapter Six) is clearly shown.
5. the child's phenomenological response to the situation was demonstrated.

The authors conclude that, in a situation nearer to real life than the earlier (1961) experiment, the straight power/secondary reinforcement paradigm was not supported. Instead

these findings provide considerable evidence for the seemingly paradoxical conclusion that imitation can in fact produce innovation of social behaviour... (ibid, 446)

In Piagetian terms, there is nothing paradoxical about the findings. The assimilation to existing schemata is perfectly demonstrated², and imitation proceeded just as Piaget suggests. It is only paradoxical that

¹ Its elegance included the use of post-experimental interviews in which the children could say what they thought had happened.

² Particularly in the children's mistaken perception that the two adults had a father-mother relationship. Piaget so often proved the significance of such mistakes.

a research design intended to compare three other theories of identificatory behaviour should have finished by disproving all and proving Piaget; proving not "global" but selective perception.

This experiment (analysed at length because of its centrality to the theory later to be put forward) has one additional point. The authors note that by providing alternative models, they had approximated a two-parent model situation. But Helper's 1957 study (below) suggests strongly that the two-parent paradigm is not enough; Bandura, Ross and Ross' data merely imply that alternative models may be selectively attended to - whether these models are fathers, mothers, siblings or peers.

B. IDENTIFICATION AS SOCIAL ROLE LEARNING: Brim

Of "sociological" theories of identification, Parsons' is the most familiar, having blended Freudian concepts skillfully with both role and cognitive elements. It is essentially an anaclitic theory, placing more weight on describing the discontinuity phase for boys therefore, than the process for girls. For further treatment see Parsons and Bales (1955), Bronfenbrenner (1960), Houston (1968). Some discussion of Parsons' position will occur later in connection with Lynn's argument.

Brim, however, has given a specifically sociological account of personality development (1960). This expresses the downright view that

personality differences consist of inter-individual differences in characteristics as expressed in social roles, and of little else. (ibid, 127)

Brim therefore insists that the process of development must be explained not only by understanding motivation, but also "knowledge of the role

demands, and ability to perform. (ibid) He defines socialisation as

a process of learning through which an individual is prepared with varying degrees of success to meet the requirements laid down by other members of society for his behaviour in a variety of situations. (ibid, 128)

Brim notes that the "normality" or otherwise of personality characteristics can only be decided with reference to role prescriptions.

"Dominance", for example, has different value for any one individual in a role requiring dominance on the one hand or a role requiring submissiveness on the other (a point taken up fully in Chapter Eight). This argument implies that the study of personality must account both for content and for deviance.

Traditional personality theories, argues Brim, are too general; they do not sufficiently specify role contexts, nor variations within role contexts:

the fact that the behaviour prescribed for a role may vary depending upon the person with whom one interacts (ibid, 132)

and even variations in role situations for the same set of actors (c.f. Goffman, 1969). Brim proposes that role-specific analyses will overcome the difficulty of assumedly invariant trait-descriptions of personality (a point even recognised by Cattell, 1965). Traditional theory, he suggests

might be viewed as studying the waste materials, so to speak, of the socialisation process rather than the standard product itself (ibid, 139)¹

He recognises (141) the difficulty of applying a role-theory approach, particularly in the case of sex role performance. Nevertheless, he notes

¹ This is important because low correlations between factors may be accounted for not because they are not operative, but because they are role-situationally specific. The point almost certainly applies to some data in Kagan and Moss (1960).

that "who are you?" questions are typically answered by status/role descriptions, not personality characteristics: identity is defined by roles, self-evaluation is based on one's performance in or across roles (c.f. Helper's study of self-concept cited in the succeeding chapter, or the evidence for anxiety related to role conflict).

Learning

Variation between people's role performances, then, is accounted for by

different degrees of ignorance of what is expected,
different degrees of ability to learn, and different
degrees of role appropriate motivation. (144)

This contrasts with traditional theory "where the major explanatory variable intervening between behavioural differences and prior learning has been that of motivation alone". (my emphasis)

Brim analyses his categories of "knowledge, ability and motivation" in role performance. His analysis of knowledge and ability is essentially in terms of a cognitive exploration (147-8) of existing roles, role contexts and role situations. Importantly, he notes (paralleling the previous analysis of "incidental" learning that:

what is learned in socialisation is fairly large response units, involving interaction episodes or even larger segments of role behaviour. Social interaction is not made up of bits and pieces... (149)

This is a much more precise form than merely speaking of identification as "global" learning. Moreover, learning is activity ("through interaction") but proceeds as the child confronts, in interaction

a series of persons holding different statuses in the peer and adult world. (ibid)

Parents are involved in "monitoring", giving "supervisory comments" and affecting what Sears, Maccoby and Levin (1957) have called "changeworthy" behaviours. Important questions are raised (151) about the outcomes of sibling or peer experiences, specifically on sex role learning. Koch's data (see Chapter 11) is adduced to support the importance of sibs in masculinity/femininity learning.

Brim specifically implies that personality studies must describe children's behaviour

in several roles, such as with their sibs, with their teachers, with their male and female non-family peers, and their parents (ibid, 156).

Moreover, in this process, Brim argues that knowledge of role expectations, ability to respond and motive to respond are antecedent variables.

Implications

The implications of this sociological approach for our general argument are:

1. That this is specifically cognitive: it assumes knowledge and ability as antecedent.
2. That it integrally requires specificity (i.e. selectivity) while accounting for the "global" response.
3. That it specifies functions for sibs and peers as well as for parents.
4. That it places role expectations centrally in the explication process.
5. That it accords sufficiently with the implications of Bandura, Ross and Ross on the importance of children's existing concepts of roles¹ as

¹ Accords rather more than is obvious in this summary of Brim's case; his stress on children's pre-existing learned generalisations about role qualities, as with the Parsonian pattern-variables, describes precisely what emerged from the post-experiment interviews cited. The children clearly perceived all males to be instrumental.

these affect their perceptions, to say that it is in effect, an alternate theory to describe their material.

6. That the stress on "role appropriate motivation" is significant for the later discussion of "sex role acceptance".

* * * * *

Therefore, it is argued, there is now assembled a sufficient case for approaching "identification behaviour" by dropping the term and speaking merely of "social role learning". This present study is concerned only to describe that part of the process of outcome of "identification" which is involved in sex typed behaviour, for which purpose such an approach appears clearly fruitful. Brim has stressed (and, significantly, placed first among the antecedent variables) the child's knowledge of the role. This supports the case that it will be fruitful to approach identification as a cognitive process of learning sex role concepts; that the process will be similar to any other process of concept formation; and that it will be informed by a Piagetian approach.

There are also solid grounds for focussing on role expectations, and on the interactions with a range of models including peers and sibs whom Brim, significantly (cited, 156) placed before parents. The approach offers something broader than the simple "parent influences child's learning" paradigm.

On these based, the next part of this study proceeds to examine the case of girls and the evidence for sex differences.

PART TWO

THE SOCIAL CONTEXT OF DEVELOPMENT FOR GIRLS

WOMEN AS THE SECOND SEX:
SOCIAL VALUES AND
THEIR CONSEQUENCES

CHAPTER SIX

There appear to be substantially two schools of thought on whether women are socially disadvantaged: those who say that they are, but that this is necessary and desirable; and those (like de Beauvoir, Friedan, Millett and Mead) who say that they are, but this is neither necessary nor desirable.¹

It may be argued that women are given high social value, and the feminine roles they play are socially essential. But the point of the "second sex" theory is not quite that. It argues that the supposed advantages of being a woman, of acting in an appropriately feminine manner (included the expected personality qualities), are at best compensations for the disadvantages; at worst a sop, fobbing off, brainwashing.

The argument is, in fact, that the predominant value system of the society is highly consonant with those values and qualities associated with maleness, with qualities clearly expected of males. The value system is to a lesser extent, if at all, consonant with those values or qualities associated with femaleness.

Sears, for example (Beach, 1965) says that

Western civilisation has almost always defined the
two gender roles as polar opposites...

¹ Friedan (1963, 112 et seq) attacks Mead as a proponent of the "feminine mystique". This is on a misreading of Mead, and Mead's other writings before and since make her Friedan's ally, not enemy.

and mentions specific

behaviour qualities which do seem to be polar opposites
e.g. activity-passivity, aggression-nonaggression,
independence-dependence. (1965, 135)

It is indisputable that society does place a higher value on displays of the qualities of activity, aggression (if translated as "assertiveness") and independence than it does on their opposites; i.e. it values the masculine rather than feminine attributes more highly. Not all societies, are so explicit as the Jewish daily prayer in which men thank the Lord "that thou hast not created me a woman" and women submissively thank the Lord "that thou hast created me according to thy will". But the marital pledge for women to "love, honour and obey" has not yet wholly disappeared.

Freud, of course, was an apostate Jew, whose views remained typical of his religion and time. In Jones' biography, he presents the very model of a "male-sexual-chauvinist": believing that women were to be protected only; that their role was to minister to men (Jones, II, 121, for example). This archetypal (if now exaggerated) male-oriented view is significant if only because Freud's theories of identification are so clearly coloured by it.

An amelioration of the status of women has been clear since Freud, and now continues.¹ Extreme differentiation between the sexes is altering in Western societies (a fact of interest to Parsons for example, and to researchers such as Hartley).

¹ A shift evidenced even over a short period in games preference tests (Sutton-Smith and Rosenberg, 1963). It is interesting that political theorists and sociologists assert the resentment of underprivileged persons to be highest when, at last, some amelioration is started, not in the state of subservience. This is to be expected on Festinger's dissonance theory, and on the standard frustration theory that frustration will be higher in the presence of a possible rather than an unattainable goal.

But, as Dornbusch notes (Maccoby, 1967, 215) while women have entered professional jobs, this index of emancipation is dubious; in fact the percentage of American women in such jobs dropped between 1930 and 1964; the percentage of Ph.D's who were women also dropped. Moreover, the larger proportion of women in high-status occupations is in the limited sector of the seven typical "female professions". Timms (1970) produced evidence to a N.Z. Conference on Equal Pay which demonstrated similar patterns.

Equality of opportunity, then, does not exist; women cannot achieve in the same proportions, at the same levels, and over the same ranges as men. But the social barriers are customary rather than inevitable and, as in the myth of absenteeism or early resignation which plagues women seeking employment, often not grounded in fact (Dornbusch, in Maccoby, 1967); there are substantial and evident resistences to changes in status for women - not least from some women.

Nevertheless, whatever may have been the situation in the 19th century, 20th century women are demonstrably socialised in childhood to value achievement; as will be seen, education aspirations tend to be the same (e.g. Vellecoop, 1969). But women fall short of their own aspirations. Merton has proposed the classic analysis of the situation which arises when groups are socialised to a set of values and aspirations from which they are excluded by social barriers. In this case, the "barriers" for women include a conflicting and contradictory socialisation in the female role. Merton's analysis postulates that the response should be either ritualism or rebellion.

Both men and women, Dornbusch concludes, share an ideology that is antagonistic to the idea of women in high status jobs (op cit, 216). Equal pay is occasional rather than general. And meantime, as Friedan fairly

if over-emphatically points out, the value placed on the predominant female role of housework as technological change has eroded the degree of skill involved in its techniques; while at the same time, as Gilson (Houston, 1970) notes, a higher proportion of women than ever are actually married and occupying the housewife position so devalued. The present writer has elsewhere noted (Garrett, 1970) that there has been little systematic attempt by parent education to provide a compensating accent on the skill, or training to improve the skill, of women in the residual maternal role - although paradoxically both theory and research have if anything increased their stress on its early importance in personality and cognitive growth. The "vegetable" syndrome is familiar.

The growth of cities, and the housing patterns developing, isolate many women. Nevertheless, kinship ties are strongly socialised into women, and maintained (Gilson, op cit). The result, Komarovsky (1950) shows, is further conflict.

This is accentuated because women continue to have a status which (elsewhere in society) is shared only by children: that is, it is derived rather than achieved. Freud was explicit. He thought it ought to remain so. It is a status also of dependency; it involves financial "satellisation", for example. The family is patrilocal in an increasingly mobile society, which gives women fewer opportunities for career possibilities.

At any activity in which men and women may equally participate, women are (as Mead notes, 1949, 314) trained not to wish to beat men. It has been noted that internalised role conflict in adolescent girls may cause them to "play the dumb blond" in school (Coleman, 1961).

True, there are class differences. Women in middle class situations find achievement easier; sex role differentiation is less. But even for (and in some ways even more for) middle class women the Mertonian impasse continues: they are if anything more effectively socialised toward sharing values with males, but are still prevented from achieving with anything like the same freedom as males.

It is crucial that men make the news. That is, the news media, and other prestige-creating systems, are concerned almost exclusively with the activities of men. Positions of power, achievement, influence and prestige are (and are most publicly seen to be) occupied almost wholly by men. (D'Andrade, in Maccoby, 1967).

In politics, religion, science, sports, the arts, the names of men become prominent and their actions become public. The social model figures, then - both historical and present - are almost never female.

Those women who are given prestige, who make the news, tend in most cases to derive it via marital status from their husband's prestige; or perhaps more often are given prestige from what they physically are rather than what they do.

"Women" said one conflicted woman recently, "are niggers".

Now this summary - impressionistic as it is - may be accused of oversimplification. Indeed, it is recognised to be so. But for the purpose of the present study, it is sufficient to argue that such a picture is in fact the phenomenological world of a significant proportion of modern women.

The consequences for sex role preference and acceptance

In such a circumstance, it could be expected that there will be a tendency for sex role preference not to be symmetrical; to the extent that the world is so seen, both boys and girls, in the process of socialisation will learn the relative advantages of maleness as against femaleness. It could, therefore, be predicted that significant aspects of the male role should be preferred both by girls and boys; that girls would prefer aspects of the male child role more frequently than boys will prefer the female child role.¹

It is not proposed that all girls will exclusively prefer the male role, but that

1. a significant proportion will see the male role as having a larger number of advantages or see it to have advantages which their own has not got; while few boys will reciprocate.
2. all will be more familiar with the male role expectations than males are of the female role; and that to this extent, at least some conflict will be experienced by females in accepting the female role.

The former postulate (that a significant number of girls will see the male role as having a larger number of advantages) leads also to the proposal that they will have more difficulty in accepting the female role.

The research material as to this is reasonably conclusive.

Sex role preference studies

Brown (1957) showed that "boys show a much stronger preference for

¹ It should be clear that this specifically refers to preferences of girls for boys' roles and activities. At the same time they (a) accept their own gender identity and (b) may prefer prospectively the adult female role. (Harley and Klein, 1959).

the masculine role than girls show for the feminine role". Lefkowitz (1962) has an apparently contrary finding. But his finding merely demonstrates that preference for the same-sex role is about equal for boys and girls, and is consistent with the finding that girls simultaneously show a greater preference than boys for the opposite-sex role, that is, are more subject to internalised role conflict.

De Lucia (1963) showed that on a Toy Preference Test

There is an orderly increase in the number of sex appropriate choices for both boys and girls through the third grade (i.e. age 8 approx.). Fourth graders made fewer appropriate choices than third graders. Boys made more sex appropriate choices than girls and their superiority consistently increased in the later school years. (1963, 117)

This is a significant finding; clearly there is an increase in the tendency for boys to prefer the same-sex toys, and for girls to choose opposite-sex toys, over the early school years. On the assumption that understanding the relative advantages of both sex roles would come to be seen over this period, it is what would be expected.

Sutton-Smith and Rosenberg (1963) show that boys become increasingly sure of their same sex preference but conclude on a play inventory study that

The generalised choices of girls are...something of a puzzle...While this undirected responsiveness to many items on the scale can be interpreted as a sign of confusion, it can be argued with some cogency that this responsiveness is rather an indication of greater role flexibility. (1963, 124)

They elsewhere showed that the 4th grade period is one of peak anxiety for girls, and that this is related to girls perceiving themselves as tomboys (ibid, 125). There is, they suggest, "greater prestige given to

the activity of boys" (ibid). In 1965, they concluded that "higher anxiety scores and not simply feminine expressions...but are symptomatic of role conflict". (1965, 68)

Hall and Keith (1964) showed that across social classes, boys are more markedly masculine than girls are feminine. Brim (1959, 13) goes further and says that boys are "antifeminine" whereas, he implies, girls are pro-both sex roles. Lynn (1959) in an earlier formulation than that we shall later discuss says that

the girl is in a sense punished simply for being born female whereas the boy is rewarded simply for being born male (128)

Gardner (1947, 14) noted that

Boys expressed a certain disdain for women's work and role not found in the girl's criticism of the opposite sex.

McKee and Sherriffs (1956) showed that college men and women both regard males more highly than females.

In a study with very broad implication, Helper (1959) concluded that while boys' self concept was rated higher for boys rewarded for similarity to father (i.e. with masculine identification) this was not so for the relationship between girls and their mothers; indeed in girls these were negatively correlated. For girls, Helper says

a source of reward is present which operates to reinforce self descriptions which are different from those self-descriptions which are rewarded by mothers. In this situation, strong maternal reward would increase rather than decrease instability in the girl's self concept. The peer group seems a possible source of such divergent reward (1955, 193). (my emphasis)

Since this was an unexpected finding, not hypothesised, it is fairly certainly valid. It strongly supports the contention of Sutton-Smith and Rosenberg that internalised role conflict is typical of one phase of the development of girls; and more importantly, for the general theory to be proposed in this study, proposes a function for the peer group in role learning.

In a series of studies Hartley has investigated various aspects of role learning, role concepts and role preference. Some are elsewhere discussed in this study, especially that of 1964, implying age-specific preferences. While she dissents substantially from some aspects of Sutton-Smith *et al*, Hartley does so on grounds which support, rather than oppose, the contention of this present study. For example, she argues (1964a, 11-12) that opposite-sex games preference for girls in middle childhood is motivated by novelty rather than masculinity; that these activities are merely the attraction of lack of restriction.¹ The argument has some merit: boys have had prior experience of the women's world, girls not of the outside world. But she goes on to say:

The various reports of attempts to measure female sex role behaviour in childhood emphasises greater variability among girls than boys, and increasing variability with age. This suggests more variation in the sex role expectations encountered by individual girls than is the case with boys. (ibid, 12)

This supports the present case. In an other study (1964b), while her conclusion is worded to appear incompatible with the present argument (since she asserts that males are "more aware of female roles than females

¹ Elsewhere she thinks not. "There is no evidence that activities cease to be regarded as masculine just because girls also engage in them". (1959, 162)

are of male roles", a statement which appears to contradict the present case) she goes on to account for this because

It is suggested that a negative directive plays a greater part in boy's sex role identification forcing an awareness of opposite sex role activities for the purpose of avoiding them. (1964b, 51)

The contradiction disappears.

A statement bearing on the generalisations about social values outlined earlier in this chapter is Hartley's critique (1962) of the notion that "Cultural values in Western society are male oriented". (1962, 226) She argues that

1. no evidence was found in her study to support the "commonly made assumption that children perceive an adult partiality for males"... (1962, 227). But Helper's study (above) suggests that the source of conflict may lie outside the family; Hussen and Rutherford (1963) strongly suggest that femininity in girls is related, as one factor, to the mother's acceptance of the maternal role.
2. "young children (do not) reject their own sex identity because of such perceived preferences". But her argument again depends upon her assumption that it is the child's perception of parental preference which is determining. And it is essential to Kohlberg's argument later to distinguish "their own sex identity" from "sex preferences".

Certainly, her evidence does strongly question any notion that parents are perceived by their children to prefer one or other sex in their children. But, because her argument is based on the equivalence of "male-orientation" and "parental preference for male children", her final statement:

...these findings call into question the validity of the assumption that a culturally enforced adult partiality for males is generally operant in children's sex role identification and development. (1962, 227). (my emphasis)

has to be taken as specific only to the underlined word. It offers further support, in fact, for the contention later to be offered that significant sources of sex role development lie other than in the conventional adult (parent)-child paradigm. (c.f. Helper, 1955, cited above).

In any case, an equally careful study of young children's perceptions of parental preferences by Fauls and Smith (1955) had already demonstrated Hartley's limited point precisely.

Conclusion

It is not, therefore, necessary to revise the general contention of this chapter. Sex role differentiation, as Linton (1942) pointed out, "begins in our culture long before there are any significant sex differences in potentials for work, or for social participation". As Kagan and Moss noted:

The universe of appropriate behaviour for males and females is delineated early in development, and it is difficult for the child to cross these culturally given frontiers without considerable conflict and tension. (1962, 270)

The present contention, then, is that after the early discontinuity phase for boys is past, there is during childhood, significantly greater "temptation" or social pressure for girls to "cross these culturally given frontiers", even at the cost of "considerable conflict and tension", than there is for boys; a temptation greater for girls with male siblings.

This appears to be supported by the opposite-sex preference pattern summarised above. The "anaclitic" move from mother-attachment to masculine role in boys at the "Oedipal" phase is, on this argument, thenceforward compensated for by the perceived advantages of the male role; as Lynn had

it, "boys are rewarded simply for being boys". Helper's data is especially relevant. No such compensation exists for girls in childhood. However, the implication of the sibling analysis (Chapter Two) will be that the consonance of sibling interaction with social expectations will affect girls in varying degree as the female role changes with age.

Role conflict and role flexibility

These may be merely two ways of describing the same situation. The present argument does not assert that women are only socialised to one role,¹ and has already argued that the nature of learning is such that active selection from models's preferred behaviours is involved; including behaviours from more than one model. It is certain that the "female role" is more broadly or flexibly defined in childhood than the male role (Gray, 1957) and that the development of behaviours appropriate to that role is, paradoxically, inhibited unless "masculinising", "extending" or "de-inhibiting" influences are experienced (Kohlberg, 1963, 163; see also Chapter 10).

However where, as with the Games Preference Test, masculinity and femininity are both measured for each child, and where these vary independently, it is reasonable to talk of elements being absorbed from more than one model. This situation is described by Sutton-Smith and Rosenberg as "role flexibility", i.e. for girls to be able to include "masculine" elements in their repertoire. When these are associated with anxiety, as in this case, it is reasonable to talk of "role conflict".

¹ Brim's statement does not, strictly merit the strong criticism of "The Oversocialised View of Man" made by Dennis Wrong (1961) if we take the point made by Goffman. Brim talks about roles not about "role".

Conflict and dissonance

It should be clear, however, that the "conflict" or "anxiety" here referred to should be understood not to be undesirable, per se. To the contrary; later argument is based on the assumption (Berlyne, 1960) that conflict or dissonance is motivating within an optimal range. Some later hypotheses in this study are made on the assumption that too little "dissonance" for girls as between masculine and feminine role-appropriate behaviours is as bad as too much, in terms of development.

Sociologically, the point has been made by Goffman (1970); "role conflict" might almost be described as a degree of freedom to choose. Freedom, Goffman sees as existing as it were within the "gaps" of this kind left by society. The incorporation of "masculine" behaviours by girls, then, may be freeing though they may be anxiety or conflict arousing. But further specification is needed, later, as to when these situations apply.

SEX DIFFERENCES

CHAPTER SEVEN

AS ROLE EXPECTATIONS

Take as an example the whole vast problem of "sex differences" as they occur in our own or any society. Some writers emphasise endocrine differences, others the early training of boy and girl, and both are right. But the problem is much larger: it is centred in the question of the masculine role, the feminine role. (Murphy, 1947, 791)

The concept of "role" in sociological theory is complex. For the purpose of this analysis it will be taken without too much theoretical complexity (e.g. Goffman, 1969) to describe those behaviours seen as appropriate for one holding a status. Sex is an ascribed status.¹ Such behaviours are in all cases defined within situations, and involve reciprocity: e.g. the statuses of male-female contain reciprocal expectations as to behaviour, including reciprocal rights and obligations (but see Goffman (1963 and 1969), for some complexities).

Discussions of role-appropriate behaviours, usually in psychology called "sex-typed behaviours" do not always sufficiently distinguish varying degrees of prescription. Roughly, behaviours may be permitted to; encouraged in; expected of; required of; or even obligatory for a specific role. Clearly, more variation will occur in behaviours merely permitted to a status than in those obligatory for it.

Insofar as internalised role-conflict (i.e. psychologically measurable conflict) exists it will also tend to affect behaviours, overt or

¹ c.f. Linton's comment: "The division and ascription of statuses with relation to sex seems to be basic to all societies. All societies prescribe different activities for men and women". cited: Kagan (1964, 137)

covert¹, which are expected or obligatory - not merely permitted. In some cases, indeed, any pressure to conform may not be socially "defined" to any degree, but may exist only because there is a "median" or "typical" role performance from which variation is experienced as a-typical, whether "socially relevant" or not.

Such complexities are, unfortunately, seldom taken into account by psychological analyses of sex role learning.

Adaptability

Brim has already been cited against a simple "trait" concept. "Adaptability" he says, characterises situational variation within roles (1960, 137). Important components of female roles do vary in this manner: a wife may be expected not to dominate her husband, but she may be expected to dominate her children. Slater (1961), Pauls and Smith (1955), Young (1947, 184) note that maternal disciplining and control is as much required as maternal sympathy. Sears, Maccoby and Levin (1957) and even more Ritchie and Ritchie (1970) have demonstrated the importance of these maternal behaviours.

On the other hand, Mussen and Rutherford (1963) imply the psychological relevance of paternal warmth as an antecedent of masculinity in boys. Later discussion will distinguish between expectations for the "masculine" stereotype and the "father" role - again, a distinction seldom made in psychological analysis.

¹ Sigel has noted the uselessness of distinguishing between overt and covert influences from models; for the present purpose, no distinction will be made between overt and covert aspects of sex role appropriate behaviours; later, however, a distinction will be made between public and private behaviours. Feelings may be as role-obligatory as actions.

Role as interaction

The cognitive aspects of role learning are essential, because role is essentially interactive behaviour; it implies the capacity to interpret and predict (Whiting, 1960, Maccoby, 1959) the role of the other, and to incorporate or assimilate/accommodate (Flavell, 1961, unpublished). It involves the ability to "imagine the roles of others and thus in (one's) inner forum of thought...be able to anticipate what they will do" (Young, 1947, 171).

The "assimilation hypothesis" applied to sex role learning (Brim, 1958) assumes that some qualities of the opposite sex will be absorbed by prolonged interaction. This is, of course, also true with "person concepts" (which are not generalised, as role concepts are, to the population of persons who hold the same status or position). (Emmerich, 1961, 60; Slater, 1961).

In these role interactions, the motive to understand the other is intrinsic. To this extent, all role interaction of any sustained sort requires some behaviours which could be labelled "identificatory"; the process is, as it were, osmotic.

Role expectations

In a broad sense, it can be said that "role expectations" are assimilated in early interactive processes particularly, and that sex role "expectations" necessarily involve certain quasi-prescriptive elements if only on two grounds:

first: on cognitive psychological grounds, that early learning proceeds

through phases of ego-centricity and absolutism; it is over these phases that important "role-prescriptive" qualities are assimilated. It can be argued that some tendency to "over-generalise" as to the appropriate qualities will be inevitable.

second: on sociological grounds, that any community "economises" by stereotyping to some extent the expectations for behaviours in specific roles.

As to the first, Murphy has said (1947, 814) that

over and above the factor of role playing, infantile experience exerts a huge influence upon personality development and serves in some degree to shape the mores...

but it is more correct, in the specific case of sex role behaviours, that in the factor of role playing, infantile experience shapes the mores. Much work demonstrates how pervasively and how early sex appropriate behaviours are communicated (e.g. Lois Murphy, 1962, Goldberg and Lewis, 1969).

Consonance with sex role expectations

Assuming, then, that some consensus as to sex-appropriate behaviours tends to exist in a society, and to be pervasively communicated from the earliest period of development, probably in a typical or stereotyped form, then it can be expected that consonance or dissonance with this role will be motivating.

Much theory and research supports this view, particularly the Fels Institute studies (Kagan and Moss, 1962). They conclude on their data that

It seems necessary, however, to acknowledge the relevance of a need - perhaps unique to humans - to act and to believe in ways that are congruent with previously established standards. (op cit, 271: c.f. Appendix One).

Of these, congruence with sex role behaviour is central.

The universe of appropriate behaviours for males and females is delineated early in development, and it is difficult for the child to cross these culturally given boundaries without considerable conflict and tension. (op cit, 270)

Their data clearly demonstrate that

when a response displayed long-term stability it was likely to be congruent with sex-typed behaviour standards.

They cite Hartup and Zook (1960) showing that three year old clearly distinguish sex-appropriate objects.¹ Then, in Kagan and Moss' data, child rearing practices have a different phenomenological meaning for boys and girls:

The impact of the parent and the child's sex roles... appears to be due to certain natural and cultural stereotypes acquired by children largely independent of actual differential child rearing patterns... These role stereotypes in turn determine the 'meaning' of various child-rearing practices to the child.

Support for this generalisation comes from Anderson (1960) who found that there was almost no overlap between the antecedent correlates of adjustment for girls and for boys. Or from Sears, Rau and Alpert (1965) where not one of the 50 child rearing practices associated with development of conscience in boys overlaps an equal number of correlates for girls.

Not surprisingly, then:

When a behaviour is congruent with the traditional definition of sex appropriate behaviour, it is likely to be predictive of phenotypically similar behaviour in adulthood. When it conflicts...the relevant motive

¹ c.f. "Frances, who is three, was dressing up in the doll corner. She donned a dress and hat and exclaimed: "I'm a fancy lady now. Oh golly, no shoes". She hastily added shoes to her attire". Warr, et al., (1962, 76)

is more likely to find behavioural expression in derivative or substitute responses that are socially more acceptable. (Kagan and Moss, *op cit*, 200)

It is not just, as Katkovsky has it, that

Parents translate achievement attitudes into child rearing practices in a manner consistent with cultural stereotypes of roles. (Katkovsky, *et al.*, 1964, 121)

but that the children themselves inevitably do; and that demonstrable conflict (as in the Fels Institute tachistoscope studies cited below) results from experienced role-incongruence.

Congruence and constitutional differences

It was argued in the introductory chapter that biological components in sex differences are, if anything, underestimated. This study recognises these. Waetjen and Grambs (1963) have usefully summarised a wide range of sex differences, but note in passing that for mental retardation, for example

mental retardation in a male is more cause for concern - he won't be able to get a job - than it is for a female.

Hamburg and Lunde (Maccoby, 1967) and Eichorn (Stevenson, 1963) extensively review biological correlates of behaviour. Biller and Borstelman (1967, 255) have some data for males only. In the former, for example, the work of Bell and his collaborators is noted (*op cit*, 18) demonstrating that newborn females show lower thresholds of skin-sensitivity than do males. The sense of smell on other research appears to be not only differentially more acute in females, but also to vary with the menstrual cycle. A range of data tentatively suggests greater innate sensitivity for females in

several sensory modes.¹ On the other hand, associations between testosterone secretion and aggressive behaviour have been demonstrated both in animals and in humans (op cit, 13) and male animals appear in most species to be more active and aggressive. Activity level is known to vary idiosyncratically, with an apparently constitutional basis (Thomas, 1964) but hyperkinesis appears to be differentially higher in boys. (See also Kagan and Moss (1962). Aggression is possibly associated with the XYY chromosome abnormality (Thoday and Parkes, 1968).

But the phenomenological significance of such genetic or constitutionally determined components varies with sex role expectations. Hasburg and Lunde (op cit, 15 et seq) discuss at length the studies undertaken at Johns Hopkins by Money, Hampson and Hampson (see also Money, 1965; Hampson (Beach, 1965). Persons suffering from chromosomal sex abnormality causing some degree of "ambiguity" appear to fit whatever gender role is ascribed, so long as this is early clarified, but do not adapt to any later attempt to change.

Further support for the congruence theory in interaction with biological components comes from the work of Jones and others on maturation at adolescence (Michorn, 1963). Hasburg and Lunde (op cit, 3) cite Jones:

In general it has been shown that boys who are accelerated in physical development at adolescence seem to be advantaged in the peer culture. In adulthood, although physical differences no longer distinguish the extreme maturity groups, some psychological differences still exist.

The relative difficulties of the late-maturing boy and the early-maturing girl in adolescence, then, appear to lie in the incongruence of this constitutionally-linked situation with the sex role expectations of the society.

¹ The ethological argument that such increased sensory discrimination has evolutionary adaptive value seems reasonable. See Morris (1967) or Beach (1965).

It is not intended here to review biological components, nor to deny their importance; but only to note that their effects have to be seen as they emerge against the backdrop of social expectation.

Sex role expectations for girls

"Typically", Kagan has said, "boys are expected to be strong, courageous, assertive and ambitious". (1963, unpublished).¹ This stereotype appears to remain from cultures or sub-cultures in which motor skill and strength are essential, and in which high sex differentiation is typical (Clausen and Williams, in Stevenson, 1963).

The stereotype for girls, then, is one emphasising emotional expressivity, submissiveness, passivity, a lack of aggression, and dependency. Kagan and Moss (1962) demonstrated in tachistoscope studies a perceptual delay (hypothesised to be due to culturally induced conflict) in males' perception of dependency situations, and in females' perception of aggression situations. Taking this with the intercorrelations of measures at earlier age levels, they conclude that:

It is possible that the differential stability of dependency and aggression for males and females is the product of a complex interaction in which the constitutional variables find support in the behavioural roles promoted by the child's culture. (op cit, 119).

It is possible that greater pain sensitivity of girls (Lipsitt and Levy, no date) could in part account for their lowered aggression; but the fact that levels of aggression have been shown to increase both in males and

¹ A preliminary study by Houston (1966) of the New Zealand adult attitudes to what is the "typical N.Z. boy" suggests a very similar pattern - at least enough to support applying this chapter generally to New Zealand.

females to about age 3 but thereafter to decline for females suggests a socialising and selective element; the more so because pro-social aggression is substituted in females. (Sears, in Beach, 1965; Sears, Rau and Alpert, 1965).

It is possible too, that the masculine stereotype or sex role expectation is more powerful than that for the female. Lynn (1962: to be discussed below) derives from the "developmental shift" theory the idea that boys are strongly influenced by the masculine stereotype, which is narrower and firmer than that for girls, because it must be insisted that boys give up "cissy" behaviour.

A greater role flexibility for girls was noted by Sutton-Smith and Rosenberg (1965, discussed above). Certainly for boys, comparison of Hetherington's data (1965) with other IT scale studies shows little absolute score difference between father-present and father-absent boys (Kohlberg, in Maccoby, 1967), which suggests a very effectively operating stereotype.¹ But stereotypes may have different effects at different ages. Lynn may be correct in arguing that pressure for the boy to be "anti-female" (Emmerich, 1961) is high in the period after the shift (the "Oedipal" phase in Freud); but other evidence suggests strongly an equally firm pressure on girls to conform after 10 or from pre-puberty on (Sutton-Smith and Rosenberg, 1965). The effect is exemplified by Coleman's (1961) study particularly; the girl in adolescence, he suggests

is pushed toward doing well at school by her allegiance to parents and teachers, but if she wants dates and popularity she is constrained from working to her scholastic capacity. Consequently, many of the brightest girls manage to hide their intelligence... (op cit, 255)

¹ It also suggests that powerful sources of the stereotype exist in the peer group - see Chapter 12 below.

This behaviour is clearly reinforced also by the social expectation that girls are more interested in persons and in feelings. Gollin (1958) and Goodenough (1957) have discussed this manifestation of the Parsonian "expressive" behaviour. Goodenough concludes that

Parents seem to carry on differential reinforcement in the ongoing stream of behaviour by a consistent pattern of rewards and punishments of which they are not necessarily aware... Conclusions suggest that parents' expectations of sex typed differences in their children are such as to promote the more personal orientation of the female to the environment, and the more objective, less personal orientation of the male.¹

Vinacke and Gullickson (1964) however, demonstrate that this female orientation toward caring more (in a group task oriented study) about the expressive coherence of the group than the set task is a developmental one; in middle childhood, boys and girls are not significantly different; boys later develop toward a task-achievement orientation.

Nevertheless, the implication of these data taken with Coleman's is that, following puberty, the sex role expectation for females more heavily stresses expressive concern for others; but that this interacts with the growing requirement for females in reciprocal role interaction situations with males to be relatively passive, submissive, dependent and emotional.

Who are the "significant others"

If individuals are

motivated to behave in a way that is congruent with a hypothetical ego ideal or idealised model that

¹ That parents respond acutely to the sex of their children at an early stage is suggested by the incidental comment of Goldberg and Lewis (1969). They noted how offended mothers of one year olds, indeterminately dressed in winter garb, were on all occasions when the experimentors mistook the sex of their children.

embodies the essential qualities of masculinity and femininity (Kagan and Moss, op cit, 271)

then what models do they take? Goodenough (above) suggests that parents affect children in many ways.

Parents of teenage girls demonstrably affect their daughters' aspirations and dependency attitudes over a long period. Vellecoop (1968) showed that teenage Westport girls did not differ significantly from boys in level of aspiration; but parents expected them to be less likely to leave the town, and the girls expected themselves to be more likely to return to it.

But parents, as communicators of social expectations, appear to affect boys and girls in different ways: it could be summed briefly by proposing that boys are influenced first by mother and then by father plus a social stereotype; girls by mother and then by both parents. Girls continue to be more open to influence from models of either sex than are boys (Bandura, Ross and Ross, 1961; 1963, Epstein and Liverant, 1963). Moreover Wallach and Caron (1959) suggest that parents communicate situationally specific expectations permitting boys more independent and aggressive behaviour outside the home, and even encouraging it, while they discourage these behaviours in girls (op cit, 59).

The existence of such parental differences in treatment is not denied, particularly as to the acceptance of dependency behaviour in girls as against boys. Less popular boys in pre-schools are significantly more dependent; no association is found for girls (McCandless, Bilous and Bennett, 1961, 516); they conclude that dependency is "moderately acceptable" for girls. Goldberg and Lewis (1969) showed that a pattern of more dependent, less

exploratory behaviour for girls exists at one year (1969, 30).¹

The perception of the parent

However, the import of Ruth Hartley's series of studies on the reduced sex role differential for modern parents suggests that a phenomenological response in children exists early.

On Parsons' theory, a high degree of sex role differentiation between parents, on the instrumental (male)-expressive (female) dichotomy, ought to exist for proper psychological growth. On this theory, weaker identification should be the outcome of lowered differentiation - as could be expected to exist in families with working wives. But work e.g. by Emmerich, Hartley and Kagan, across a broad field of studies in the perception of the parent, does not suggest this to happen. Nor do studies of socio-economic status, as a variable, where a lower sex role differential exists in middle class groups.

Hartley (1959a,b; 1962, 1964) seems to show that boys and girls continue to perceive the father and mother roles much according to the social stereotype. Emmerich (1961) showed that children aged 7-11 perceive the male role in terms of power; but that girls

reported the father to be boss significantly less frequently than boys, and reported that both parents were equal in power significantly more frequently...

But power, which Emmerich (1959, 1961) takes to be the basic discriminator in children's perceptions of parents, is demonstrably linked to the

¹ The authors propose that parents "reinforce behaviours they regard as sex appropriate". The pre-existence of these behaviours is assumed. Other data suggests that a differential constitutional difference toward more active/exploratory behaviour in boys may exist.

child's level of cognitive operation. In an important series of studies, Kagan and his collaborators have shown that, in perceiving parents as much as perceiving Piagetian glasses of water, children's perceptions are influenced by what they think they see. In Kagan, Hosken, Watson, (1961) it is clear that boys and girls perceived fathers to be stronger, larger, more dirty, more angular, and more dangerous than mothers: they conclude that

some of the labels that are implicitly linked with the concepts 'male' and 'female' in the adult psyche have been acquired by the time the child is 5 or 6 years old. (1961, 633).

This greater perceived power of the father, which Emmerich showed, exists although, as Bronson, Livson and Katten demonstrated:

In actual behaviour the mother is significantly more often a strong source of authority than the father. (1958, 152)

a conclusion strongly confirmed for New Zealand by the whole trend of Ritchie and Ritchie's study (1970), and demonstrated by Hartley's study of low role differential "working wife" families. While in the study of Kagan, et al. (cited) girls and boys perceive themselves to have the same attributes as the same sex parent, this does no more than confirm Kohlberg's theory (to be discussed) that gender role perception of himself, and of others exists for the child by this stage - and that the child has begun to perceive that he belongs to the same class as the same-sex parent.¹

There are, however, studies which suggest strongly that girls perceive sex-appropriate behaviours earlier than boys do (Emmerich, 1961; Rosenberg and Sutton-Smith, 1964, Kohlberg, 1967).

¹ See the Hartup and Zeok study (1960) cited above.

Complexities

Many complexities exist, however, and some must be noted.

First, as Kagan and Moss say, the very existence of perceived sex role expectations (demonstrably operating early in development) makes the analysis of "psychological" variables dubious. When a boy is aggressive he

may not necessarily reflect hostile needs but (it) may be the child's way of announcing to the social environment that "I as a boy, I am capable of executing these behaviours that help define my role". Thus a boy may employ a shove or a verbal taunt as a way of greeting a peer - a hello, if you wish. This use of aggression in girls is unlikely. (Kagan and Moss, 274).
(Authors' emphasis)

An implication of this is that the antecedents of aggressive or dependency behaviour, and the correlates, may be quite distinct: aggression in girls and dependency in boys is socially a-typical and therefore may be evidence of psychological conflict and social deviance. This is likely to become ever truer with age development. But the reverse case of aggression in boys and dependency in girls may be "role appropriate" in meaning. The point at which such behaviours become psychologically a-typical is therefore dependent on social expectations. But it is clear if we accept Brin's "assimilation hypothesis" that such behaviours will vary also according to the ordinal position and sex of sibling (see Chapter Eleven below). The range of experiences which communicate sex expectations will cause some variation.

Perceived congruence

If it is assumed that the male stereotype is narrower or "tighter" than

the female for boys and adult males (for which view there is reasonable support) then studies supporting an identificatory basis for sex-typed behaviours may prove nothing except that boys and their fathers both conform to the sex role expectation of the society. Studies showing a greater relationship between boy/father than girl/mother, then, should be treated with reservation. Marwell (1964) implies this problem, as does Gage (1955). But Helper (1956) went further and showed the masculinity scores of boys not to differ significantly from those of a random group of adult males (cited, Kohlberg, 1967), a result which lends the view further support.

However, this explanation may not be true for girls; or may be true rather later, i.e. at that point where (it is suggested) sex role expectations press more heavily on girls, from pre-puberty on. In this case, conclusions drawn from projective, Q-sort or other perceived-similarity mother/daughter studies in adolescence could be contaminated with this social variable, and no comparison as between girls and boys at this stage would be strictly permissible.

The diametric

The final caveat is the most significant. It is that describing "male" and "female" or "masculine" and "feminine" as discrete entities, as polar opposites, is extremely inaccurate as a psychological distinction. That popular parlance does so, that such stereotypes exist is not disputed. Indeed, the prevalence in sophisticated psychological analyses, even in test instruments, of a simple masculine-feminine polarity suggests the force of the social stereotype.

Slater (1961) has strongly criticised Parsons for assuming a simple

polarity of instrumental/expressive behaviours.¹ He argues that, far from marked differentiation facilitating the child's identification with the same sex parent, it will impede it. Marked role differentiation, he argues is dysfunctional for the child. Mussen and Rutherford (1963) clearly supports this view; father's nurturance (an expressive behaviour) correlates with sex typing in both boys and girls. More particularly a study by Beier and Ratzeburg (1953) showed that males identified preferentially with whichever parent was least extreme in the performance of his or her sex role. On grounds of sex role acceptance it can be argued that the father demonstrating extreme dominance is unlikely to make the girl accept the female role, however. This point will be discussed later in connection with Mussen and Rutherford, 1963.

Those test instruments (e.g. the Games Preference Test) which allow simultaneous masculinity and femininity scores for each subject do not support the simple polarity view, which would imply that any individual's scores on the separate scales would vary inversely. To the contrary: they vary independently. Houston's data (1968) and the Sutton-Smith/Rosenberg series show many instances where children tend to be low on both scales, high on both scales, or where M/F scores vary independently without association with anxiety scores. Moreover, important implications are to be drawn from the fact (especially in Houston, 1968, and Sutton-Smith and Rosenberg, 1965) that relative scores on the M/F diametric vary from one age level to

¹ "If the boy is to identify with the father in the sense of sex role categorisation there must be a discrimination in role terms between the parents". Parsons and Bales (1955, 80). Parsons like Freud is less adequate and less specific as to the need of girls, because he assumes the boy's developmental sex role shift to require special preconditions for satisfactory resolution.

another, from one sibling or ordinal-position group to another, and as combined functions of these.¹

In part the problem exists because the instruments themselves, which have test validity,² do no more than reflect themselves the existence of accepted stereotypes in those children they measure. But they do then demonstrate that both males and females in our society have qualities also measured objectively to be associated with the opposite sex.

In fact, on every personality dimension, role demands (rather than role stereotypes) require variation. As a father, a man is required to be expressive; an older brother is required to be gentle with a younger sibling. A girl (socialised toward achievement) is expected in this regard to act assertively; as a mother she will be expected very strongly to manage with independence, and to control her children. And the ability (it has been earlier argued) to carry out role interaction with people of the opposite sex assumes not only reciprocity (e.g. dominant-submissive acceptance) but some degree of empathy.

Public and private behaviours

It is suggested that - in addition to the other situational variants - the relevance of the distinction between public and private behaviours (e.g. Goffman, 1963) is not sufficiently noted in psychological analyses.

¹ Sutton-Smith and Rosenberg (1965,69) again sum these up against the pattern of social expectations by saying that "with age the increasing reinforcing value of masculine traits in the general culture decreases the sex role conflict for those ordinal positions which bring the subjects into contact with male siblings".

² The Games Preference scale consists of items found to correlate with the sex of the children and to discriminate sex, that is. Other instruments have validity of like sort.

Sex role expectations affect both areas; sex role stereotypes more usually concern public behaviours only. The father who is expected to be pleasant to his children in private may not demonstrate it in public; may be unwilling to wheel the pram, for example, because it infringes the stereotype for public behaviour. The existence of sex-typed behaviours and the importance of congruence (both overt and covert) is clearly shown by Kagan and Moss most of all in the tachistoscope data, but more precise analysis of what is meant by "sex-typing" is required in other fields of behaviour. To some extent, most M/F tests are themselves a "public behaviour" and may measure only what the subjects are willing publicly to express - a reservation Houston clearly has about the Brown I T. test. (Houston, 1968).

SEX DIFFERENCES:

CHAPTER EIGHT

SOME DATA

A reservation is needed at the outset. Witkin, et al. (1962,221) summing studies of their own, say:

The sex differences that have been observed are clear-cut and persuasive, but they are relatively slight compared with the range of individual differences within each sex.

As to antecedents and correlates, very clear and marked differences between boys and girls occur, but as to the measurable differences on various personality factor scales, it is wise to note Witkin's caveat.

The neglect of sex differences

Tyler (1956, 247) said that "no topic in psychology is of more perennial interest than sex differences". But until the last decade, in fact, the topic has been relatively neglected in research. A survey of standard texts over the 1945/1960 period discloses the small number of index references: e.g. in view of the cognitive areas to be discussed in this chapter, it now seems extraordinary that in a book on "Children's Thinking" Russell (1956) has no index references to the topic, although some items were located in the text - surely a symptom of the significance given to the subject.

But the problem has been noted from time to time. Sarason (1955) said that

...sex differences are pervasive, and yet the problem of degree of pervasiveness has not been critically examined despite its implications for

theory, methodology, and the direction of future research.

Kagan and Moss (1962, 275-6) go further:

One tentative conclusion is suggested. It may be unwise to pool data for males and females without first examining the data for sex differences. This means more than merely computing means and standard deviations, for many of our variables showed no significant differences in these two parameters but yielded different patterns of intercorrelations... It is likely that many studies in the literature or in a file drawer would have led the investigator to draw different conclusions if separate analyses had been made for males and females.

Anderson (1960) illustrated the same point; but there is also a case which quite directly supports the above comment. Bayley and Schaeffer (cited Maccoby, 1967, 38) reworking the earlier well known study by Skodak and Skeels of adopted children, found their earlier conclusion (a positive correlation between intelligence of child and adoptive mother) to hold only for boys: in girls there is a positive correlation with the intelligence of the natural mother.¹

Clauseu and Williams (Stevenson, 1963) say there is little

systematic data on the nature of the differing influences upon, and definitions of behaviour by sex (op cit, 85)

More sophisticated research techniques, and a more direct attack on the problem since then, however, has begun to crack the nut. A landmark is Maccoby's compilation (Maccoby, 1967). Her own chapter, and the extensive summary and tabulations of research data also included in the book,

¹ Maccoby offers the tentative proposal that girls may be more influenced by genetic and boys by environmental factors. If this were so, it would be a very important finding indeed. Nash (1965) cites Beach (1961) as having made the same proposal in effect.

are drawn on heavily in this chapter; some more recent and relevant data is included. However, the direction of this chapter is, again, to focus on girls.

Differences: (a) developmental

Sex differences in general developmental level have long been known to favour girls (Ilg and Ames, 1964, 25 et seq); they may relate to the greater genetic/biological susceptibility of the male. In verbal ability, girls are in general more advanced, as they are in school achievement through to adolescence. Physical development is, of course, somewhat more advanced in girls especially as to the onset of puberty. Such broad developmental differences, however, are of an order in general much less than within-sex variations.

Differences: (b) personality

Girls and women are lower in most studies of aggression, other than pro-social aggression; higher on dependency; higher on measures of social reinforcement and respond to both sex models: higher on conformity/suggestibility (Mischel, in Maccoby, 1967, 71); higher on anxiety scores; higher on emotionality or emotional expressiveness and introversion¹ (Cattell (1965). Freud's generalisation as to the "nature of women" (see Chapter Three above) is not so inaccurate; though again, within-sex variations may be greater than the difference between the sex-group means.

Differences: (c) moral development

In spite of Freudian theory, and much subsequent research, there

¹ Vroegh (1968) showed high F. girls to be more introverted than low F girls.

seems no reason to depart from Kohlberg's conclusion (1963) that there are no significant differences between the sexes on the usually operationalised measures of moral behaviour;¹ any difference is of rationale: that girls conform more to authority; boys tend to conform more to rules. This appears no more than the frequently found difference (see Goodenough, 1967) as to the concern of girls for persons rather than things; or in Parsons' terms, the tendency of the girl to act in particularistic-expressive modes as against the boy's universalistic-instrumental modes. The difference is supported by the data, as it applies to moral development.

Differences: (d) in intellectual functioning

This chapter will concentrate upon the nature, and implications, of ascertainable differences in intellectual functioning and its correlates. Here the data (as opposed to the theory) present a relatively clear picture.

Standard tests of intelligence are usually so standardised as to exclude sex differences; the lack of differences on these therefore proves nothing. It is often asserted that males scores show greater deviation either side of the mean; the case is not clear.² There is also the possibility that long-term changes in test scores show greater increase for men into adolescence and adulthood; but there is some inconsistency in the data (Maccoby, 26). Coleman's findings about social pressures on adolescent girls (Chapter Seven) may apply.

¹ Resistance to temptation: guilt after transgression; comprehension of moral concepts. Kohlberg's reviews in Stevenson (1963) and Hoffman and Hoffman (1964) are most extensive.

² Vernon P. Intelligence and Attainment Tests 1960, p.171. Univ. London Press. Excluding genetically-influenced defect at one end, and genius with social opportunity at the other, the case for greater male variation is dubious - at least on present data.

Cognitive style

A broad range of behaviours is here involved, with a good deal of semantic confusion; discussion on the latter in Kessen and Kuhlman (1962), in Maccoby (1967) or in Harper, et al. (1964) does nothing much to clarify the overlaps and variations. The following section is therefore secure in data but tentative in terminology.

Gardner, et al. (1959), Gardner (1953) and Mercado, et al. (1963) put forward a cognitive-defence¹ theory; the latter in an empirical comparison of Mexican and American children showed that the difference in ability to think abstractly was greater between Mexican than between American boys and girls; they hypothesise that this is linked to greater sex differentials in Mexico. There may be doubts about operationalising "abstract/concrete" as a simple single dimension (other such studies, not comparative, show no consistent differences or conflicting results) but the Mercado data calls for some explanation.

Field dependence, independence. Witkin, et al. (1959; 1962) have done and initiated much work in this field. Clear sex differences are demonstrated. The "tilting room", Rod and Frame and Embedded Figures Tests, with almost complete unanimity show girls to be, as it were, more affected by the totality of the situation. However, a significant contribution is that of Bieri (1960). Here, field independence was demonstrated to be associated not with the sex of S, but with the "parental identification".

¹ Deriving from Rapaport. The motivational assumptions are neo-Freudian and somewhat antithetical to the theoretical assumptions of the present study.

² Since it was measured by "perceived similarity to one's parent" Gage's strictures cited above apply, if taken as "identification". The data stand as an approximation to a measure of M/F diametric, however.

Analytic thinking and variant formulations

On Bieri's data within-sex variation, then, demonstrably has other personality correlates of some relevance. Perceived "sex role" attitudes, it seems, show some degree of sex typing in the same direction as the between-sex variation.

Kagan has termed something like this cognitive difference "analytic ability"¹ but this (a) does not appear early - perhaps till school years
 (b) may mean either "field-independence" in Witkin's sense, or the "modes of grouping diverse arrays of objects" (Maccoby, 1967, 27) where only those who group on the basis of some selected common element appear to be "field independent".

Discussion in the Kessen and Kuhlman symposium (1962) considered possible relationships between field-dependence, Piagetian "centration" (which Witkin recognises himself) and the question of what is "analysis" and "differentiation". The latter term is used also in Mercado (1963, 199). Witkin (Wright and Kagan, 1963, 120) discusses but does not solve the issue, since he uses "analytic" somewhat differently (see also Witkin, 1962, 201). He does, however, regard this as a language-linked development (op cit, 200), and without much evidence says that:

...a disproportionate investment in verbal skills is particularly apt to occur among people who have a global field approach and who are less differentiated (1962, 220).

Analysis and concept formation

The implication is that differences in the process of concept formation

¹ "Analytic-functional" is Kagan's distinction. Girls tend to functional grouping. Wright, et al. (1963). Annual Review Psych. (1964, 223).

are somewhat related: a relation to reading ability is cited also. Braun (1963) suggests that the reading factor is concept-formation (which Witkin links to the analytic process) but says that this is independent of intelligence "as presently measured" (op cit, 682).

Freyberg (1963) does not support the notion that concept formation, in the Piagetian sense, is independent of intelligence: to the contrary. However, the data as to sex differences in "analytic" as opposed to "field-independent" cognitive styles vary. Case and Collinson (1962) found no sex differences on a Piagetian study, such as might be expected if it were permissible to equate centration with field-dependence. Yet this area deserves clarification. Hilton (1957) in a close parallel to Bieri showed that

females who perform well on problems requiring analysis and complex reasoning tend to reject a traditional feminine identification. Males with high performance scores, on the other hand, do not reject a masculine identification.

Gardner, et al. (1959, 84) link centration with "failure to scan or analyse the field" while Lee, Kagan and Rabson¹ talk of "grouping the stimuli on the basis of an element that is a differentiated part within the total pattern". The direction of sex differences is not likely to be resolved until the terminology is resolved. A way out is suggested by Dienes (1959)² who found in a study of concept formation that

girls approach tasks more from the point of view of the construction of the whole; boys more from the point of view of the analysis of the parts...

¹ Child Develop Abst. (1963, 37; 185) Abstract only.

² Dienes suggests interesting links with dogmatism and with extraversion which cannot be discussed here. Dienes is not cited in the summary of cognitive studies given in Maccoby (1967).

and suggests usefully that

a predominantly analytical task requires a judgement to be made at each point of the analysis whereas a predominantly constructive task only requires a judgement to be made where it becomes uncertain whether the performance of the task is proceeding with success. (op cit).

Unfortunately, if this is a feedback "response to failure" or "task persistence" element, studies reviewed in Maccoby (1967, 346) show no consistent pattern. Zuzich (1964, not reviewed in Maccoby) with pre-school children's problem solving showed that while most children attempted to solve it alone, those boys who failed responded dependently, destructively and emotionally; girls tended to seek information. Some early conflict over dependency may be implied; and if so much more age as well as sex-specific data is required.

Such possible links between "levelling-sharpening", "differentiation"¹ "analysis", "centration", "field-dependence-independence" and concept formation then, are in sum confused; but clear sex differences appear to favour boys in some types of analytic thinking.²

A further possible line requiring clarification is the content of the "concept": and this is critical in viewing sex role learning as concept development. Gollin (1958) seems to suggest that girls are superior in inference with social judgements (c.f. Kagan, Moss and Sigel, 1963) which may be linked to Davis' old finding that boys ask more questions about causal relationships and girls about social relationships (Russell, 1956, 235).

¹ Piaget implies that ego-centricity is lack of differentiation. (1962, 73-74)

² Riesman (1961, xvi, footnote) cites work by Graham showing a correlation between other-direction and field-dependence. Though no sex difference is cited, it could be speculated that other-direction is something like the "feminine" concern for persons.

Conservatism: (a) in judgement and risk taking

Girls appear consistently to favour narrower¹ categorising; Wallach and Caron (1959) is the most unarguable study. Harlow (cited Freyberg, 1963, 43) notes that

Breadth of concept is obtained from training in a wide variety of situations. Breadth rather than intensity of training appears to be the key to efficient concept formation.

The link with general concept formation, then, is implied. Kass (1964) found clear differences at ages 6-10 favouring boys in risk taking. Kogan and Wallach (1967, 166-167) discuss this against another study by Slovic, and suggest the possibility that conformity to sex-typed behaviour ("males as bold and females as cautious") may be higher in childhood and may then decline. Other studies may support this in "game strategy" situations, but do not support it with narrow categorisation modes - demonstrably shown by adult as well as young females. Perhaps this mode may be linked to Kohlberg's "adherence to authority" proposal?

Conservatism: (b) affective judgements

In the overlapping cognitive/affective field implied by Rokeach's Dogmatism scale, no significant sex differences have been found consistently.² On other measures of conservatism, the same is probably so (Boshier, unpublished). Wilson and Patterson (1968) found, though, that

females score consistently higher than males (on the C-Scale), the difference increasing

¹ This terminology is used from Pettigrew (1958) who exactly confirms Wallach and Caron, but in clearer words.

² Anderson (1962) however did show that above average intelligent women were significantly more dogmatic than above average men. But on his own data this may be a function of anxiety, as Rokeach might suggest.

slightly as a function of age (1968, 268).

The differences, however, are small and though they may be of theoretical interest are not consistent with some other data. The correlates of within-sex variation, however, may reveal some consistencies if explored.

Creativity and curiosity

While some data suggest that early activity/curiosity levels may be linked, and there is some consistency as to a pattern which favours boys continuing (Maccoby, 344), on "creativity" the pattern is less sure. Maccoby (1967, 27) says that

If the emphasis is on the ability to break set or restructure a problem there is a tendency for boys or men to be superior, particularly if the problem involves a large perceptual component. Breaking set is involved in the tasks used to measure "analytic ability".

Creativity-as-divergence may favour girls; but this may be so chiefly for verbally presented problems (ibid). However, Vernon (1964, 167) cites Mackintosh's work to show that people rated as creative scores on the Strong Interest Blank indicate

a strong streak of femininity. Creatives show a much greater willingness to accept and express their feelings than is usual in the American male.¹

Other specific intellectual abilities

Better known, and better documented than the differences so far discussed are differences in:

¹ This is yet another definition of "femininity"; but it was an element specifically noted as more typical of women (see p. above).

- Spatial ability: from school age, specific ability with spatial tasks favours boys;
- Verbal ability: until the beginning of school girls are more advanced in most measures of verbal ability; the difference declines and disappears, however, except in grammar, spelling and word fluency;
- Number ability: differences appear not to show markedly early, i.e. in pre-school years. Boys probably are favoured in arithmetical reasoning during school years, and are clearly so by adolescence and early adulthood.

Correlates and disparities in intellectual functioning

It has been noted that while levels of functioning may be identical, antecedent or personality correlates may not overlap for boys and girls. Much evidence points to this. In the Fels study, there is little overlap: e.g. early maternal protection predicts intellectual functioning in boys; maternal demand in girls (Kagan and Moss, 1962; Kagan and Freeman, 1963). The latter showed that while maternal justification in discipline related to intellectual functioning later for both sexes, maternal criticism was positively correlated only for girls.

Correlations with personality variables

Work by Sigel (cited Maccoby, 29) and Kagan suggests that "analytic" style is positively correlated with emotional control for boys but negatively for girls; while Sutton-Smith, et al. (cited, ibid) showed that the use of a winning game strategy found to correlate with intelligence

was characteristic of girls who were aggressive, dominant and hyperactive, while the boys who adopted a winning strategy...were not specially

active and showed a preference for 'conceptual recreations'.¹

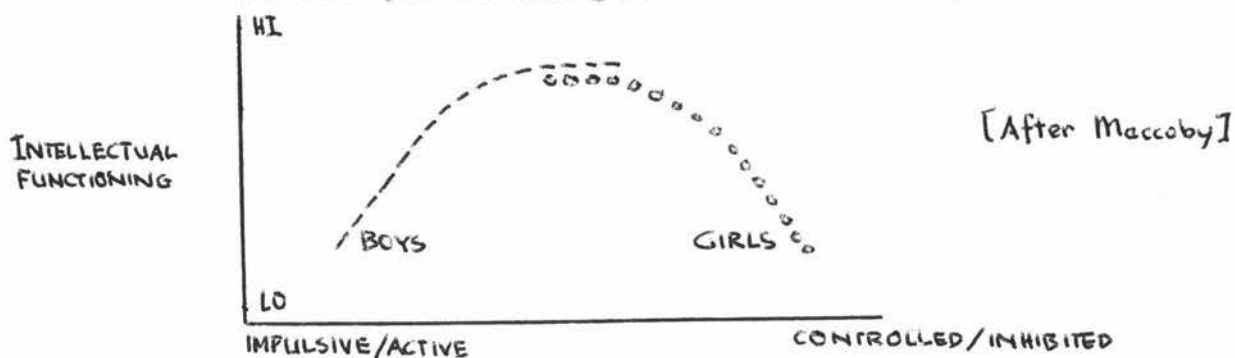
Murphy (1962) shows that impulse-control patterns are related to "coping" for boys; not for girls. Kagan and Moss show hyperkinesis to be negatively predictive of cognitive functioning for boys, but, if anything positively for girls. On several studies, anxiety appears positively correlated with aptitude for boys, but negatively for girls (Maccoby, 1967, 30). Aggressiveness

appears to be more of an inhibitor (she says) or less of a facilitator, for intellectual development among boys than girls (ibid, 31).

Maccoby's synthesis

After considering these and other data, Maccoby tentatively proposes a synthesis:

Let us assume that there is a single personality dimension running from passive and inhibited to bold, impulsive and hyperactive... A tentative hypothesis might be that there is a curvilinear relationship between this dimension and intellectual performance so that the very inhibited and the very bold will perform less well, while those who occupy the intermediate positions on the inhibited-impulsiveness dimension will perform optimally... There is reason to believe that boys are more active, more aggressive and less passive than girls



¹ This somewhat conflicts with Milton's findings (1957) but seems more consistent with other data as it affects boys. Milton confirms the case for girls.

If the hypothesis holds, it would follow that for optimum intellectual performance most girls need to become less passive and inhibited, while most boys need to become less impulsive (ibid, 46-47).

Maccoby specifically notes that, whether the dimensions are innate or learned, the hypothesis holds. But explanations in terms of antecedent family learning situations have been offered for these personality dimensions. Wallach and Caron explain their finding of "narrow categorisation"¹ or "conceptual conservatism" on the guess that girls are not rewarded for independent behaviours, with

drastic consequences to girls for free expression, rendering them more restrained and cautious, as well as more dependent on external standards (op cit, 1959)

though they admit that:

we are hypothesising that there has been a generalisation of fear of independence from the field of action to the field of cognition. (ibid).

Vernon (1964) makes similar guesses as to the grounds for sex differences. Maccoby had earlier (Annual Review of Psychology, 1964, 224) surmised that cognitive style could arise from interpersonal relationships of this sort. On the specific and central point of "impulse control" Tasch (1962) has stressed the parental role in helping the child internalise impulse control; Bronfenbrenner (1961, and elsewhere) has noted often that girls "suffer from too much, and boys from too little taming". The relevance may be seen in a parallel to a Piagetian formulation by Luria (1961, 59, 60):

¹ Which is - or is not - a cognitive style rather than a cognitive level? Authors in this field frequently move to assuming an equation of cognitive style with intelligence or general concept formation.

the regulatory function is steadily transferred from the impulsive side of speech to the analytic system of elective significative connections which are produced by speech.

The question again (in a different context) is whether speech is, as it were, a paradigm for socialisation? Do girls suffer from a degree of "impulse control" which is dysfunctional and generalised? Since speech is essentially socialised behaviour, is Witkin's "over-investment in verbal skills" an equivalent of "the over-socialised girl", of whom Bronfenbrenner talks? Is early speech a form of premature perceptual closure, a concentration on the signifier-label attached to a narrow experiential range? The possibilities are intriguing.

Anxiety

Since anxiety appears to vary independently of the dimension above, but also shows a curvilinear relationship with performance, Maccoby guesses that a similar relationship for the difference between boys and girls may exist.

Evaluation

Kohlberg, it will be later seen, has a counter to Maccoby's argument that sex differences in cognition are consequents rather than antecedents. But there is not in fact any substantial disagreement on the nature of the differences, nor on their correlates. Whether for reasons of innate predisposition, or social learning or (more certainly) as an interaction between the two, substantial differences in the phenomenological context of cognitive operation for boys and girls exist. However, while it is

true as Koch says that

females tend to be more submissive, conforming, gentler, and less aggressive than males. These sex differences are due to both cultural and biological factors (1955, 28),

and that links between such factors and cognitive operation can be plausibly surmised, it is probable that more studies in comparative fields are required. Blurring of sex differentials in advanced societies appears (Mercado, et al., op cit) to be related to differences in cognitive functioning. Such differences (though not their correlates) have been demonstrated elsewhere - e.g. for the Phillipines (Annual Review of Psychol. 1961, 10). Differences in cognitive operation or style, if linked to sex typed behaviours or sex role expectations, should be demonstrated.

Moreover, incidental support for at least part of the Bayley/Schaeffer re-analysis of Skodak and Skeels (cited above) comes from Weinstein and Geisel (1960, 727) showing differential effects on boys and girls in adoptive families; boys appeared to be affected by variables in the behaviour of the adoptive mother, but not girls. Further study here may elucidate some relative weightings of biological/learning components.

Class as a variable

More precisely operationalised study, controlling for social class, also appears highly necessary. Distinctions in the same direction as are made above between the child rearing antecedents of boys and of girls are frequently made of differences in socio-economic status. Here, however, it is also sometimes hypothesized that age-specific expectations and limitations are imposed. Comparison of correlations between the

cognitive operation and child-rearing antecedents of working class/middle class boys, and similar class-controlled comparisons for girls, might prove helpful. But if it is true that middle-class children are less restricted early in childhood but more in adolescence (while working class children invert the pattern) age-specific data would be required.

Discussion of the antecedents of differences in cognitive style clearly tends to overlap substantially into the whole field of environmental or experiential determinants of intelligence generally (Hunt, 1962). It becomes necessary to clarify whether different modes, of intelligence, different specific abilities, or differential levels of ability in general intellectual functioning are involved. Because explanations of the kind have considered analytic thinking or broad categorisation as though these were synonyms for intellectual performance generally, they explain too much and too little. Maccoby's hypothesis is, however, plausible (if tentative) even at the most general level. It is difficult to see any other hypothesis accounting for so wide a range of data.

In terms of understanding the antecedents (rather than only the correlates) of cognitive operation differences, it is doubtful whether present hypotheses may be more than a guide to research. But they may also guide further more specific hypotheses; and discussion in this study now moves to look at two more general theories about sex role learning in girls, in the light of the data (and some of the surmises) reviewed above.

PART THREE

TWO THEORIES OF SEX ROLE LEARNING

Houston (1968, 79) has rightly noted the curious neglect of Lynn's empirical and theoretical work by recent texts. Lynn's theory to be here considered (Lynn, 1962) is not even listed by Kohlberg, whose formulation is the concern of the next chapter, nor by Maccoby (1967) in proposing explanations for the cognitive differences considered in Chapter Eight - although Lynn's theory discusses precisely the same data. However, Lynn's is a major attempt to synthesise, taking specific account of cognitive style and other differential research; for that reason it merits close analysis.

The elements

Lynn uses, but does not cite, Slater's distinction (1961) between positional and personal identification; he is concerned with sex role learning as identification.¹ Lynn had earlier distinguished (as Sears has) sex role identification from sex role preference, and sex role adoption.² He takes as basic the "developmental-shift" position: i.e. that

both male and female infants...learn to identify with the mother. Boys but not girls, must shift from this initial identification with the mother to masculine identification. The girl has the same-sex parental model...with her much more than the boy... Much incidental learning takes place

¹ Sears, Maccoby and Levin (1957) and McCandless (1961) accept this as basic: the former holds sex typing to be the most "pervasive"; the latter "the clearest of the various meanings" of identification (op cit, 339).

² He does not (in 1962) consider these differences, which causes some of the defects later discussed.

from the girl's contact with her mother which she can apply directly in her life. (op cit, 556)

On the basis of his own previous work on father-absent families (Lynn and Sawrey, 1959) and on work by Sherriffs and Jarrett (cited, ibid) he concludes that men and women share the same stereotypes about the two sexes. Consequently, he had previously proposed (Lynn, 1959) that

Consequently males tend to identify with a cultural stereotype of the masculine role, whereas females tend to identify with aspects of their own mother's role specifically.

The differing role of the parents in the development of children

Lynn suggests that the father, largely absent at work, as a model for the boy

may be thought of as analagous to a map showing the major outlines but lacking most details... He may (also) reinforce the boy's masculine striving and stimulate his drive to achieve masculine role identification.

The distinction, then, is between "masculine-role" identification for boys, and "mother-identification" for girls. The necessity to make such distinctions was noted above (Chapter Seven).

Lynn's argument here is directly derived from Parsons (though he does not cite him), and is best given in Parsons' own words: for a girl

...identification, in the sense that the adult becomes a role model, is the normal result. For a girl, this is normal and natural, not only because she belongs to the same sex as the mother, but because the functions of housewife and mother are immediately before her eyes and are tangible and relatively easy for a child to understand. Almost as soon as she is physically able, the girl begins a direct apprenticeship in the adult feminine role.

It is notable that girl's play consists in cooking, sewing, playing with dolls and so on, activities which are a direct mimicry of their mothers! But the boy does not have his father immediately available - especially in the middle classes but perhaps increasingly in the lower - the things which a father does such as working in an office or even running a complicated machine tool, are intangible and difficult for a child to understand.

(Parsons: in Anshen, 256)

Parsons' concern here is for "emotional maturing". Lynn is concerned with the postulated cognitive consequents. For studies documenting this pattern, see especially Hartley (1959).

The nature of the learning situation which results

Lynn then postulates that the contexts of role learning for boys and girls are wholly different, and may be contrasted using Woodworth and Schlosberg's distinction between the problem and the lesson. A girl is not given a major problem in learning the sex role; she does not have to shift models, and her model is consistently present; "in the context of an intimate personal relationship with the mother" she can imitate and covertly practice the role.¹ The girl, then, has "lessons" in the role.

Thus

abstracting principles defining mother identification is not considered a concern for girls. (ibid, 558)

On the other hand

when the boy begins to be aware that he does not belong in the same-sex-category as the mother he must then find the proper same-sex identification goal.

He begins to reach this stage (as has been noted) at about three.

¹ Lynn bases this formulation on Maccoby (1959) rather than Whiting (1960) with whom he appears in terminology to have more in common. He does not cite Whiting.

Hartley is cited as supporting the notion that for boys, behaviour is negatively¹ defined as something he should not do (Lynn does not cite Kasserich, Bronfenbrenner and others who have made the same point).

From these largely negative admonitions often made by women and often without the benefit of the presence of a male model during most of his waking hours, the boy must learn to set the masculine role as his goal. He must also re-structure the admonishings, often negatively made and given in many contexts, in order to abstract the principles defining the masculine role. (ibid, 558).

Consequents

Lynn's postulation is then that:

1. Because of the context of sex role learning females will show a greater need for affiliation.
2. Because girls are not required to "deviate from the given" and must pay attention to "any bit of behaviour on mother's part" in learning the role, while boy's role learning involves restructuring the field, "females tend to be more dependent than males on the external context of a perceptual situation and hesitate to deviate from the given".
(ibid, 559)
3. Males, in the learning context, acquire a method of learning "which should be applicable to solving other problems"; consequently "males tend to surpass females in problem solving skills".
4. The male learning context requires abstracting principles, and this should generalise, including to the acquisition of moral standards. Therefore "males tend to be more concerned with internalised moral standards than females".
5. Females learn primarily by imitation² but males do not; therefore

¹ Dickinson and Tyler (1944), cited Russell (1956, 239) may be relevant. With 7 year olds, learning nonsense syllables, girls seemed to do better with all positive examples, and boys with some negative examples. But the parallel may be far-fetched.

² Lynn's use of imitation here does not assume a "passive reinforcement" paradigm. Indeed his basic assumption is close to Kohlberg (1967).

"females tend to be more receptive to the standards of others than males".

Supporting argument

Much of Lynn's supporting data has already been reviewed in this present study. Lynn's central term "restructuring" is precisely the same as Maccoby's "breaking set", already considered; a sex difference favouring males is in fact found. Milton, and Sweeney in particular are cited by Lynn. On moral development, his conclusion parallels Kohlberg's: boys conform to rules, girls to authority.¹ On receptivity to the standards of others, the data cited certainly support the view that girls are more obedient (Koch's conclusion) and amenable. The hypothesis is generally consistent with other work done since 1962.

Lynn gives special prominence, in adducing supporting evidence for his hypotheses, to Witkin's field dependence-independence studies. He cites Wallach and Caron (1959) on "deviation from the given" in a cognitive sense, but not Pettigrew (1958) who supports him also. Curiously, he does not cite Bieri's study (1960), considered above, which shows that "masculine identification" rather than sex correlates with field-independence. In effect, he makes the same assumption as Wallach and Caron (1959): that there has been generalisation from "the field of action to the field of cognition". Such transfer is usually assumed in cognitive theories. (Milgard, 1948, 289)

¹ A difficulty in applying this to boys, however, is that Lynn presupposes the process to be one of positional identification. Kohlberg is specific in arguing that personal identification is the antecedent of moral behaviour as identification.

Evaluation and critique

Lynn's theory parsimoniously accounts for a wide range of facts; indeed, takes account of formulations since proposed. His stress on the priority of the child's awareness of his own gender role and on the consequent attention to the model's behaviours is in fact, the basis of Kohlberg's position (to be considered) though Lynn interprets the data somewhat differently. His stress on the male process as involving an abstracting of principles "from many contexts" (ibid, 558) parallel's Harlow's note (cited from Preyberg, above) that it is the breadth not the intensity of experience which affects concept formation ability.

But there are qualification to be made.

Lynn admits that father may "reinforce" the boy's desire to learn the masculine role. Mussen and Rutherford (1963) have subsequently demonstrated this. But Lynn did not discuss some complexities implied by Fauls and Smith (1956) whom he did not cite. In a study of 5 year old children's sex role concepts in relation to themselves, and to their perception of parental expectations, they controlled to some extent for ordinal position. Only children they then demonstrated, chose sex-typed activities more often than those with one or more like-sex siblings. Both groups perceived parental expectations to be the same, but those with siblings chose differently.

While their data could be adduced to support Lynn at another point (agreement between only child choice and his perception of mother's preference is no higher than for other children/perceived mother preference: the existence of stereotyped expectations could be deduced),

Fauls and Smith clearly demonstrate some degree of sibling effect in a study¹ available to Lynn, but not cited by him.

Moreover, the same study (as most studies then and since available) show that sex-typed behaviour or sex-typed preference is not dichotomous, even if the child puts himself into one or other of the two mutually exclusive sex categories. Lynn's theory would recognise that boys could retain some preference for female-typed activities; but does not in the least account for demonstrable female inclusion of some male-typed activities.

In short, the bi-polarity problem is not considered by Lynn,² and his account (which like all developmental-shift theories is better suited to explaining male behaviour) ignores any father-daughter interaction whatever.

More seriously, though, as was noted, it ignores siblings completely, although Lynn's own quotation as to female obedience and "amenability" is derived from Koch's sibling study. Before Lynn wrote, the Brim re-analysis of Koch's material (Brim, 1958) had already demonstrated the "assimilation theory" in sibling interaction, and the importance of sibling models.

Lynn's statement about the boy's understanding of the father role seems reasonable. In the same year Wann, et al. (1962) said on the basis

¹ The study has many defects in experimental design. In view of the permutations of ordinal position/sex demonstrated now so clearly, and the effects of variation in family size (Chapter Eleven) their groupings of only children versus those with siblings are too loose. Nor do their tabulated results differentiate between perceived mother and father preference, nor disclose whether any differences between these two types of preference existed, whether systematically nor not.

² Tyler had already said that "what we have is a continuous distribution rather than an exact classification" (1956, 264).

of playground studies:

It is significant that in their play and in a special test situation, these children's concept of the role of daddies was more limited than the role of mothers. This is not surprising when one considers the extent to which children today are cut off from adequate knowledge about their father's occupations... The comparatively greater detail with which these young children could delineate the role of mothers... is obvious. (op cit, 80)

Lynn does not consider variations either in father-child interaction or in the boy's acquaintance with the father's work; i.e. either as to the nature of the work and its comprehensibility, or the opportunities to see it. It is reasonable to argue that a paradox occurs: on the assumption that middle class fathers may more often allow their sons to learn about their work, middle class fathers at the same time hold jobs which (in nature) are less comprehensible; working class fathers may explain less, but hold more comprehensible jobs (e.g. involving manual skills understandable by a 4 year old boy). Lynn's theory could perhaps accommodate this paradox.

As to girls, Lynn's detailed "imitation" of mothers is apparent in many areas, as Wann and Dorn have noted, and clearly shows what seems to be close imitation of an actual mother, not the mother or female role.¹

¹ Note. In 1960-61, the writer collected many tape-recorded conversations of 4 year old children, for teaching illustration in child development classes. Lynn's point was noted before he made it. Indeed, the resemblance between one 4 year old girl and her own mother's voice was so striking that a class member hearing it, who knew the mother but not the child, (and could not have otherwise known the circumstance of the recording) was able to identify the family from which the girl came. No such close identity between the voices of boys and their fathers was ever detected, and the "masculine stereotyped" boy's voice resulting supports Lynn. Some of these tapes are held as records. Research on these lines (if measures of similarity could be operationalised) could be extremely productive.

Lynn's theory, derived from an original formulation by Parsons, is supported by the subsequent Bandura, Ross and Ross data (cited above) as to incidental learning.

A difficulty, however, is inherent in Lynn's own words. He notes that males and females share the same stereotypes about the differences between the sexes. This implies that girls also learn about the masculine or father role. It may be argued that girls are not required, as boys are, to learn it in order to practice it; but some acquaintance with the father role (and some "abstracting" about it) is implied.

Lynn's hypothesis would further predict (it is assumed) that situations such as the Kibbitzim, where both parents are equally present only intermittently, should produce abstracting tendencies equally in both boys and girls. Rabin (1958) indicates that kibbutz children appear at age 10 to be favoured in intelligence as against non-kibbutz children. This might be taken to support Lynn's theory, were it not that Rabin (op cit, 183) speaks of the kibbutz children as having "more diffuse identification". Higher intelligence can be just as simply explained by more consistent nurse-teacher interaction. A test of Lynn's theory might be if a comparison of kibbutz boys and girls showed little difference on abstracting ability when correlated with within-sex variation in "identification".¹

The problem of within-sex variation, in fact, is critical, and Lynn offers no satisfactory explanation for it. A consideration of sibling effects would have corrected this.

¹ Studies in families with working mothers ought to be fruitful also - if all the variables could be controlled.

Lynn's theory may then be a reasonable account of the situation at the developmental shift period for boys (age 3-5) but appears to be inadequate as an account of the total developmental process rather than as a cross-section of it. Girls (as will later be argued) have to shift from mother-identification to female identification at some point. On some concept formation, as has been noted, girls are superior, as they are on some measures of problem solving (Maccoby, 1967, 384). Lynn's dichotomous male/female perceptions of the father/mother roles, too, ignores Emmerich's comment (1958?, 152)

On the whole children are very accurate on their perceptions of parental behaviour, although this accuracy does not appear to be a generalised ability - perceptual accuracy in the several areas is not inter-related.

On Lynn's theory it probably ought to be.

A further query relates to the criticism made earlier in this study, of the simple instrumental/expressive dimension. Mother's role is, in fact, neither simple nor wholly comprehensible. Arguably, it contains more conflicting elements than father's. The girl ought to be presented with major problems in reconciling conflicting elements, and abstracting general principles. This consideration may support the contention that what exists is a difference in the content rather than the style of abstraction, since women are demonstrably more perceptive in abstracting as to behaviour and motive.

A final problem, not considered by Lynn, is implied by a closer analysis of the Bieri data (1960). Here, the significant association between field independence and masculine identification exists for females, not males.

This immediately raises the complex of issues implied by Maccoby's hypothesis above, and implied by the range of data (cited by her) which appears to show that for boys

the frequency of analytic grouping was positively correlated with emotional control, cautiousness and attentiveness...

i.e. the "feminine" characteristics. It is, apparently, not the "male males" who most usually show the behaviours Lynn postulates to arise from learning the male role. And early maternal protection (Kagan and Moss 1962, 221) predicts male intellectual achievement.

Paradoxically, therefore, Lynn may have come up with some part of the explanation for the difference in the case of those girls who show analytic behaviour, but not an adequate account of the situation for boys.¹

However, his theory raises a complex of inter-relationships which require consideration. To some extent, and particularly amended to include a specific role both for siblings and peers, it will be later incorporated in this study. His greatest defects, it seems, may be to have ignored peer interaction for boys at precisely this age, as a source of information about the masculine stereotype; and to have confused the masculine role/father role when he so clearly distinguishes the female role/mother role.

Related theories

Johnson (1963) has added the important concept that

¹ A far-fetched retort could be that those boys most unlike the stereotype (for whatever reason) have the greatest problem in comprehending it; therefore develop greater abstracting/analytical ability.

it is identification with the father in the sense of internalising a reciprocal role relationship with the father, which is crucial for producing sex role orientations in both males and females. (op cit, 319)

She bases this on the Parsonian role interaction notion. Here, only Johnson's case for girls is studied.

She argues that mothers treat both sexes as "children"; i.e. the mother behaves in the mother role.¹ Father as the "instrumental" role-player is concerned to link the family system into the environment. She cites Bronfenbrenner in support of the case that expressive socialisation techniques condition dependency "particularly in boys"; Green's classic article (1946) also made this point. In this case, Johnson sees the father role as: providing "objective punishment or deprivation" (op cit, 321) and effecting emancipation for both sexes from mother-dependency; as the symbol of independence and the outside world, father provides the basis for sex role learning for both boys and girls. For girls, this statement is somewhat consonant with Deutsch (1944).

A corollary is that

the masculine personality has two components while the feminine personality basically has only one. (op cit, 323)

i.e. male instrumental/expressive but female expressive only. The father rewards his daughter for femininity; but with his son he is also demanding, giving the extra push that "instrumentalness requires" (op cit, 324).

¹ i.e. according to the expressive function which is essentially intra-system; a concern for making the elements of the family system work smoothly. Parsons and Bales (1955) develop this notion more fully.

Supporting evidence

The evidence Johnson reviews is justifiably in support. Mussen and Rutherford (1963) however, suggest a later and necessary qualification

1. As to boys, it is not paternal demand but paternal nurturance which relates to masculinity.
2. As to girls, the father's role as described by Johnston appears necessary, but not of itself sufficient.

Biller and Weiss (1970) reviewing the father/daughter relationship places special weight on Vroegh, et al. (1967) who showed that the components of femininity relate, even at pre-school stage, to "social adjustment, competence and confidence in her abilities" (1970, 81). The role of father is essential in developing these; indeed, father-absence may be more significant in girls than in boys. They conclude reasonably that

The particular character of the father-daughter relationship appears to affect profoundly feminine development, and to have pervasive effects upon a girl's personality and social adjustment. (op cit.)

Evaluation

Johnston, then, revises Lynn as to the role of the father. Biller and Weiss¹ argue convincingly that Johnson is, perhaps, correct for girls but not for boys. Later theory put forward in this study accepts the father role as having the importance, for girls, which these revisions propose; but, as in Mussen and Rutherford, adds that maternal acceptance

¹ Because they present the most recent review, this has been chosen rather than Nash's (1965) study of the father, or Kagan's (1964) review of the acquisition of sex typing.

of the feminine role is necessarily related to a girl's interpretation of role expectancies, in a male dominated society.

Johnston, Biller and Weiss, and most theorists of their kind continue to display the customary myopia: their fathers and mothers, it seems, produce only one child per family (siblings are not mentioned, as is usual); and their children have no playmates. Parents continue to be the sole sources of sex role learning. Again the evaluation must be that such theories (and the evidence they adduce) prove that parents play a necessary role in sex role learning - in this case, significantly so for father - but not a sufficient one.

KOHLEBERG'S THEORY

CHAPTER TEN

AND A CRITIQUE

It has already been made clear that theories of "identification" have become increasingly

- (a) cognitive
- (b) concerned with role aspects
- (c) concerned with the social context.

Maccoby (1959) specifically incorporated Piagetian insights into her interesting formulation. Other theories, like Lynn's, have tried to account for cognitive differences between the sexes as consequents of the different processes of sex role learning. Nevertheless the theory put forward by Lawrence Kohlberg (in Maccoby, 1967) contains quite new elements which justify its title: "A cognitive-developmental analysis of children's sex role attitudes and concepts".¹

Specifically, all past "identification" theories have, in one way or another, assumed that identificatory or sex role learning must be explained on a theory of primary drive/reward, in which the mediator or source becomes secondarily rewarding; in which similarity to, or imitation of the source is therefore rewarding. Kohlberg does not. He assumes "intrinsic motivation" theory explicitly using White's "competence-effectance", in which it is not thus necessary to give some special explanation of the mediator or source as an influence.

Secondly, all previous theories have regarded sequences or developments

¹ Kohlberg cites as "in print" his own book Psychosexual development in children : Holt, Rinehart and Winston. Since it has not yet appeared, this critique is based on the 1967 article. That applies his theories only to boys (other than occasional comment as to girls).

as a result of relational interactions: in Freud, the Oedipal sequence; in others, the developmental shift. They have added social elements, including the preferential effect of the male role (explained more recently by social values rather than by the "castration"¹ theory). But on such grounds it is strictly necessary to explain "identificatory behaviours" only to the end of the Oedipal phase, or developmental-shift for boys.

A wholly different analysis is implied if "sex role" is viewed as a concept or series of concepts, to be learned. The basis for analysis may then be Piagetian rather than Freudian (see Wolf, 1969), and the implication is that

1. Motivation does not need to be explained in the same manner; different consequences and patterns should result, and could be tested against the data.
2. Stages in psychosexual development should show some general accord with those of concept development generally as implied in Piagetian (or related) theories of concept learning.

Kohlberg develops an intricate theory, supported by extensive analysis; in particular it is supported by his own empirical study (Kohlberg and Zigler, 1966), since a necessary corollary of his theory is that there should be some correlation between "identificatory behaviour" and cognitive maturity or the development of intelligence.

¹ It may be worth noting that Witkin, (1962, 220) in an updated variant of Freud, explains field-dependence in women on the grounds that women's perception is undifferentiated on the ground that their sex organs are hidden. This does nothing to explain within-sex variation in field-dependence (c.f. Bieri). Erikson, of course, explains sex differences in the play patterns of boys and girls on this Freudian assumption (Erikson, 1965).

In this present study, only a summary of Kohlberg's argument is given.

Cognitive versus social learning theory¹

The essential contrast is summed by Kohlberg himself:

The social learning syllogism is: "I want rewards, I am rewarded for doing boy things, therefore I want to be a boy". In contrast a cognitive theory assumes this sequence: "I am a boy, therefore I want to do boy things, therefore the opportunity to do boy things (and to gain approval for doing them) is rewarding. (op cit, 89)²

Kohlberg might have added: "therefore it is more rewarding to imitate behaviours which show me how to do boy things".

Kohlberg argues that cognitive self-categorisation as boy or girl is the critical and basic organiser of sex role attitudes. Once made, this categorisation

is relatively irreversible, and is maintained by basic physical reality judgements, regardless of the vicissitudes of social reinforcements, parental identification, etc. (op cit, 88).

"Basic self-categorisations determine basic valuing", says Kohlberg.

The child, once self-categorised, values positively and acts consistently with his gender identity. However, a child's understanding of sex role (including his understanding of physical anatomical differences)³ is subject

¹ The latter is beautifully argued by Mischel (in Maccoby, 1967) and has been drawn on elsewhere in this present study.

² Angrilli (1960) in his theory of identification did make the assumption that identification as a male preceded the imitation of the male model.

³ In Freud, understanding of anatomical differences is assumed implicitly sometimes to be almost innate; his arguments, are frankly, metaphysical. The Oedipal theory assumes that all young children know all the "facts of life".

to the

qualitative differences between the structure of the child's thought and the adult's. The child's sex role concepts are the result of the child's active structuring of his own experience; they are not passive products of social training. (op cit, 85)

This is a Piagetian view.

Money, Hampson and Hampson (1957: already cited) support the "critical period" notion of gender identity. Hartup and Zook (1960), with much other research, show gender categorisation to be present by age 3/4. De Lucia (1961) and Epstein and Liverant (1963), both already quoted, support the case that same sex models are selectively reinforcing, especially for boys; moreover, the latter showed that the effect of the model's sex varied with the masculinity rating of the boy. Sears, Maccoby and Levin (1957, 375:396) agree on the age of three.

Kohlberg adds a significant qualification to the argument used in Chapter Seven (typically that of Kagan and Moss, 1962) that congruence/incongruence with the social sex stereotype is motivating. M/F scores, says Kohlberg, do not appear to correlate with

self-reported, rated or tested maladjustment, anxiety or neuroticism (ibid, 91-92).

The data generally confirm this¹. Kagan and Moss' tachistoscope studies show, however, some patterns which may question Kohlberg's statement on this point (1962, 242 et seq); relations between rated anxiety and some indices of masculinity/femininity do appear to be demonstrated in the Fels Institute data.

¹ The comment is fairest for the confused relationships between anxiety and M/F patterns which show up in Sutton-Smith and Rosenberg (1965).

Gender constancy

It is clear from empirical data that children do respond to gender identity as a concept, with the expected Piagetian confusions in the early stages; self-categorisation does not imply the existence of a stable and articulated concept. Kohlberg's own studies demonstrate that gender-constancy, as a concept, is not present at 4, but is established by 6/7 (op cit, 97). No psychoanalytic explanations are required for cognitive shifts of this sort which so precisely parallel other demonstrated cognitive development, at just this period. Transductive reasoning and intuitive thought are evidenced in the child's understanding of gender identity. Moreover, gender identity tasks are shown to correlate quite highly with other conservation tasks (op cit, 98). It is reasonable to conclude that

the process of forming a constant gender identity is...part of the general process of conceptual growth. (ibid)

Work has already been cited in the present study to support the case that children's perceptions of parents appear to show some general pattern, and demonstrate a type of intuitive reasoning (e.g. father is bigger; therefore father is more powerful; therefore father is boss)¹ which overrides variation in child rearing experience; a resultant is the

general differentiation of maternal, inside the home functions from paternal outside the home function... (Kohlberg, op cit, 99)

but this may be accounted for on cognitive grounds rather than the identificatory process which Parsons (and Lynn and Johnson who rely on the

¹ This makes some sense of Johnson (1963) if it is assumed that it is the perceived paternal power which is determinant.

point) assumes. The existence of accepted and relatively invariant stereotypes, then, may be explicable as a stage of cognitive growth. Absent fathers (Smith, 1966) and working mothers (Hartley, already cited) scarcely affect the child's perceptions of parental roles, argues Kohlberg.

The source of stereotypes

In view of the later discussion (Chapters Eleven and Twelve) it is important to consider Kohlberg's account of the source of stereotyped perceptions of gender roles. These are demonstrably more rigid in young children than in older children and adults; social learning theory would imply the opposite. Perceived genital differences are not plausible as a source (children demonstrably categorise on other data¹ consistently, and stable or constant understanding of anatomical gender differences comes later). There is, Kohlberg argues, sufficient experience through children's stories and the mass media within any culture to allow such stereotyped distinguishers to be learned early, particularly male aggression and female emotionality/dependency. While children argue intuitively from body size to generalised power, by 6/7 children demonstrably also know that males preferentially hold high-power roles in society (see Chapter Six). Children in the centration period could be expected to "stereotype" from such comprehensions.

Regularities in the understanding of gender qualities, then, are displayed developmentally, in a manner consistent with a cognitive theory.

If purely affective factors were involved,

¹ i.e. clothing, hair, at first; later, behaviours. Brown's IT scale, in fact, is based on the assumption that clothing and hair style are perceived by children as early distinguishers of gender identity.

one would expect a large number of non-cognitive individual differences in children's awareness of gender constancy and anatomical differences, factors not apparent in the research on normal children. (op cit, 107)

It is then only necessary to suppose from

theories of cognitive dissonance...that the child will value that which is like himself, and to see himself as being like that which he values. (ibid, 107)

The development of masculine and feminine values

Tests of masculinity/femininity, Kohlberg argues, should on conventional theories show a "developmentally stable or irreversible attitude" but in fact

it is difficult to predict an individual's masculinity-femininity score on the basis¹ of a test given earlier in his development.

Kohlberg seems to be fair in commenting that tests do not adequately predict from the masculinity or femininity of parental models (c.f. Mussen and Rutherford, 1963, though other variables appear to be predictive there); nor consistently from parental expectations, from the presence of a same-sex model, from or social adjustment. Indeed, sex role learning (on conventional theories) being global, should show high intercorrelations between test items; these do not appear.

In most of these criticisms, Kohlberg is reasonable. It is not

¹ No study of this sort has been located for the present analysis: i.e. considering individuals longitudinally, and measuring shifts in the M/F scores of the same individuals. Such studies as have been located (e.g. Houston, 1968) are not strictly longitudinal but sequentially cross-sectional.

certain, however, that he gives sufficient weight at this point to the variations which could be caused by developmental difference in the perception of the social value attached to the male or the female role; nor (in spite of his comment on Mischel; *ibid*, 110) to situational variance in role behaviour.

Valuing the self-categorised role

The central import of Kohlberg is to invert the usual "attachment or reward" argument and to assert on dissonance grounds (see above) that the child values that which is like himself. Piagetian theory, assuming an early egocentric phase would suggest that

at this age...the child has a naive or egocentric tendency to value anything associated with or like himself. (*ibid*, 113)

This argument has already been adduced in criticising "perceived similarity" theories. Later differentiation results in some objectivity of thought, but at first

the child is much more likely to "impose" his self-based values upon the world because he assumes that they form the basis of the valuing of others. (*ibid*, 114)

This sufficiently accounts, on Piagetian grounds, for behaviours which Freudian theory has to adduce intricate affective patterns to explain. Children demonstrably value their own sex even when "sex role preference" tests show that they include some preference for behaviours objectively assessed as "opposite sex"; many studies have been so constructed as to ignore this point.¹ But Kohlberg argues that at the egocentric level,

¹ Hartley (to be discussed later) repeatedly argues that girls' demonstrable same-sex preference pattern disproves a female perception of male dominance. The assumption that self-valuing is a basic cognitive step seems to be simpler and more in line with the pattern of empirical data.

the same-sex is valued by a child

as it is identified with himself; he does not value the masculine as an absolute standard, stereotype or category. (ibid)

The role of power

Kohlberg accounts for this not on social learning theory, but because

the mere recognition of a role as powerful or competent leads to the desire to play this role. (ibid, 117)

While he proposes that the findings of Bandura, Ross and Ross (discussed above) may be accounted for "by an appeal to the primary competence value of power and control", Kohlberg could have gone further and argued that the children's existing cognitive schemata determined their perceptions of who held the power and competence.

Parental influences

The theory which holds that identification stems from the early interaction with parents would imply that sex typing should then be fixed and relatively invariant; a cognitive Piagetian theory assumes that there will be substantial changes in mode and comprehension. Just such changes occur (see Chapter Eleven); stability does not appear to be demonstrated, and this suggests that

parent identification attitudes are age-specific reactions to developmental tasks...(ibid, 126)

Basically, however, Kohlberg views the child's use of the parent-as-

model as stemming from the competence/effectance needs of the child. Where parent/child similarities occur, Kohlberg sees these as

primarily resulting from the tendencies for boys high on masculine sex typing to identify with the father, rather than for a high father identification to cause high masculine sex-typing. (ibid, 127)

...imitations are neither the result of a conditioned association between imitation and reward, nor the result of an "imitative instinct" but are more a product of the child's tendencies to master or demonstrate a causal control of interesting events. (129)

Here, Kohlberg does not use Piaget's language precisely, but the implication is identical.

The evidence for the case

Kohlberg clearly shows that data normally used to support other theories may be so interpreted as to support his. Some data (e.g. Bandura and his collaborators; possibly Epstein and Liverant) may support either a cognitive or a social learning theory. Is there data to support Kohlberg which does not fit other theories? In a broad sense, Kohlberg's theory should predict that if faced with a rewarding model, and a same-sex model, the child would choose the latter. Freudian "defensive identification" (Oedipal theory for boys) describes just this situation with, of course, a different rationale. The difference requires elucidation.

Evidence for a pervasive tendency to value the "like-self", which Kohlberg's theory requires, is sufficiently clear as to adults (Second and Backman, 1964) but such arguments may be "chicken-and-egg" issues.¹

¹ Vast areas of "identification" research and theory are vitiated by the simple tendency to confuse a correlation with a cause. The fact that Kohlberg can invert the conclusions while maintaining the data in so many cases demonstrates this.

Only some sequential data, demonstrating the primacy of imitation based on primary effectance motivation, can really support Kohlberg's case. The data he cites based on Kohlberg and Zigler (1966), give strong - if as yet limited - support. Sex typed preferences for activities and peers do appear somewhat earlier than preferential imitation of fathers. The group trend

for father preference in imitation precedes the trend for father preference in dependency by about one year. (op cit, 133, my emphasis)

This is convincing. He recognises that strictly only longitudinal data on the same children will suffice; some is foreshadowed.

Basic to Kohlberg's argument here is the notion that the act, in sequential development, precedes the desire for approval (e.g. as with the diffuse "exploratory" activities of children). Then though he does not quite so state it, "approval" may more properly be seen as effectance-reward rather than affective-reward; that is, approval becomes as it were a "checking" response to see: "Did I do it right?" (c.f. op cit, 134).

Who are the models

This implies a selective/attention to the model's behaviour, or among models, for two purposes:

1. To "pick up ideas" relevant to categorised performance;
2. To "check on performance".¹

Now significantly, though in passing, Kohlberg proposes that

gender similarity tends to lead to affiliation;

¹ Not Kohlberg's terms.

i.e. that a boy likes other boys because other boys are like him. (op cit, 134)
...preference for same-sex peers appears at the same early age as sex typed activities and role preferences. (emphasis added)

and that

his preference for same-sex peers is established before his preference for same-sex parent figures. (ibid, 135)

The case for this statement - and it seems understatement to term it significant¹ - is again based on the principles of concept development:
 i.e. that

the boy's classification of adult males in the common category of "we males" is a more cognitively advanced achievement and therefore comes later than his classification of other children in that category. (ibid)

Diverse age figures are not consistently grouped by sex, he says, till about 5/6. This essentially Piagetian problem with classes is general. See e.g. Boehm (1961). The process by which it occurs, for boys, is aided by the preferential status accorded to males, but is then

assimilated to general stereotypes of the masculine role having little to do with the father's individual role and personality. (op cit, 136)

Evaluation of Kohlberg's theory

The theory accounts better for the "developmental shift" than anaclitic

¹ Since peers are not further mentioned, and siblings are not mentioned at all, it is tempting to apply to Kohlberg, Churchill's comment on someone that "he stumbled over the truth, but picked himself up and hurried on as if nothing had happened..."

theories, where some sleight of hand is required when (if reward is assumed to precede attachment) the boy shifts attachment to father without any demonstrable shift in reward.

Kohlberg implies some major empirical and operational issues. For example, in Mussen and Rutherford (1963), boys' masculinity was found to relate to father's perceived nurturance; but not to father's measured masculinity. But Kohlberg's assumption that boys, as it were, notice only selected "masculine elements" in fathers' behaviours¹ suggests that had the boys' perceptions of their fathers' masculinity been taken by Mussen and Rutherford these could (a) have correlated highly with the boys' masculinity and (b) varied independently of the measured masculinity.

The role of the father, Kohlberg suggests, is more effective in the adjustment and moral development of his son; this however, is a function of personal identification.

Intellectual development: The implication here is that

individual children of a given age who are relatively mature in the clearly cognitive aspects of sex concepts should be also relatively mature in sex role attitudes (sp cit, 147)

and Kohlberg and Zigler (1966) demonstrate conclusively that there are reasonable correlations between measured intelligence and measures of sex role attitudes. Moreover, intelligence (at four) correlated with preferential orientation to an adult male model, and other data support this cognitive pattern. Houston (1968, 223) directly supports the hypothesized

¹ The example he cites on 136-7 is familiar to fathers of similar sort. The writer's son, on only very spasmodic evidence, regards his father as an excellent handyman, mechanic etc., because, in Kohlberg's formulation, it is only these elements of his father's behaviours which are attended to as relevant models of masculinity as understood by a boy. For a research study which supports Kohlberg see Radke (1946).

correlation between sex preference and intelligence. It is difficult to see how on any essentially affective theory of identification, such correlations ought to exist.

Cognitive styles

As a corollary, Kohlberg proposes that

clear masculine interests will lead to
poor performance on cognitive tasks
involving feminine interests...the
reverse will be true for girls with
strong feminine interests (op cit, 154)

This constitutes his reply to Maccoby's hypothesis (see Chapter Eight). He accepts her case as applying to "special cognitive traits" only. The argument is only partly convincing. There seems no need to force a dichotomous choice between either "intelligence precedes sex typing" or "sex typing precedes intelligence".

General

Kohlberg does admit antecedent variables, but sees these not as causes of the identificatory process so much as necessary environmental conditions for cognitive growth.

The case of girls

Kohlberg specifically applies his theory to the case of boys, but some passing comment is made on the case of girls. Boys' preferential sex typing fits his theory, but he admits that "the age trends...for girls are less clear cut". "...there is no clear age increase in girls' sex typed

preferences after age four, as there is for boys". (ibid, 117). He takes the position already argued in this study:

...the responses received from children aged five to eight can only be explained by the fact that during this age period both sexes award greater value or prestige to the male role... (ibid, 120)

And significantly:

For girls, the decline of the egocentric mode of conceiving the "like sex" as best coincides with a growing awareness of the superior prestige of the male role. (ibid)

Much data supports this; but Kohlberg rightly notes that this is not saying that girls want to give up their gender identity. A key study is Hartup and Zook (1960); girls scored higher on feminine preference when asked "which do you like", than when asked "which do girls like". Kohlberg combines this with the notion that the female role is more flexible, and permits more "opposite sex" components (already documented).

Moreover, during middle childhood, Kohlberg argues, sex role appears to be viewed in an absolutist manner, e.g. the 7 year old who says

"God made her a girl and she has to stay a girl, that's what God meant her to be".

This attitude would be predicted on Piagetian terms, and makes some sense of the changing patterns of preference to be discussed in Chapter Eleven. Kohlberg (1964) has elsewhere discussed the concomitant application of diffuse or absolutist concepts to moral behaviour over just this period.¹

¹ Elkind (1962) shows very similar stages to occur for religious concepts as Kohlberg does for sex concepts. He shows global undifferentiation to about 6; undifferentiated concrete concepts 7:11, and so on. This is interesting in view of the child's comment (cited) which includes both a religious and a gender concept showing "absolutism".

Paralleling Parsons' point that the adult female role is increasingly seen to provide some compensation for girls, Kohlberg proposes that girls perceive and begin to value this in middle childhood. Some "feminine" values, e.g. niceness and goodness, attract girls to the female role, and by playing the game of "niceness, attractiveness, goodness and social approval" the girl can meet her needs for competence and self-esteem. Much data, not cited by Kohlberg, suggests that high self-esteem in girls after middle childhood correlates with just these patterns (e.g. Carlson, 1965).

However, in general, Kohlberg admits that his general outline does not fit the case of girls nearly as well as that of boys, on which he bases most of his evidence. He notes (op cit, 143) that research findings on girls are "complex", and that to explain it would involve

a detailed analysis of the major sex differences in sex typed identification processes, and is complicated by the fact that there is no evidence of a clear age linked shift in the girl's parent-identifications. (ibid, 143)

He postulates that what occurs in girls is not a shift to "preferential identification with the father" but "an increased orientation to the prestigious male role in these years" i.e. from 5/6 onward. He also proposes that

this developmental increase in father-identification consolidates rather than weakens the girl's feminine values and identification. For both sexes identification with the expectations of the complementary role partner may facilitate identification with one's own role...

but this tendency is "much stronger in girls than in boys". Johnston's proposal that father-identification facilitates it in both boys and girls

appears, however, more reasonable on most data.¹

The data which Kohlberg uses to demonstrate the paradigm "gender-identity/masculine orientation/ father orientation" are not directly applicable to girls:

there are less clear-cut developmental shifts in girls' sex role attitudes than in boys; the findings for girls give less support to a cognitive-reorganisation interpretation of IQ group differences. The findings for girls are generally consistent with a developmental interpretation. (op cit, 152)

Support comes from the demonstrated fact that bright girls appear to show a pattern of male orientation at four which average girls do not show till later (Kohlberg and Zigler, 1966).

While, in general, data reviewed by Kohlberg suggest that a "positive family climate" acts as a general precondition for same-sex development, again the data on girls are "less consistent" with the case (op cit, 161). He proposes that

feminine interests reflect a cautious and conservative stance for both girls and boys in the early school era. Feminine interests are thought to be conservative because they represent the home and the older tie to the mother rather than the outside world and the newer tie to the father; and because they represent the restrained, safe and passive rather than the active, dangerous and aggressive. (op cit, 161-2)

This is essentially Lynn's and Johnston's position; to studies he cites in support, Kohlberg could have added Helper (1955). The data on the

¹ Kohlberg (145) cites Johnson (1953) supporting his above quotation; he is not correct. The amendment here added is.

antecedent correlates of achievement for girls (see Chapter Eight above) also support Kohlberg here; he does not, however, cite Kagan and Moss (1962) who most clearly do support him.

He makes two final postulates as to the case of girls:

1. That the power competence of the male role is more important for the boy's masculine values than is the corresponding power-competence of the female role for girls' feminine values. Hetherington (1963) is cited; Mussen and Rutherford (1963) could be.
2. That the girl's sex role identification is based more on identification with the complementary (father) role than is the boy's.

These postulates may now be seen to be in line with the case built up in previous chapters. They are necessary because perceived differential social values for male and female roles must be incorporated in any sound theory. The postulates would not be necessary merely on the grounds that girls have a continuous same-sex learning situation, and boys must shift. Kohlberg is superior to Lynn in his formulation, because he recognises the social values difference, whereas Lynn does not really consider it.

The mystery of the missing peers

Clearly the major defect in Kohlberg's theory is that, having asserted the fact that peers as selected models precede fathers as selected models (at least for boys) he proceeds in the manner of conventional theories, to discuss thereafter only the use of parents as models. This is a defect which this study now goes on to rectify: first by discussing siblings, and then by discussing peers. Kohlberg has provided the basis for this.

Individual difference

Flavell (cited previously) has pointed out that Piaget is concerned to construct a descriptive theory, not an explanatory antecedent-consequent one. Kohlberg's Piagetian stage analysis has a similar defect. Since it concerns sex role it has to take sex difference into account. It does not, however, take into account, or attempt to explain, individual variation. For this consideration of the sibling data and studies of ordinal position are essential.¹

¹ Of the standard work on siblings, two studies by Sutton-Smith and Rosenberg are cited by Kohlberg, but only in the context of the failure to demonstrate any systematic correlation between sex typing and anxiety or conflict. Siblings are not mentioned, throughout, in spite of the data to be reviewed which show their considerable influence on sex typing. Nor did Kohlberg and Zigler (1966) control for ordinal position.

PART FOUR

THE ADDED ELEMENTS

I N T R O D U C T I O N :

PART FOUR

A N O T E O N S A L I E N C E

There is an apparently irreconcilable distinction between conventional identification theories (which in one way or another stress power as an antecedent) and the cognitive theory which stresses what may best be called the motivation of perceived "relevance".¹ But Piaget, cited above, notes that the model perceived to have authority will therefore be attended to (thus introducing a "power" element); and on the other hand most power theories (e.g. Mowrer, Sears, Whiting) have talked of the child's active attention to adult role behaviours, particularly in dissonance aspects.

Henceforth this study will describe the general motivational aspect involved in socialisation as "salience", describing those aspects of the model which cause arousal or attention. Therefore a model may be salient for relevance or power reasons; or both. Insofar as parents are agents in socialisation, "salience" is sharply but not only affected by the dependency, low power and large status differential involved for the child.²

Not surprisingly then, power theories concentrate on the parent-child situation where perceived power/dependency status differentials exist, and almost wholly ignore what Piaget called imitation of equals.

¹ This is not Kohlberg's term but it clearly sums his formula that the child likes people who have something to teach him, as it were c.f. "it does not restrict the appeal of a parental model to power factors but includes any factor of interesting or competent activity..." (op cit, 139)

² Brim and Wheeler (1966) have a useful discussion of these dimensions.

But if saliency¹ includes "relevance", then focus on socialising agents will shift additionally if not alternatively, to siblings and peers. Whiting's "resource mediation" may be included, then, if we extend resources to include "informational resources"; that is, the child will model on persons who possess behaviours, skills, etc. for "how to do what I want in order to be x" (Kohlberg's position).

It follows then, that a cognitive theory of sex role learning implies that all models, not merely parental models, are relevant. It also follows that a cognitive model with Piagetian elements will stress differential age effects. The two succeeding chapters pose in turn some issues about siblings, and about peers, as models, socialising agents or informational sources in social role learning.

¹ Saliency with siblings includes the necessity for living with them. It is not denied that both in the short and long run, very significant aspects of modelling may be negative. See below, summary Chapter Eleven.

This chapter will argue that while the role of the parent has been emphasised, development as a function of sibling interaction has been essentially under-valued both in theory and research.

It is implicit throughout this chapter that it is the child's perception of the interaction process which constitutes the significant variable. Dubin and Dubin (1965) and Yarrow (1963) have covered the general ground implied by this position.

A lack of theory

Bossard and Boll (1958) noted that

the role of sibling has been considered chiefly in the light of "displacement" and rivalry.

This is a Freudian legacy: while Freud himself noted the importance of birth order (in his General Introduction of 1938) it was not a central concern. Such theoretical concern as there is stems rather from Adler and power theory, and has remained in this area. The result, as Slater noted is that

Some of the most confused segments of psychoanalytic theory are those which attempt to deal differentially with intrafamilial relationships. The difficulties seem largely due to a failure to isolate the effects of formal structural properties based solely on variables such as age and sex of family members (1961b, 297)

Parsons and Bales (1955) consider but do not stress sibling interaction;

nevertheless this theory entails assimilation, that is the tendency for a child to acquire some of the characteristics of those with whom he interacts. Brim, whose 1958 re-analysis of Koch has a Parsonian basis, takes from Parsons the implication that

when the child begins his differentiation between the father and mother sex roles, he would be helped in making the differentiation if he had a cross-sex sibling (Brim, 1958, 4).

This, in fact, introduces a cognitive element which partly foreshadows Kohlberg: while it confuses the male/father and female/mother roles (as Parsons did) it implies the salience of peer models early in the sex role learning process. Curiously, however, it is only the negative model (i.e. cross-sex model) who is postulated. On Brim's assimilation theory, then, cross-sex siblings as compared with same-sex siblings should possess more traits appropriate to the cross-sex role. This should be more noticeable in affecting the younger children, and when children are close together.

But Parsonian theory does also imply that taking the role of the other (Mead's term: the idea developed by Whiting, and Maccoby, 1959) should result in the incorporation of behaviours: thus same-sex children should as it were have an additive effect on sex appropriate behaviours.

Brim gives a somewhat unusual rationale for sibling salience:

Even though parents must remain as the major source of sex role learning, almost every child has a mother and father to learn from. Hence, the variations in type and amount of sex role learning occur on top of this base, as it were, and in this variability the effect of a same-sex or cross-sex sibling may play as large or larger a role than variations in parental behaviour...

More usual, however, is the kind of neo-Freudian position of Whiting (1960, 118)

if a resource mediator withhold a resource from a child and gives it to a third person, this third person will occupy the envied status.

This is the position explicitly studied (and rejected) by Bandura, Ross and Ross (1963); it has the interesting implication (not considered by Whiting) that since jealousy stems from displacement, with the younger child holding the "envied status", the younger should affect the older child's behaviours. It may account, theoretically for regressive behaviours.

Angrilli (1960, 357) notes more generally that

sibling constellations and relationships may play equally significant roles in the shaping of identification patterns.

Biller and Borstelman (1967) suggest some age-specific affects:

sibling effects may be stronger in young children because with increasing age, greater interaction with peers provides brotherless boys with many masculine models.

But more usual is the pattern of Sears, Maccoby and Levin who consider siblings only in terms of aggression (1957, 239 et seq); or of Johnson, Lynn and Kohlberg whose theories are silent on siblings. In fact, most typical of the tendency is Egan whose 1964 article on the acquisition of sex typing (Hoffman and Hoffman, 1964) came well after Koch's data, Brim's re-analysis, and the first of the Sutton-Smith and Rosenberg studies had demonstrated sex typing effects - but failed to mention siblings in relation to sex typing.

It is left rather to the sociologist or social anthropologist to postulate more than interactions involving rivalry: e.g. Clausen (Hoffman and Hoffman, 1964):

The first born is likely to serve as a model for later-born siblings (op cit, 17). An older sibling may be caretaker, teacher, pacesetter or confidant for a younger one. The older may (and perhaps inevitably does) regard the younger as a rival...but he may also be proud and protective of his younger sibling. (19)
There is, however, a rather clear indication that an older sibling can be a helpful model for learning sex appropriate behaviours. (19)

The reason for the general neglect of sibling effects in psychological theory is, perhaps that theory and research has not only taken Sears' point that ordinal position is not an ecological variable but a psychological one, but has also interpreted it almost exclusively in the light of motivational theory which (as Sears himself has said) sees drives as only "something to be avoided".

It will not be proposed in this chapter that rivalry/displacement and such problems are not relevant to sibling interaction and the learning which results. Indeed, the "primary and secondary reinforcements" proposed by Sutton-Smith and Rosenberg (1965) make sense of patterns difficult to clarify in other terms; but it is suggested that this theoretical position is not sufficient - that other motivations, other learnings and other interactions (such as those Clausen mentions) are involved, and make sense of some of the data not wholly explicable even using Sutton-Smith and Rosenberg's formulation.

We-categorisation in siblings

The only category of social identity that is

as basic and clear as gender is age...
(Kohlberg, 1967, 93)

It seems reasonable to propose that children - especially siblings in constant interaction - perceive as salient the categorisation "adult-child", at an early stage; and that they categorise themselves together with other children as "we" at an early stage.

Kohlberg (op cit, 135) says in fact that categorisation by sex across age is more "cognitively advanced" than the child's categorisation of himself "with the class of other boys". That is, the same-sex/same-age categorisation is prior (a point central to the following chapter of this study, on peers).

But given the demonstrable salience of the physical size factor in children's perception and classifications^{1,2} there is a good case for believing that self-categorisation by a child into the class "child" may also precede sex-across-age categorisation, and is cognitively less advanced.

Emmerich (1959, 404) explicitly supports the view that the discrimination of child and parent categorisation comes before the discrimination of sex roles, perhaps about age two. This implies that, on cognitive grounds,

¹ As for example, in Kagan's work on the child's tendency to reason transductively from size to power; or in other studies to assume that people who are bigger must be older.

² Not much work located bears directly on this. But Danziger (1967) on the child's understanding of kinship terms, and Freyberg (1964) implicitly support it. A linguistic confusion is admittedly entailed. "Child" in English has a dual meaning: an age status; and a relationship. Later, children are clearly confused about this and assume that "Mummy used to be grandmother's girl when she was little". But this confusion is not likely to affect the postulated tendency of children to self-categorise themselves as children at an earlier phase. Johnson (1963) may support the argument proposed here in noting that mother treats both boys and girls as "children" in the early phase.

the child self-categorising himself as a child may then model on appropriate behaviours of other children - including siblings. Hartup (1964) gives some support to the idea that imitation occurs across sex as well as age.

Now it seems that this has similar implications to Brim's proposals, and the following postulates would seem logical on the grounds of cognitive self-categorisation as a child classed with other siblings:

1. That such self-categorisation occurs early, probably about the same time as the first gender categorisation.
2. Categorisation in the same class as other siblings will be easier when the siblings are close together (c.f. Brim).
3. "We" categorisation should be easier in the case of same-sex children; and from younger to older (on the grounds that the older child more sharply distinguishes child-baby).
4. Such "we-categorisation" should be most operative from age 3 and at least until the more rigid gender categorisation of childhood is superimposed (about 6/7). Modelling effects for same-sex children should then continue; for opposite-sex children diminish.
5. When the sex-across-age categorisation emerges (Kohlberg proposes about 5/6) children without a same-sex sibling will preferentially model on the same-sex parent.
6. The sex-across-age categorisation could be expected to occur earlier in girls on the assumption of much greater mother-daughter interaction.
7. When the perception of the sex role concept includes some comprehension of the social-bias factor favouring males (which seems to be from about 7+) modelling on same-sex siblings will be accentuated for males and

modelling on opposite-sex siblings will be accentuated for females.

In sum: using Kohlberg's cognitive analysis but applying it to siblings as models, very similar postulates emerge as in Brim, or in Sutton-Smith and Rosenberg.

A case of salience

Houston's earlier data disclose that in terms of the total perceived interactions,¹ siblings are highly salient. An earlier paper (1968a) discloses that boys in two child families perceived a greater number of affectional transactions toward the sibling (older or younger, of either sex) than toward either parent, consistently at age 5/6 and 7/8.² (1968a, 11; table 1). This, however, does not demonstrate modelling - only the fact that traditional interpretations have underestimated the importance of sibling interactions as compared with parent child interactions. Some cases from the full analysis in Houston (1968) do however demonstrate modelling affects.

On assimilation theory, or the cognitive theory proposed above, the effects of a same-sex as distinct from opposite-sex older sibling should

¹ The modified form of the Bene Anthony Family Relations Test is outlined in Houston, 1968. It measures affectional responses as perceived by the child, in four categories: positive incoming and outgoing; negative incoming and outgoing. "Total" interactions here includes all four categories, and it is a measure of the perceived "emotional traffic flow" between the child and each member of the family.

² The single exception was the FM2 boy at 7/8, for whom father was such, and mother somewhat more salient than older sister. FM2, however, is in all studies markedly atypical; this will be mentioned later.

be marked. It is. At Houston's Level I (age 5/6) IT scale scores, a measure in which higher scores indicate higher masculine sex preference, were:

MM2	78.00		
FM2	61.25	(Houston, 1968, 201)	

That is, IT scores were depressed 17 points by the interaction with an opposite sex sibling. By comparison, the mean IT scores¹ for father absent boys were depressed another 5 points only, to 56.62. Though less marked, the effect of having an older versus a younger sibling confirms the pattern:

M1F	63.55	M1M	69.33
FM2	61.25	MM2	78.00

Age specific effects

On any theory, the social bias toward favouring the masculine role should increase through childhood with age; therefore this effect overrides sibling salience; as shown in the shifts, in Houston's data, from Level I to Level II. With the unexplained exception of the MM2 group, all others shift toward masculine preference:

M1M	82.90
M1F	81.92
FM2	76.42

¹ These are mean scores only. No analysis was available in Houston (or in any other available study) to differentiate IT scores for the ordinal positions in father-absent families. But on this mean score it can be supposed that some boys in father-absent families (probably MM2) had higher IT scores than FM2 boys in father-present families.

Note: the IT scale is uni-dimensional, not diametric.

This data is consistent with Houston's comment, on diametric scores, that

firstborn sons reject feminine activity
more emphatically than second-borns (1968, 184)

The salience of siblings, and the social-value effect therefore are shown to interact.

Data from other studies

Variables customarily controlled in studies of ordinal position¹ are:

1. family size
2. the age of the child
3. the sex of the child
4. the birth order position
5. the sex of any sib(s)
6. age spacing between sibs

Other variables (e.g. parental age, which partly but not consistently co-varies with child-age and birth-order: see Koch, 1955, 16) are sometimes controlled for. However, there are few studies, if only because of the necessary sample sizes for statistical analysis; three age spacings with the 8 permutations of ordinal position in two child families (Koch) or the 24 permutations for three child family without age control, provide obvious research problems. Subsequent analysis in this chapter is therefore limited and tentative; it ignores studies e.g. Pauls and Smith (1956) in which family size and ordinal position were inadequately controlled. Since Rosenberg and Sutton-Smith (1964) and Sutton-Smith and Rosenberg (1965) have

¹ Rosenberg and Sutton-Smith distinguish "ordinal position" studies (which control not only order but also sex of all siblings) from "birth order" studies. They review some of those. However, demonstrably "first-borns" should not include "only" children; and the sex of sibs as well as family size should be distinguished. "Ordinal position" is used here.

included material derived from Brim's (1958) re-analysis of Koch's data, these two studies will be taken as central.

The pattern of results

The clearest generalization to be made is that few clear generalisations can be made. Roughly, however, it appears that ordinal position as an independent variable seems to have ascertainable effects of itself to about age 6, but thereafter, by age 10:

With age, the increasing reinforcing value of masculine traits in the general culture decreases the sex role conflict for those ordinal positions that bring subjects into contact with male siblings.

(Sutton-Smith and Rosenberg, 1965, 69)

By age 20, conflict is a function of past sibling interaction and its consonance with social values, but masculinity/femininity are no longer conditioned (as they were at 10) by the bias in favour of males. The three measures (masculinity, femininity and anxiety) used in these studies enable some insight to be gained into the psychological meaning of the interactions and the learning which has taken place.

The consequences of sibling interaction for girls

From Rosenberg and Sutton-Smith (1964) the following selected conclusions on outcomes are relevant in sibling interaction for girls:

1. Anxiety diminishes as family size increases.
2. Only girls (not only boys) are low on anxiety.
3. A principle of "complementary imbalance" means that in two-child families, a favourable position for one child is unfavourable for the other; for girls, this favours MF2, FF2 and F1M. It does not favour F1F.

4. The presence of an opposite-sex sibling lowers sex role preference; a same-sex sibling heightens it.
5. In a three child family, the first-born girl is favoured in outcomes.

Psychological processes: an affective account

The authors account for these outcomes by postulating:

1. differential access to the parent and its effects;
2. differential approval for dependency and the association of affiliation with anxiety;
3. vicarious reinforcement; by girls, of a specific mother, by boys of a masculine stereotype (c.f. Parsons, Lynn);
4. reinforcement for the older child taking a "caretaker" role, especially in a large family.
5. rivalry in same-sex families; displacement affecting the first child; but with "additive" sex typing;
6. less competition in opposite-sex two child families; but greater assimilation of opposite-sex characteristics.

The whole is to be seen against the social expectations for sex roles. To take a case: the expected "caretaker" role of the older child is consonant with femininity, less so with masculinity; therefore the oldest girl but not the oldest boy is relatively conflict-free.

Age variations

The general pattern depicted by the 1965 study is on the surface confused and intricate; but again a more obvious selected case displays the pattern.

The MF2 pattern is:

<u>Age</u>	<u>6</u>	<u>10</u>	<u>20</u>
Masculinity	High	High	High
Femininity	High	Low	High
Anxiety	Low	High	Low

Without competition from a cross-sex sibling, the MP2 girl assimilates female sex appropriate behaviour early; but has a salient masculine model to heighten masculinity at 6. By 10, the perceived disadvantages and constraints of femininity are more obvious to her; masculinity is high, femininity is low, and she is conflicted. But by age 20, although she is high on masculine and low on feminine interests, her past "role-playing" experience has been with the dominant masculine/submissive feminine pattern in interaction with an older male sibling; therefore her anxiety is low.

By contrast the opposite case, F1M shows the following pattern:

<u>Age</u>	<u>6</u>	<u>10</u>	<u>20</u>
Masculinity	High	Low	Medium
Femininity	Low	Low	Medium
Anxiety	High	Medium	High

High masculinity at 6 is presumably part modelling, while high anxiety is presumably dependency conflict. The attraction of the "masculine" at 10 is less for her because it is associated with an inferior younger male. But at 20, again, the past pattern of role-playing is significant; this time because she has been used to "dominating" a male rather than fulfilling the socially expected female pattern, and therefore her anxiety is high.

The apparently confused data, then, fall into some meaningful patterns if age-specific role changes in the feminine role are also taken into account.

Affectional ties: the Houston data

Here, the data (cited above) are much more intricate, and apply only to boys. Some brief comments, however, are required to note where they confirm or disconfirm general theory.

The FM2 boys on Houston's data are closest to confirming most theories. Not only do their sex preferences take a predicted form, but the affectional correlates are as expected; at age 5/6, "incoming negative" responses from the sibling are inversely correlated with sex preference, and at age 11, incoming positive responses are positively correlated with masculinity. Moreover agreement in this case with the M/F ranking as found by Sutton-Smith and Rosenberg for age 6 is almost exact.

The "social values" hypothesis appears to get some support. The protectiveness of M1F is clearly demonstrated (Houston, 1968, 205). However, at age 5/6 the pattern of affective transactions for FM2 suggests some antagonism, and more in the more masculine boys. For both M1F and FM2, the level of F score to some extent also supports the assimilation hypothesis.

Houston suggests that the emotional "traffic flows"¹ in the FM2 and M1F constellations are in almost wholly opposite directions, and that at least at age 5/6, positive ties significantly impede sex role preference for the FM2. Other data suggest some support for the conflict over the caretaker role for M1M.

Other variables

Family size: It is clear that no generalisation (other than that anxiety

¹ Not Houston's own term.

diminishes with family size) applicable to two-child is safe for three child families. For girls, the only safe surmise is that the oldest child/caretaker role will produce the least conflict at any stage.

Father absence: It is clear (Sutton-Smith, Rosenberg and Landy, 1968) that the effects of father absence are substantially mediated by ordinal position effects: boys without brothers are affected more than boys with brothers; girls with younger brothers more than other girls (except the only girl, who is affected more than the only boy).

"Defensive masculinity": A straightforward assimilation or power theory receives little support from the high masculinity scores shown by FFM3 (Rosenberg and Sutton-Smith, 1964). On either of these theories, FFM3 should be greatly feminised. But he is not. However, there are several significant implications:

(a) the concomitant high anxiety score suggested to the authors a "defensive masculinity". But this may in fact be another illustration of what the same authors (1968) demonstrated as an affect of children's ordinal position constellations on fathers. Fathers of two child MF or FM families were shown to have higher femininity scores; fathers of two child FF families were shown to have high masculinity scores. Only a hypothesis of "role polarisation" can explain this type of effect. Certainly here, neither a power nor an assimilation theory could apply.

Coalitions: A significant omission from this discussion is the problem of coalitions. Hoffman and Lipsitt (1965) have regretted the "inaccessibility" of these critical aspects of family interaction. These certainly occur: the atypical response pattern of the FM2 in Houston's early data (Houston, 1968a) suggests a father/son coalition. But sibling

coalitions are at least as significant, particularly where same-sex or close age-spacing produces "clusters" in larger families. It seems almost certain that some degree of the variance in three-child (possibly also in two-child) families is accounted for by coalition effects. The fact that in Koch's data certain patterns reversed where the age spacing between siblings was greater than 4 years suggests, too, the presence or absence of coalitions.

Complexity of pattern

The potential 1:1 relationships in a family are to be calculated on the formula

$$\frac{n^2 - n}{2}$$

but the possible relationships and coalitions are

$$\frac{3^n - (2^n + 1) - 1}{2} \quad (\text{Houston, 1968, 122})$$

The improbability of dealing with such complex data, if it were accessible, is obvious.

Summary

It seems probable, on the data and the theory, that sibling effects as models for sex typed behaviour will be

- higher (a) from age 3 to about age 6/7.
- (b) from older to younger
- (c) from boy to girl.

It seems certain that the presence or absence of a sibling during

the 6/11 period will significantly affect sex role preference, especially the cross-sex preferences of girls.

It seems certain that children with male siblings are generally advantaged; that those with older male siblings are advantaged on a longer-term basis.

It seems certain that the absence of siblings (Sutton-Smith and Rosenberg, 1965, Rosenberg and Sutton-Smith, 1964) may do much for the achievement of only children but it significantly affects, in particular, the personality of the only girl.

A tentative proposal: negative modelling

As a tentative proposal designed to bridge the gap between the affective explanations made by Sutton-Smith and Rosenberg, and Kohlberg's cognitive emphasis, it is suggested that a useful additional way of looking at sibling interaction may be in terms of "negative modelling". Brim (1958, 4; cited above) implied something of this sort in proposing that an opposite-sex sibling might aid the "shift" in identification. All role behaviour is, by definition, defined as reciprocal. However, emphasis in conventional identification theory has been on "taking" the role of the other. Kohlberg may be rephrased to talk of "understanding" the role of the other. Now, in reciprocal patterns, understanding the role of the other entails quite specifically understanding what behaviours B must leave to A; i.e. what behaviours are inappropriate for B. This may be described as "negative modelling". Interaction with opposite sex siblings, then, will serve cognitively to delineate more precisely the boundaries of the child's own role behaviours.

This implies the reverse of the "assimilation" hypothesis. But many aspects are more parsimoniously assumed under such a formulation. Most masculine "shift" behaviour is assumed to be negative. The "unexplained" rejection of femininity between levels which Houston describes is a negative response. The low anxiety of MF2 at age 20 or the high masculinity of FFM3 boys (Sutton-Smith and Rosenberg's data) may be the result of a clearer definition of what not to be.

A cognitive theory of role learning, then, can subsume the process by which the proper boundaries of a role are so delineated. "Self-categorisation" may be aided.

The application of this notion to role learning for girls may later clarify the pattern at some points.

THE SALIENCE
OF PEERS

CHAPTER TWELVE

This chapter proposes a theoretical framework for age-specific and sex-specific functions for peer-interaction in sex role learning. But the relative absence of supporting empirical data in this field is marked.

Indirect or passing references to the significance of peers are frequent. Boll (1957) notes some relevance for peers. Boehm (1963) argues, from a cross-cultural study, that the more peer-oriented U.S. children are emancipated earlier from adults, become more dependent on peers, enjoy freedom of thought and independence of judgement at an earlier age, and develop a more highly autonomous though less complex consciences (1963, 467). On the other hand Leiderman (1959) cited by Nash (1965) argues that peer interaction is a function of prior parental interaction: boys whose father was a prestigious model are more secure in relationships with peers,¹ and Lynn and Sawrey (1959) conclude that father absent boys were defective in peer adjustment. Koch (1957) reported that for 5/6 year olds, there were demonstrable correlates with ordinal position: FM2 boys reported the fewest playmates and F1M girls the most; in general girls named more than boys. Gray (1957) showed that social acceptance for boys related highly to perceived sex appropriate behaviours, but did not for girls.

Hartup (1964) showed that patterns of imitation are generalised across models; peers were also imitated. Helper (1955, 193) showed sex differentials in peer acceptability. Biller and Borstelman mention, but

¹ This may, in fact, be an excellent example of the failure to distinguish a correlation from a cause.

do not specify a function for peers in sex role learning for boys (1967, 267). Long, Henderson and Ziller (1967) looked at peer affiliation in middle childhood and concluded that there were some significant (and sex differential) correlates of peer affiliation.

A more significant role, perhaps, is assumed in middle childhood. Piaget (1960, 258) has given a lead which has been more fully developed in studies of games, school interactions (e.g. Sutton-Smith, Rosenberg and Houston, 1968, 3) and particularly on concomitant moral development.

Kohlberg (1960, 32) sums the Piagetian position:

Piaget then believes that restitutive or reciprocal justice develops almost purely out of peer group interaction on the one hand, and out of a logical capacity for non-egocentric reciprocal or 'reversible' thought on the other.

This is not, however, sex typing although conventional theories of identification assume the processes to be related. Kagan and Moss (1962, 242) clearly imply that the shifts toward congruence of sex typed expectancies result from experience in the first years of school, and therefore from peer experience.

In the more remote ethological field, it is clear (Harlow, in Beach 1965) that peer-play experience certainly affected the sexual development of his rhesus monkeys. But the general pattern of theory and research has been diffuse.

Hetherington (1963)

An important step forward was taken by Hetherington (1963) who proposed that

rate of development and type of sex role preference would be related not only to parental behaviour but also to social pressures to conform and the status of a given sex in the culture. Parent-child similarities in traits which are not sex typed should have fewer extra-familial sanctions bearing on them (1963, 188)

In pre-school years, she argued, "relatively few social contacts (existed) outside the family" but

in older children sex typed behaviours should be increasingly influenced by social norms. (ibid)

She predicted that

because of the greater prestige and privileges of males in our culture, girls will be slower and less consistent in developing appropriate sex role preferences than boys. (ibid)

Her study then analysed other variables (e.g. maternal or paternal dominance). Her conclusion was that paternal dominance facilitated cross-sex identification in girls.¹ Kohlberg (1967, 116) interprets her data to support only a retarding effect of mother dominance on boys.

The difficulty with her theory is the flat assertion that pre-school children (i.e. to age six) have "relatively few social contacts outside the family". No evidence is adduced to support this statement, which would be dubious even for New Zealand where "pre-school" goes to age five.

¹ Much caution has to be taken with Hetherington's results (rather than her theory) because (a) the operationalisation of the dominance measures is both crude and not related to the children's perceptions,

(b) the IT scale has been shown to be dubious with girls, especially older girls.

As to the former, note Dubin and Dubin (1965) "There has been widespread failure to recognise that it is not only the parental behaviour to which the child responds but also his perception of parental behaviour". See also Yarrow, (1963).

The existing assumptions

To sum, then, the typical theory so far has assumed peer-interaction to be secondary, or a dependent variable. Such interaction is assumed (if related to sex role learning) only to succeed parental influence and/or sibling influence. Though peer-interaction is assumed to be important in middle and later childhood, it is not assumed to play any specific part earlier (Hetherington); no specific statements about sex differences in peer-interaction age-specific effects tends to be made before adolescence. Lynn's, as a typical theory, derives from Parsons the notion that boys have difficulty in learning sex appropriate behaviour during the "developmental shift", but assumes that the only available model is the father. It is conventionally assumed that both mother and father "share the same sex role stereotype"; in asserting that boys, therefore, learn the masculine stereotype and conform to it, (Parsons, 259) only the mother is usually assumed to be the source of this learning: Lynn (1959); Lynn and Sawrey (1959); Lynn (1962).

Kohlberg and Zigler (1966); Kohlberg (1967)

It is this "conventional wisdom" which Kohlberg has queried without, it appears, realising that he has done so.

The clear distinction, in Kohlberg's argument, is that he places the function of peer-interaction in sex role learning earlier; i.e. preceding parental learning for boys. Hartley (1959) discusses male socialisation to the stereotype; but developing the case later made by Lynn, specifies peer interaction only at 8/11 (1959, 460).

In Kohlberg, the argument is thus:

preference for the same sex peers appears at the same early age as sex typed activities and role preferences...his preference for same-sex peers is established before his preference for same-sex parent figures. (emphasis added: Kohlberg, 1967, 135)

His major explanation (already considered in this study) is that the same-sex/same-age categorisation is cognitively simpler than the sex-across-age categorisation. The period specified here is age 3 - 6.

The data on which this generalisation is based are given in Kohlberg and Zigler (1966, 143 et seq). They conclude that their data demonstrate

the role of cognitive transformations of the perceived social environment in initiating new developmental trends, rather than simply representing a more facile learning of, or adjustment to, a given social environment. (1966, 161)

Sex role learning, they argue, is not merely "cultural transmission" as the result of "adult labelling and reinforcement or as the result of identification with simple parental behaviours". Mental, rather than chronological age is the correlate (c.f. Houston, 1968, for supporting data on sex preference choices).

There are a number of reasons for attributing the formation of social attachments, and of imitative or modelling tendencies largely to effectance, competence, or exploratory motives rather than to secondary drive learning or to primary social instincts. (ibid, 152)

Their data demonstrate clear differences in the case of boys, in line with the Parsons/Lynn description of the problem for boys; but the temporal priority of peer preferences over parental preferences which they demonstrate suggests that the search for models is, with boys, solved not (as Lynn has it) by deriving a second-hand stereotype from mother; or by

abstracting from father - although both these patterns occur.

It is suggested that in the normal development of boys, effectance motivation results in the use of peer groups as models, at ages 4 - 6 particularly. It is suggested that this is typically prior to the direct "father-role learning" situation.

This implies that peer-experience for boys at this stage should be investigated as an independent variable. In short, it is argued that for boys, early peer-participation "solves the problem" of sex role learning, and tends to account for the stereotyped masculine response; and also for the later, highly selective, attention to only those aspects of father's behaviours seen as masculine. The pattern of boys play shows this stereotyped (rather than specific father) orientation. Conformity to the group, then, becomes a dependent variable; the boy depends upon the group as a source of information about masculinity.

The pattern for girls

In boys the trend is toward a same-sex orientation; in girls, on Kohlberg and Zigler's data, it is

primarily in the direction of greater positiveness toward the masculine. (ibid, 149)

the girl's same sex orientation appears to be formed prior to and without the benefit of the age and IQ trends found in the present study. The results, then, are consistent with the hypothesis that girls' same-sex orientation develops earlier and more concretely than the boy's because the girl has the opportunity for earlier and more concrete interaction with the same-sex parent than does the boy. (ibid)

But, significantly, in girls both variance in age and IQ are significantly related to peer-preference: more so than in boys, where peer preference is somewhat more independent of either, though bright boys show same-sex peer preference earlier than average boys.

Their findings, Kohlberg and Zigler suggest, are consonant with the theory that

pre-school children preferentially orient to feminine figures. A clear developmental trend in most of the studies is toward an increased orientation to the father. (ibid, 160)

It seems clear, however, that an orientation for peers may precede that to the father in boys - and may, in fact, mediate it. There is some suggestion in their data that, for bright girls, the same may apply.

Therefore it can be tentatively proposed that peer groups do not at this earlier pre-school stage fulfil the same function, normally, for girls. Learning the sex role (as has been made clear) is not for them a problem. To the extent that peer-orientation in childhood (7+) operates for girls, it is suggested that it does so, in a dual way, to support for the girl a dual independence/masculinity preference trend. Dissonance theory would predict such a supportive role for the peer group.

In the following chapter, a more specific sequential analysis will be provided for peer-functions in sex typing for girls. Here, peers as a source of sex role development are argued to be highly significant in the early development of boys; but not so clearly for girls.

Peers are salient early for boys as a source of sex role learning. In middle childhood, they are probably more salient to girls in the task of

sorting through the conflicting attractions of the masculine pattern; it is suggested that prior experience of sibling-interaction patterns, then, should be significantly more correlated with peer-interaction for girls in middle childhood, than they are for boys.

In a somewhat approximate way, the trend proposed here is that the relative importance of peer as against sibling-interaction effects on sex role development will be higher for boys than for girls; that sibling interaction-patterns continue to influence girls parallel to peer-influence through middle childhood; and that peer-influence in girls does not become prime until pre-puberty. This case may now be examined - in a broader cognitive content - in the following chapter.

PART FIVE

TOWARD A SYNTHESIS

THE DEVELOPMENT
OF GIRLS:
A SYNTHESIS

CHAPTER THIRTEEN

...as they grow up, girls seem to be learning how not to be babies and boys how not to be girls. (Kammerich, 1959, 257)

in girls, femininity is related to imitation of the mother in preference to the father... It...appears that so far as sex typing is concerned, imitation has different consequences for the sexes... imitation of the like-sex parent plays a more extensive role in the socialisation of girls than of boys in this particular culture. (Hartup, 1962, 94)

for girls, the decline of the egocentric mode of perceiving the like-self as best coincides with a growing awareness of the superior prestige of the male adult role. (Kohlberg, 1967, 120)

...to put it in more colloquial terms, boys suffered more often from too little taming, girls from too much. (Clausen and Williams, 1963)

It is from the many generalisations and conclusions on the process of sex role learning - such as these - that some synthetic view must be assembled.

Anaclitic identification

In Freud, it was the female case which served as the paradigm of anaclitic identification. While empirical data now clearly support the case that mothers (and fathers) use rather more "love-oriented" techniques with their daughters, and that the result of this process is "femininising", a role-interaction explanation is needed as perspective. The type of theory put forward by Maccoby (1959), based on a close role-interaction of

mother-child appears, in fact, to fit the case of the girl better than the case of the boy.

It is suggested, however, that traditional anaclitic identification theory has over-stressed part of its case. While for girls it postulates a close and intimate interaction with a same-sex mother - which the data certainly support, both in process and outcome - it also stresses the continuity of the process for girls; i.e. that the girl, unlike the boy, does not have to "switch tracks". True, the girl is not required to acquire new behaviours appropriate to another sex, as the boy at 3-5 is. But she is, as the quotation from Emmerich (above) suggests, at some point required to change age-roles, not sex-roles.

The problem with much analysis has been that it is not age-specific, talking (as Parsons sometimes does) too generally about the "female role". A developmental view of the changing expectations associated with the female role is essential. (Hartley, 1964, is most specific).

Infancy: gender categorisation

Hartley has discussed in detail the early socialisation of infant girls; she proposes that

- (a) socialisation by manipulation (e.g. the manner of dressing and handling girls);
- (b) canalisation (direction toward sex appropriate objects, e.g. dolls);
- (c) the perceptual priority accorded to selected patterns (appropriate emotions and sensory responses);
- (d) direct parental verbal reinforcement ("What a pretty girl".);
- (e) encouragement for a "symbiotic" similarity to mother; and

(f) direct discouragement of "unfeminine" behaviours all lead to "the perceptual saliency of girl-specific references..." (1964, 3-5). With girls, more than with boys, it is reasonable to suggest that this more direct socialisation precedes (ibid, 4)¹ and continues to parallel the self-categorisation of the child by sex. Kohlberg (1967) and Emmerich (1959) clearly support the earlier emergence of the same-sex categorisation in girls.

In the first phase of social expectation, then, the girl is aided toward the appropriate gender-self-categorisation by clearly definable socialisation practices. It seems, also, that the implicit expectation for greater quietness and neatness in girls - a pattern of constraint - is even then communicated.² The extent to which biological differences operate over this phase is not clear.

Gender-categorisation and after

Negative role definition, however, then takes different forms for boys and girls: in boys the behaviours negatively defined have already been in his (babyish) repertoire, and are in the developmental-shift period required to alter. The relatively "defensive" or "negative" definition of masculinity has often been noted. It is, as Lynn notes, "anti-feminine" in boys. The association of femininity with dependence appears to lead, in boys,

¹ Murphy (1962) has a closer analysis of the ways in which differential handling patterns occur for boys and girls in infancy. Hartley makes the fair point that if self-categorisation occurs so early, there must be antecedent experiences, even if these have not been empirically demonstrated.

² But on biological bases. Data suggest that girl babies tend to stop crying when soothed; boy babies not to do so.

to the use of stereotyped masculine role definition, an "anti-femininity". But in girls no such clear negative model exists.

However, in girls a similar process must take place. It is usually said (e.g. by Parsons) that the girl absorbs the "adult female" role; it would be more accurate to note that her incidental learning involves highly specific "mother" behaviours. Hartley rightly comments that girls not only play more specific mimicry of their actual mothers' behaviours; they also are earlier involved in doing, rather than playing, these behaviours, i.e. assisting with chores. A "reality" factor enters earlier for girls. There is also a tendency to earlier socialised independence behaviour (e.g. in dressing, toileting) in girls.¹ The tendency to earlier verbalisation at this phase possibly both aids, and "rigidifies" the manipulation of the concrete "feminine" skills involved. It is also probable that the "over-socialisation" process, and the manipulation by "love-oriented techniques"² interact; the girl more consistently and intimately interacting with mother, could be expected to be aware more sensitively of approval/disapproval cues.

The girl, then, in the 3-6 phase is not forced to look elsewhere for information about role performance. Thus far, the anaclitic identification theory has been closely paralleled. The girl closely models herself personally and positionally on her mother.

¹ This is probably a "chicken and egg" interaction with earlier maturity, manual dexterity and so on; it seems scarcely possible to distinguish the relative influence of biological, imitational and expectancy factors in this earlier development for girls.

² For accounts of parental differences in the discipline of girls see Tasch (1952), Sears, Maccoby and Levin (1957, 403,407 etc.), Johnston (1961, 271), Gardner (1947), Bronfenbrenner (1961).

Child-categorisation and after

The phase so far described (as Hartley has noted, 1964, 8) is also the early phase of concept formation. Lynn, then, may have some grounds for assuming that there are links between the mode of sex role learning, and such factors as field-dependence.

However, we now have to account for a new range of data. Mussen and Rutherford (1963) note that

In a way that is analogous to the boys' development of masculine interests, a positive mother-daughter relationship is of paramount importance in the girl's establishment of sex role preference. In addition to this factor, however, aspects of the parent's personality structure - e.g. high degree of maternal self-acceptance and self-confidence - appear to (affect the girl). Furthermore...the father's personality and behaviour appear to be important factors in the daughter's development of personality. (1963, 602-3).

Father's masculinity and encouragement of the girl's sex typed interests foster her appropriate sex role preference.

The girl's family must play a more forceful and direct role as teachers and socialisers than the boy's. (ibid)

because it must at this phase begin to counteract the social values which weigh against girls. Here, the role of the father becomes more critical.

Rosenberg and Sutton-Smith suggest that father

plays a more critical role in the development of children's sex role preferences than mother's (support). (1968)

Bing (1963) studying early cognitive development found that

...of the very few patterns pertaining to the father that were evaluated two proved to be significantly correlated with girl's development (1963, 641).

Johnson (1963), Deutsch (1945), Kohlberg and Zigler (1966) come to the same general conclusion, as does Nash (1965). More specifically as to girls, Biller and Weiss in their recent survey of father-daughter studies conclude that

The particular character of the father-daughter relationship appears to affect profoundly feminine development, and to have pervasive and lasting effects on a girl's personality and social adjustment. (1970, 91).

But Kagan and Moss (1962) show also "pervasive effects" in girls from mothers' earlier behaviours; Sutton-Smith, Rosenberg and others show strong sibling effects; Tussen and Lutherford (1963) show that a complex of family variables appear to relate with girl's adoption of the appropriate behaviours. It is safe to conclude (as the last authors do) that a more complex pattern of support is required for girls because of the relative social disadvantage.

Dependency

A rough summary of the perception of children in the 6-10 phase is that boys associate femininity with dependency; girls associate masculinity with independence. Accent has so far been placed on the father role. But Sutton-Smith and Rosenberg (1965) noted the pattern for girls to be favoured if they had experienced masculine sibling interaction. Hartley goes further in discussing "preferences" at the middle childhood phase, and says that girls perceive activities merely as new, or daring - rather than masculine. She notes that girls (like boys) do not wish to be "sissy". But phenomenologically, it is probably correct that for boys, sissy means "girlish"; but for girls it means "babyish".

Flexibility

The tendency to "opposite-sex" preferences in girls 6-10, then, is clear. Only when, as in certain ordinal positions, it is accompanied by anxiety may it be fair to call it "sex role conflict" at this stage (Sutton-Smith and Rosenberg, 1965). However, the greater "flexibility" of the girl role at this phase is generally agreed on. (Sutton-Smith, Rosenberg and Morgan (1963); Hartley (1964).

It is here postulated that this may be related to the constellation of cognitive patterns depicted by Maccoby. Since the girl is in a much more indefinite and flexible situation while performing the "girl role", more detailed and subtle attention to cues in behaviour and response could be expected. Such a pattern clearly exists: particularly in perception of persons, but also (generalised) as shown by Wallach and Caren (1959). Some link between narrow-categorisation, (or functional rather than analytic grouping) and field-dependence appears likely. Field-independence is demonstrably linked (Bieri, 1960) with masculine rather than feminine "identification" for girls. Roughly, the narrow role-cue categorisation of femininity appears to be related to a generalised cognitive narrow categorisation; and, if it can be taken to be sound, greater social differentiation of sex role results in a less abstract cognitive style in girls. (Mercado, et al.)¹

The constraint factor

It is suggested that the middle childhood phase is a "critical period"

¹ See also Annual Review of Psychology (1964, 243-44).

in girls as to constraint acceptance. In middle childhood, it has been suggested, masculinity equates with independence for girls: some degree of freeing from mother and reciprocity with father is implied as the mode of independence (for the former, Helper (1955), is clearly in support). Parsons' much earlier point that father is the independence symbol¹ for boys may apply even more to girls; but during middle childhood. In large part, this seems a response by girls against constraint, and against the higher degree of impulse-control imposed upon them.

Middle childhood is the "child's world" period; one in which (in spite of considerable recent social change) peer-codes are powerful and traditional. These involve child-imposed sex differentials; but more so for boys than girls. Effectance-motivation at this time may be expected to make girls seek competence in girl-activities, but the concomitance of both child and parental pressures toward independence may also result in the girl's attraction to the less constrained "boyish" activity. Nor, at this stage, is the girl subject to the same negative modelling effects as boys (to be a "tomboy" is not derogatory). Through this middle stage, acceptance of conformity in both sexes is high; (Vinacke and Gullickson suggest little differentiation here); and rule-absolutism affects both sexes.

In Houston's data for boys, the M/F diatremic tends to converge as boys grow older (1968, 190). It seems probable that, for girls, the reverse may be so by Houston's Level III, age 11.

¹ Tasch (1952) may have priority on the argument; saying of the father: "...this (i.e. 5 to 8) is the period when he helps the child clear the hurdle from the home into the world outside". (1952, 325).

Pre-puberty

Much data suggests a new phase for girls approaching puberty. One reason is, clearly, biological. While

In the normal course of events the secretion of (the sex hormones) in childhood is quite minimal... (Hansburg and Laude, in Maccoby, 1967, 2)

and could therefore be assumed to have relatively little differential effect on the sexes during childhood, the earlier approach of puberty (and its preceding hormonal patterns) certainly affect girls differentially.

Role confusion

Hartley (1959) has suggested that "girls amble toward femininity". Vinacke and Gullickson's study certainly suggests that in early puberty, an instrumental emphasis is added to the boy's attitude which is not always required of girls. For girls in the stage 11-13, some concomitants of adult femininity - including its constraints - begin to appear. It could be expected that, at this phase, those most provided with opportunity to observe the relative lack of constraint for males would be most conflicted: the high anxiety rating of MP2 girls (Sutton-Smith and Rosenberg, 1965) supports this hypothesis. Gray (1957) talks of the "lack of clarity" in the role expectancies of girls nearing adolescence. Webb (1963) speaks of the girl's "role confusion" at this point. But it may be safer if it is said that the new pressures toward adult-femininity (without as yet, any of the compensating advantages of that role) are added to existing female role expectations. The much lower correlations for girls than boys between the pre-puberty and puberty periods in Kagan and Moss

(1962, 158) support a "discontinuity" hypothesis and Webb's finding that high anxiety at this phase is associated with high (not low) female sex preference suggests a response to the lack of clarity.

The pattern of data which suggests that the early-maturing girl is relatively disadvantaged (as against other girls) at this stage supports such a position.

It seems likely that, in early adolescence, the first major new role expectation for girls is increased social sensitivity. Douvan had earlier postulated this, but a study by Carlson (1965) directly shows that while ego-integration in early adolescent boys is linked to the development of independent and personal standards, in girls ego-integration is linked to interpersonal skill and sensitivity. This is an emergent pattern; no such difference was found with pre-adolescence. Together with Vinacke and Gullickson's conclusions, it is reasonable to speak of a pressure toward instrumentality in boys, but toward expressiveness in girls, at about this early adolescence phase.

Female peer groups: the informational source

It is postulated that peer-groups for girls at about puberty and after fulfil somewhat the same function in sex role learning than peer groups for boys about and after the "developmental shift", age 4 - 6. High patterns of peer-participation and conformity appear to develop in girls through this phase. On dissonance theory, it seems probable that diverse types of girls' peer groups exist, and that such groups are differential in function: that is, to the extent that they are self-selecting, certain homogeneous within-group characteristics (e.g. as to

the degree of conflict or lack of conflict over masculinity/femininity) may pattern these groups.¹

Hartley (1964) has usefully distinguished role-implementation (the contemporaneous behaviour in the role) from role definition i.e. where

Role cognition and expectations...develop in anticipation of future statuses by perception of the role implementations of older persons, much like the development of "cognitive maps"...
(1964, 3)

It seems likely that, given their pattern of greater and more specific cognition of female adult roles, girls more directly "anticipate" role requirements. The role requirement for social sensitivity is almost certainly perceived clearly by girls in the early adolescence phase as a "task"; and effectance-motivation would assume that there should be a "search for practice and models", resulting in high peer-interaction.

Identity and sex role

If this is Erikson's identity phase, it seems likely that important components of sex role identity begin here to emerge. But it also seems that, in early adolescence, it is the same-sex peer group interaction which is significant as a cognitive experience for girls (probably as a dissonance-reducing pattern). The same-sex girl group acts as a "social mirror", playing the "checking" role postulated earlier for models.

Role reciprocity

It is proposed that the important reciprocal male-female aspects

¹ Coleman's data are not sufficiently age-specific, but probably relate more to later, than to early adolescence patterns. There, such different groups or cliques clearly exist.

(to the adult view of sex role differentiation) do not operate substantially until later in adolescence for girls. The relative social handicap of the early-maturing girl supports this view. Douvan (1960) has suggested that there is not so much pressure on girls as on boys to meet the "identity crisis". But it is probably more correct to suggest that not until girls are required to reshape their roles and identities in terms of male/female reciprocity do the problems for girls essentially emerge.

By age 15/16 and beyond, then, it is postulated that girls begin to meet, more directly, the pressures to conform to the categorisations of femininity which cause Coleman's "playing dumb" phenomenon.

Toward womanhood

Parsons (1959) says of the girl's problem:

...this involves a more severe type of competitive insecurity, because so much depends on the one step (i.e. marriage)

The tendency, he notes, is toward

an accent on romantic love, certain rather immature types of sexuality, and glamour - the exploitation of certain specifically feminine assets of attraction.

The qualities and ideals to which she was socialised are "even to a degree a positive handicap". (Parsons, in Anshen, 1959, 259-260).

At this stage it could be expected that those girls whose past socialisation most prepared them for and is most consonant with this socially prescribed (and circumscribed) pattern will be least conflicted.

In terms of past sibling-interaction, the pattern seems startlingly clear in the Sutton-Smith Rosenberg (1965) data for age 20 where (in rank order) the three most anxious ordinal positions were: F1M, F, and F1F.

Process and outcomes

The differences for girls, then, appear to be that the role requirements emerge as a more gradual, less discontinuous, more flexible but also less well defined process. The girl is, as it were, challenged less in learning her role over the early phases. A wider range of variation may mean that the possibility of dissonance with the role is, at first, less.

It is suggested that in middle childhood, the role expectations are such that still a wide range of variation is permitted, if not encouraged, but that the perception of the male-orientation in social values begins to affect preferences. Not until middle adolescence and beyond does the more direct negative modelling pattern of "unfeminine" behaviour and personality characteristics appear sharply to emerge. The range of responses possible for girls at that stage is suggested by Douvan and Adelson (1966, 243), who found

1. Unambivalent, feminine girls; those who score high on femininity and give none of the critical masculine or antifeminine answers.
2. Ambivalent and omnipotent girls; those who score high on femininity and wish to be boys, or envy boys, or choose masculine jobs, or any combination...
3. Neutral girls; girls who stress neither feminine nor masculine interests.
4. Boyish girls; those who are low on femininity and would like to be boys.
5. Achievement oriented girls; those who

do not focus on future femininity but rather on masculine occupational goals.

6. Antifeminine girls; ...who do not want to marry.

Family and parental patterns, socio-economic status, and - significantly - intelligence also appear in this study to be strong differential correlates of the outcomes.

Effectance motivation and selection in modelling

Girls, no less than boys are motivated toward competence. Because over most of their development (except in the years to age 6) role prescriptions are flexible, it is suggested that a wider range of models is salient for girls than for boys. A possible sequence of models is, approximately:

<u>Age</u>	2-5	mother: direct modelling
	3-10	siblings: direct or reciprocal modelling
	6-10	father: reciprocal modelling
	11-13	same-sex peers: interactive modelling and dissonance reduction same-sex sibling: direct modelling opposite-sex sibling: negative modelling
	14-16	same-sex peers: direct modelling same-sex older models: anticipatory modelling (including mother) father: reciprocal modelling
	17+	reciprocity: opposite sex.

But because flexibility of role expectation for girls in the middle period of development is succeeded by relative circumscription of the role from late adolescence and early adulthood, it is suggested that divergent patterns will produce the greatest conflict in girls at this later stage.

It is suggested that conflict in men may be seen as psychodynamic, i.e. related to the relatively early closure of the role expectation; psychodynamic conflict over masculinity has its origins in the developmental shift. Freud's Oedipal theory pointed to the correct phase.

In women, however, it is suggested that internalised role conflict may be better seen as sociodynamic. At least in the present stage of social expectation, the pattern of role learning for girls is such that society itself socialises toward decidedly incompatible and contradictory role expectations for women, toward a conflict which becomes more obvious to girls from puberty on.

Toward autonomy: the female identity

the inwardness of individuals is only awkwardly if at all captured by a typology designed for the understanding of large-scale social change.
(Riesman, 1965, xvii).

The outcome of this more flexible process of role development for girls - more broadly based on the assimilation of behaviour and attitudes of others, more sensitive to the feelings and responses of others - may be greater internalised conflict. A threatened identity is a not unusual outcome in women incompatibly reared to be independent but asked to exist vicariously, to hold only ascribed status.

A better understanding of the process of development for girls then, is certainly required if only because of the existential situation of women. But it seems clear that resolution of the conflict, in adult women, will be in large part dependent upon earlier experience of role interaction.

The implicit assumptions of the psychologist

Throughout the studies drawn on here, especially in research, the words "sex-appropriate behaviours" recur. But it is clear (as Hartley insists) that what is properly defined as "appropriate" is broader than those test instruments which operationally define "femininity" seem to imply. It is too easy to slide from a statistical to a normative definition of "femininity".¹

One striking pattern, in fact, emerges even on the data using such instruments: that narrow or traditional role categorisations for girls appear to aid neither their development intellectually (Kagan and Moss, 1962; Maccoby, 1967) nor their role acceptance (Lois Hoffman, cited Douvan, 1966, 246). Indeed, the former at least seems to be true in reverse also for males. Divergence, to some extent, from the sex role stereotype (both in upbringing and personality characteristics) seems, at least tentatively, to be associated with those of both sexes who in a broad sense are likely to achieve intellectually.

It has been suggested that the antecedents of achievement and adjustment for girls are more complex than for boys. They require more specific elucidation, with a clear and explicit understanding of the social values entailed.

And finally, it is to be noted that the necessary concentration on understanding the nature of sex differences must proceed from a proper understanding of human individuality. Witkin, therefore, may have the

¹ Kohlberg (1967, 109) clearly defines the "statistical" nature of the test instruments, which he lists and reviews.

last word:

The sex differences that have been observed are clear-cut and persuasive, but they are relatively slight compared with the range of individual differences within each sex. (Witkin, et al., 1962, 221).

T O W A R D

CHAPTER FOURTEEN

O P E R A T I O N A L I S I N G

This chapter briefly notes a few selected implications of the material discussed, and demonstrates more precisely the manner in which these might be investigated.

Phenomenology and the correlates of femininity

Parental antecedents are relatively well understood. Sibling interactions and their outcomes are, as yet, still indefinite. Some irreconcilable differences (even on straightforward sex-preference data) between Houston's findings for boys and those of Sutton-Smith and his collaborators, or Brim's re-analysis of Koch, suggest that much more precise work is needed.

Sibling interaction and replication of Houston

A difficulty is the dubiousness of the IT scale for girls, especially older girls (Lansky, 1963). Sex preferences, therefore, cannot safely be compared for girls with Houston's data.

However, the salience of parents versus siblings could well be subject to analysis. Houston's earlier finding (1968a) showed that total affectional responses for boys by age 5/6 were greater to any sibling than to either parent (except for the atypical FM2 at Level II). More precise analysis in the full study (Houston, 1968) shows complex and changing patterns of positive and negative, incoming and outgoing affectional responses. It does much to illuminate the phenomenology of the relationships, but little

to simplify them.

Houston's major study, in spite of a most complex analysis, is defective in one key area as to the relative salience of siblings and parents; i.e. data are available only for boys in all ordinal positions combined (1968, Table X.1) as to affectional ties with parents, though ordinal position-specific data (ibid, Table X.20) are available for sibling affectional ties.

In view of the postulated greater or equal salience of parents for girls, it would be essential, in any replication, to derive data (using the now demonstrably sound modification of the Bene Anthony scale) as to affectional ties in the four categories¹ for each ordinal position, for each parent and for the sibling.

The use of the Games Preference instrument seems sound as a measure of "statistical masculinity". Hartley (1964 and elsewhere) has drawn attention to some questions about whether opposite-sex choices mean the same for boys and girls. With this reservation, however, use of the G.P.T. would at least enable comparison, for girls, with Houston's data for boys.²

Control for intelligence: the fact that intelligence is demonstrably associated with sex typing (Kohlberg and Zigler, 1966; Houston, 1968) makes it essential that an intelligence measure be taken.

Age specific data: a comparative study to Houston's, with girls, seems

¹ i.e. positive and negative, incoming and outgoing.

² The use of this instrument seems preferable if only to enable comparisons. Intercorrelations between various M/F scales are low (e.g. Dubois, 1960, 236). Several researchers have recently pleaded for some end to the assessment of M/F with new measures, preventing comparisons.

sound on its choice of the two lower levels - on the basis of theory and research. There is clearly a problem at his Level III: age 11. Here, the probable effects in at least some girls in any sample, of pre-pubertal or pubertal changes would make it essential to control for this factor. No ready solution appears except to exclude from the data any girls who have reached menarche.

Control for socio-economic status: since much data points to greater sex differentiation in working-class families, this factor would need quite specific control.

A comparative replication of Houston's data, then, would enable certain hypotheses to be tested. Stated generally, some are:

1. Parents retain greater salience (relative to siblings) for longer with girls than they do with boys.
2. Ambivalence toward opposite sex siblings (i.e. higher negative outgoing responses) should correlate with masculinity more specifically in girls. The "social-bias" theory suggests this.
3. Femininity in girls should relate more highly to positive outgoing and incoming feelings toward father than in boys, and probably show an increase over the age levels.
4. At age 11, the salience of parents relative to siblings should drop for girls. The constraint theory would predict that perceived negative incoming (and possibly negative outgoing) responses should increase for mothers certainly; possibly for fathers.
5. The "social bias" theory should predict that the salience of opposite sex siblings should be higher in girls than in boys, and that this

should increase. Therefore, the opposite-sex/same-sex sibling comparison for boys in Houston's boys should not be confirmed with girls.

Risk-taking and masculinity: a significant possibility for educationalists

One possibility (not known to have been elsewhere suggested) is that if sex differentials in risk-taking exist, these may well apply to multiple-choice test situations. Some possible applications of this might be:

Multiple choice with penalisation: Some multiple choice tests penalise the wrong response; i.e. those sitting get no mark for a nil-response, but a mark is subtracted for a wrong response. This is, in effect, a risk-taking test. It could reasonably be predicted that males should show a differentially greater willingness to risk being wrong. It seems probable that where a female (being unsure) would leave the response blank, a male might guess. Where the guess was correct, there is no way of knowing whether this was sound knowledge or guess; but it could be predicted that the ratio of wrong to blank responses ought to be higher in males on such tests.

Multiple choice without penalisation: Risk taking theory would predict that this differential pattern should show more clearly on penalising than on non-penalising tests. A simple comparative study, using university class students, would be possible.

Sibling effects: Assimilation theory might, at the same time, be tested. That is, if the students were asked to indicate their ordinal position, it could be hypothesized that significant within-sex variation on risk-taking

may be associated with ordinal position.¹ While the statistical analysis of these hypotheses could present complications, they seem feasible.

Intelligence tests as multiple-choice risk-taking

It is noteworthy that the most usual intelligence test used with New Zealand children, the Otis, is in effect a non-penalising multiple choice test. It may be that the non-penalising nature of the test makes it not a "risk-taking" experiment. But the theory nevertheless suggests that it may be differentially responded to. Again, it could be hypothesized that on the Otis test, the ratio of wrong to blank responses ought to be higher in boys than in girls. If a preliminary study found this to be so, it is also possible to predict that significant correlation with ordinal position in the case of girls but possibly not of boys, should be demonstrated.

"The typical New Zealand girl"

Houston's study (1966) on the social expectations for the typical New Zealand boy could provide a basis for a study operationalising the proposal made in Chapter Thirteen, that constraint increasingly circumscribes the female role. That is, a comparable study of social role expectancies should demonstrate that there is a wider range of responses for the "typical girl" than for the "typical boy"; but a narrower range of responses for the "typical woman" than for the "typical girl". Nothing solid exists on this subject, on which so many generalisations have been made.

¹ That is, the presence of an opposite-sex sibling could be hypothesized to increase risk-taking: it is likely that (if the hypothesis held) on assimilation theory the rank order demonstrated would be MF2, F1M, FF2 and PP2 for those from two-child families.

APPENDIX ONE

ON MOTIVATION: A FULLER STATEMENT

This Appendix comments on general theories of motivation, because (it is argued) classical theories of "identification" have depended basically upon one particular kind of theory - and that, one which has limitations. The consequence of accepting theories of "intrinsic" motivation is that we need to review theories of identification.

Underwood has said: "Just how learning and motivation interact is a complex problem, which has tried many theories for years" (1964, 145).

It is certain that learning may always take place without, as he goes on to put it, "intent to learn", and all theories of identification are in effect based on such "incidental learning". They also assume that motivation is what keeps people learning, whether it is involved in the "formation of associations per se" (ibid) or not. Motivation is also - both generally and in the particular context of identification - seen to be that which maintains "the subject in a situation so that factors which are responsible for learning can operate". (ibid, 146).

In the Freudian view, identification was founded on instinctive behaviour, as was all human activity: "the instincts are the ultimate source of all human activity" (cited: Foder and Gaynor, 84). However, Freud's definitions of instinct were not consistent. He himself admitted to "long vacillations on the point" (ibid, 85) which related rather to the content than to the process. Therefore his statement about the

¹ In this argument, even when not directly quoted, the argument relies chiefly on Hill (1964), Hilgard (1964) and Hunt (1964). The comments and parallels with identification are my own. A new book (Rowland and McGuire, 1971) not available at the time of writing promises to cover the general theoretical framework here reviewed.

process involved may be taken as typical:

An instinct differs from a stimulus in that it arises from sources of stimulation within the body, operates as a constant force, and is such that the subject cannot escape from it by flight as he can from an external stimulus. An instinct may be described as having a source, an object and an aim. The source is the state of excitation within the body, and its aim is to remove that excitation... (Freud, 1933, 125). (my emphasis)

The closeness of this to Hullian S-R theory will later be noted; it is essentially a hedonist theory, as the underlined phrase makes clear.¹ This is true even though S-R theory has become (as Mowrer has said) more liberalised; although "the relevance of cognitive as well as affective processes is being recognised in systematic theory..." and though it now admits "concepts such as fear and hope which pristine behaviourism would not countenance..." (Mowrer, 1960, 252). These remain primarily drive-reduction theories, in which the key element is, to use Whiting's term, "response-selection" (Whiting, 1962, 62).

The same criticism cannot be directly made of the connectionist S-R school deriving from Watson or Pavlov, admittedly, and this point will be taken later. But drive-reduction theories have been dominant; and in them, as Sears and Hilgard have pointed out, the dominant implication has been "the negative one of something to be escaped" not the "positive one of something to be sought..." (Sears and Hilgard, 1964, 183). The closeness to the Freudian statement above is clear; indeed, in his

¹ Mowrer originally (1950, 276) classed all such theories as "hedonist"; his later book (1960, 276) distinguishes between hedonism, which implies the pursuit of pleasure as well as the avoidance of punishment or tension, and homeostasis. Mowrer says that "hedonism is the handmaiden of homeostasis", which he therefore takes to be more basic. The terminology, however, seems better in his original formulation. If anything, Hunt (below) implies that homeostasis is the handmaiden of hedonism.

important article White (1959, 297) sees Hull and Freud as closely parallel.

It is half a century since the "passive" type of connectionist theory was contrasted with Dewey's "active" theory, but although mediated experiences were offered to remove the objection to this passivity (Hill, 1964, 11) the criticism has been renewed.¹ Drive-reduction theory has incorporated Dewey's accent on purpose and problem-solving or goal-directed behaviour (as in Mowrer himself, 1950, 222). Some theories of identification have, in fact, been based directly upon such modified theories as Mowrer's (e.g. Lazowick, 1955).

Connectionist theories have continued to exist. Rigid connectionism (as in Holt² or Guthrie) may be less frequently postulated, but some of its concepts are incorporated into general statements in other aspects based upon the law of effect: as for example when Kagan's identification theory (Kagan, 1958) uses Guthrie's law of frequency and strength of stimulus; or Maccoby (1959) makes use of Holt's circular reflex and Guthrie's law of recency. In fact, although connectionism and the Thorndike-Hull approach are contrasted schools, it is more typical to find a dualistic approach, as in Mowrer himself.

Moreover, S-R theory has taken over other elements, for example, from Gestalt - particularly as in Tolman (Whiting, 1962, 62; Hilgard, 1964, 55). It is from this modified source that Sears presumably derives the "action sequences" in his theory of identification (Sears, 1957) discussed above; and more significantly, the growing cognitive element.

¹ Mowrer (1960) accuses Harlow's criticism (which we shall later discuss) of being only an updated version of Dewey's.

² It is interesting that though Holt propounded a connectionist rather than a drive-reduction theory, he was one of the earlier American supporters of Freud.

As Hilgard puts it:

...perhaps if one looked one would find that beneath some of the terms like "display", "feedback" and "structure" there lie hidden the basic notions of "insight" (Hilgard, 1964, 58).

Kagan's "perceived similarities" which were examined, assume such "feedback".

Taken from Gestalt, too, is the common notion that infant behaviour begins in an undifferentiated form and moves toward differentiation. In theories of identification, this element is implicit in Sears (1957) and explicit in Bronson's distinction between "infantile" and "ego-identification" (Bronson, 1959) which claims also to be psychoanalytic. Gestalt has contributed more typically in the context of motivation when notions of "dissonance" are introduced (as in Rau, 1960). As Hilgard says (1964, 76) dissonance in this form is an updating of Lewin's "level of aspiration".

Explanations of motive - both generally, and in identification theories - may be typically couched, then, in conventional S-R language but include many borrowed elements. Tolman has certainly influenced all role-based S-R formulations, and it becomes clear when Whiting, for example, talks of "cognitive maps" (Whiting, 1960) or Sears of "action sequences" (Sears, 1957).

Tolman has contributed also many implicitly accepted notions of latent learning (critical in identification theories), an element Hull took over firmly so that (as Hilgard puts it) no-one now supposes that "only movements which occur could be reinforced". (Hilgard, 1964, 75).

Freud and S-R, then, march hand in hand. Bronfenbrenner notes that

...what Sears has done ingeniously is to restate in the language of learning theory Freud's theory of anaclitic identification (1960, 28)

There is, in fact, a Freudian "learning theory", most obviously when this theory is based on drive-reduction.

Reactive theory

Freudian and S-R drive reduction theory both assume the motivational processes involved to be reactive, and relatively mechanistic; or more precisely perhaps, have a preference for explanation in these terms. When modern behaviourism leans heavily on anxiety (as in Nowrer, 1960) it sounds heavily Freudian, and many behaviourists from Miller and Dollard (1940) have tackled restatements of Freudian concepts.¹ Freud himself, of course, did use words like "reinforcement" (see Bronfenbrenner, 1960, 16); but it is chiefly his fundamental notion of instinct as working in a "drive-reduction" fashion which make him congenial to the behaviourists.

Almost alone, then, in being apart from this alliance of S-R with Freud is Skinner. But it is difficult to see an approach which rejects intervening variables being applied to developmental theory. It may be interesting, though, to note in excluding the Skinnerian approach from this present analysis, that Skinner does admit behaviour can be reinforced when no organic needs are involved (see White, 1959, 316); something like a motor urge is accepted. Its difficulty is that it discusses selectivity only passively as the basis for operant conditioning.

¹ White (1959) draws the links and parallels between Freud and behaviourism much more fully, especially with Hull.

The origin of motives

For most conventional S-R formulations, motivation therefore appears to originate in homeostatic drives however it later becomes transformed. In this sense, it remains close to Freud. But Freud himself (in his speculative fashion) can be said to have contributed to the notion that some motivation for behaviour originated other than in his more usually mentioned instincts.

Although Freud is usually taken to have developed finally the dualistic Eros/Thanatos theory (the latter being clearly the ultimate in drive-reduction) he said late in his life:

It seems as though an instinct of the one sort can scarcely ever operate in isolation... Thus for example the...instinct of love, when it is directed toward an object, stands in need of some contribution from the instinct of mastery if it is in any way to possess that object.
(My emphasis) ¹

Elsewhere he speaks of

aim-inhibited instincts which proceed from familiar sources and have unambiguous aims but come to a stop on their way to satisfaction with the result that a permanent object cathexis and an enduring driving force come into being.
(1933, 126)

Anaclitic identification rests on this concept.

And again,

this peculiarity (of inflexibility) does not apply to all the ego-instincts but only to hunger and thirst (ibid, 127; my emphasis)

¹ In "Why War", Collected Papers, No.5. Hogarth, 1950; here cited from "Power and support structure of the family in relation to socialisation", in Jnl. Marriage and Family, 1964, 26; 319-320.

This latter statement appears parallel to the "drive-priority" of learning theory; that preceding it looks like primary-secondary drive theory at first glance. But does Freud imply something more?

Such speculations, in Freud, nevertheless do not represent the major burden of his motivational theory, but minor divergences from it.

More typical of his general position is:

What do the instincts (of hunger and love) want? Satisfaction, that is, the establishment of situations in which the bodily needs can be extinguished. The lowering of the tension is felt by our organ of consciousness as pleasure-able; an increase of it is soon felt as un-pleasure...in this connexion we speak of the domination of the pleasure principle. (1926, 110-111)

As Hunt notes (1960, 490) the term "drive" appears to have passed over, via Woodworth, as a transliteration of Freud's "Triebe", very soon after Freud himself worked it out in this type of formulation. Therefore Freud is making it clear, to use Hunt's paraphrase, that

the organism would be inactive unless driven by either inner or outer stimuli (1960, 490)

For Freud, this drive reduction was a consequence of the nature of the organism:

the nervous system is an apparatus having the function of abolishing stimuli which reach it or of reducing excitation to the lowest possible level; an apparatus which would even, if this were feasible, maintain itself in an altogether unstimulated condition. (1925, 63)

The contrast between this, and more recent neurological statements - particularly in Hebb - will later become obvious.

For Freud then, the origin of motivation lay in such a basis, whatever

habits were later added to it.

In S-R theory, of course, the "habit" has been worked out in massive detail by comparison, especially in one or other variant of conditioning; indeed insofar as behaviourism is "learning theory", habit is central to it. It is therefore not unfair to say that where, to use Hunt's objection,

animals and people are sometimes active when
it is hard to see how either homeostatic drive
or painful external stimulation could be
operative (1960, 491)

S-R theory would suppose this behaviour to be the consequence of weak stimuli present aroused by association with past needs, that is, to be motivated by habit.

Drive-reduction theory, then, offers as an explanation of the origin of motivation a combination of drive and habit. This is "extrinsic" motivation, in the sense that it is outside the instrumental behaviour or the cognitive or informational processes involved.

And though the convergence of behaviourism and Freudian theory takes place at many points, some of the most typical lie in restatements of identification using the above basis assumptions.

There is, then, a "tradition" almost in S-R theory to accommodate; the question is whether it has done more than add to itself without altering its basic structure; and whether more recent criticism relates to this basic structure.

A reconsideration of basic theory

Hill, in an understatement, notes that there has been "a renewed

interest" in other ideas, which were foreshadowed some time before. It was Guthrie who originally talked of "movement-induced stimulation" as basic; and developed the idea that stimulus reception could be modified by changes in receptor orientation, an idea akin to Tolman's "search for the stimulus". S-R theory, then, has also become recently more interested in cognition, and has revised its approach to accommodate concepts formerly almost antithetical to it. Sheffield, for example, was some years ago interested in the possibility that the consummatory response was a better predictor of learning than drive-reduction (Hill, 42-43); such revisions are, in Mowrer's terms, hedonist rather than strictly homeostatic. "Mediational" or, in Wykoff's term, "observing" responses are, moreover, clearly cognitive. Therefore more recent theories of identification which are basically behaviouristic are able to incorporate mediating responses - as in Mowrer (1950), Lazovick (1953), Courtenay (1950) and Whiting (1960).

But it is still not unfair to such theories to argue that in basis the process of identification is seen to originate in one way or another with drive (or need) reduction.

Although S-R formulations have admitted the role of experience, they have not accorded it the centrality which more recent and more specifically cognitive theories have done.

Critics of extrinsic motivation

Drive-theory is criticised on several grounds: that the whole "drive" theory may be outmoded; that the interpretation of drives has been too limited as to the number of primary drives with which it has been concerned;

that it is defective in assuming basically that an individual is inert or inactive unless activated by a drive or habit; that it cannot account adequately for cognitive development; that the definition of the "drive" has become somewhat less than specific.

Not all the critics, then, are making the same point; if they attack the same fault they do not always agree on the solution. But there are some common elements.

Hilgard, as long ago as 1943, said that the then contemporary theories were inadequate especially "in matters of the motivational control of learning"; and that argument derived from laboratory work with animals neglected the fact that humans probably learn differently (1948, 329). Lloyd Morgan's canon, he seems to suggest, has backfired.

Hilgard made explicit criticisms which have since become more frequent; that

perceptual learning...is not inferred to be a merely passive process based on exposure to stimuli

and, more basic to our general line of argument throughout this present study

if some such motive as curiosity is allowed... then the goal of perception is to achieve clarity (332) ...Thingness is a goal of mental organisation (333). (my emphasis)

There is not much between this and Piaget's notion that "capacity is its own motivation". Therefore, there is respectable precedent for this present study to ask, as Hilgard did in 1948, whether we need to retain the S-R formulation "patched up as it is with drives, sets, tensions, secondary reinforcing agents..." (1948, 349) and to assert

that a theory of sex role learning in wholly non-S-R terms may have something to recommend it.

Since Hilgard, there have been many critics; here, only those points will be adduced which will support the case for reconsidering sex role learning.

Harlow (1953) placed great stress on the specific human quality in the process, and argues that his is a fundamental not peripheral criticism. Because drive states are only cyclic and intermittent, he asserts, studies indicate that derived and second-order responses rapidly extinguish when the primary rewards are withheld; and S-R theory has not demonstrated "functional autonomy of motives" to bridge the gap. More critically, strong drive states are in fact inimical to learning, and may inversely relate to it. He goes on to ask:

Can anyone seriously believe that an insatiable curiosity-investigatory motivation of the child is a second-order or derived drive conditioned upon hunger or sex or any other internal drive? The S-R theorist and the Freudian psychoanalyst imply that such behaviours are based on primary drives. (1953)

Stimulus selection

Berlyne (1960) says that perceptual and intellectual activities are characterised by stimulus selection (rather than response selection) and the need to reduce "conflict". He notes that even if the termination of drives is rewarding, their induction may not be punishing (as conventional S-R formulations assume). Berlyne does not agree that what he calls "epistemic" or knowledge-seeking behaviour is accounted for by the past pattern of rewards, because (he argues) it does not account for the

motivating strength of unfamiliarity when it lies within the optimal range. Berlyne is obviously close to Hebb in stressing an optimal range of stimulation, and the importance of such factors as novelty or unfamiliarity.

Getzels (1964, 254; 256) echoes many of these arguments.

Hunt provides summaries of the general case for "intrinsic motivation" (1960, 1962, 1965), as a more typical form of human motivation - agreeing with Harlow, and implicitly with Maslow's concept of the pre-potent need in saying that the explanations for human learning do not lie within the intermittent and a-typical homeostatic crises. Because Hunt specifically applies his criticism to mother-child relationships, so often basic to identification theory, it is worth noting some in more detail. He notes that Freud proposed that hunger was basic; but also that pleasure-seeking (and therefore maternal attachment) lay in stimulation of the oral erogenous zone. Harlow's work clearly supports Freud's extended rather than his basic theory:

These data make it obvious that contact-comfort is a variable of overwhelming importance in the development of affectional responses whereas lactation is a variable of negligible importance (1958, 676)

S-R theory, of course, could also accommodate by merely adding to its list of primary drives. But, as in the open-field tests, Harlow also demonstrates that strong drives inhibit learning.

Hunt argues, as Hebb does, that incongruity-dissonance is a more probable and economic explanation for motivation - and this is, essentially, cognitive motivation. He adduces Festinger and Rogers in support. In summary, Hunt argues that the

incongruity-dissonance principle makes both motivation and reinforcement intrinsic to the organism's relation to its environment...to the organism's information processing.

While Hill (1964, 48) suggests that the S-R list of drives has been too restrictive, and that there are other innate tendencies that fit "more or less into the usual meaning of a drive" (my emphasis) Hilgard was right in asking how S-R theory, which owed its early dominance to the conceptual clarity of its terms, would survive the admission of "drives" of such a range. The more recent addition of exploratory, investigatory, motor or activity drives, then, may not much assist the case; or do so only at great cost. Where the paradigm deprivation-satiation-reinforcement does not apply, S-R theory becomes shakier. White (1959, 301) doubts it altogether; Hayes (1962) calls them "experience-producing drives" but wants to keep drive to describe behaviour not produced by a deficit - the opposite of the conventional definition.

There is no doubt about the behaviour involved (e.g. White, S.H. 1963, 204-5) as it applies to children. What is in doubt, throughout, is the virtue of retaining S-R terminology at all in this context. Once discrimination of stimuli is admitted the theory becomes basically cognitive (Hilgard, 1948, 348). The upshot of the endless accommodation of S-R formulations has been, in sum, as Kessen put it after a symposium on reinforcement effects

In reviewing the papers presented, I am struck with the fact that...they seem not so much discussions of reinforcement effects as they seem flights from reinforcement... To put it another way, when we speak of reinforcement today we do not discuss a set of facts, we discuss a set of theories (1964, 258).

It is possible to speak of "telic" behaviour, as Hunt does (1961, 261) but not easily within the S-R framework.

Are drives necessary?

White doubts it.

If we admit exploration to the category of drive we are thus committing ourselves to believe that drives need no extra-neural sources in tissue deficits or visceral tensions, that they are not necessarily activated by strong or persistent stimuli, that they do not require consummatory responses, and that drive increase can sometimes be a mechanism of reinforcement (1959, 302)

Other than to account for a basic philosophical notion that all behaviour is caused, are drives needed? Is the argument more than a 20th century equivalent of the medieval "Prime Mover"? Is it more parsimonious to drop the "drive" in at least the context of "epistemic behaviour"?

White offers, as an alternative, a "different idea of motivation"; that is, he does not wish to adduce new and acceptable primary drives from which secondary learning operates (1959, 312) but puts in its place the concept of competence.

Competence

Tracing his argument from Freud through Hartman and Fenichel, White finds many parallel formulations: in Allport's functional autonomy; in Kardiner's "development of the effective ego" where "it is the successful and gratifying experiences not the frustrations which lead to increasingly integrated action and the discrimination of self from outer

world". The relevance of this line of reasoning to a theory of sex role learning is clear.

Such "stimulus preserving", stimulus-discriminating and stimulus-seeking behaviours presuppose an active rather than passive organism.

Moreover,

competence-motivation is directive, selective and persistent and... is continued not because it serves primary drives...but because it satisfies an intrinsic need to deal with the environment. (ibid, 318)

This motivational aspect of competence White calls "effectance", which

regularly occupies the spare waking time between episodes of homeostatic crisis (ibid)

This motivation (paralleling Piaget now) White says begins as undifferentiated, and leads to "cognizance, mastery, construction and achievement". (ibid, 323). He parallels Piaget again in saying that

The playing child slowly finds out the relationships between what he does and what he experiences. He finds out, for example, how hard he must push what in order to produce what effect. Here, S-R theory is particularly misleading. It would come nearer the truth to say that the child is learning R-S connections - the effects that are likely to follow upon his own behaviour. (ibid, 325) (my emphasis)

This should be compared with Berlyne's comment (1960, 8-9) that conventional S-R theory has concentrated only on that limited aspect of behaviour which is concerned with response selection rather than stimulus selection.

Relationship to the argument in this study

The foregoing summary (necessarily almost impressionistic) leads to

this point: that a cognitive developmental rather than a conventional S-R theory will be a more fruitful and parsimonious way of tackling any human behaviour, including sex role learning.

Counter-attack

It would be unfair not to note that this whole revision of motivational theory has been attacked. But, as in Mowrer (1960) attack is chiefly directed against the multiplication or modification of drives; Mowrer cites Muezinger and Fletcher as arguing that motivation is "almost by definition 'negative'", and questions optimal stimulation (1960, 185-6). The most he will admit is that the homeostatic drive reduction model (which he thinks sound) suffers because "there are some facts which do not at present accord perfectly with our theory". But the cases reviewed by Atkinson (1960), Flavell (1963), Sears and Hilgard (1964) as well as those above cited go well beyond "some facts". Mowrer quotes Conant's dictum that a theory is never overthrown by facts, only by another and better theory (ibid, 211). But intrinsic or cognitive motivation appears to be acceptable as an alternate theory of human behaviour.

Because Kohlberg's theory is essentially Piagetian, it is well to mention briefly in this section on motivation some relationship of motivation to Piagetian theory.

Piaget and motivation

This may seem a contradiction in terms; a motive is "that which moves something", implying by definition reaction on the part of an otherwise immobile object. Piaget, on the other hand,

stresses the idea that learning is an active process on the part of the organism... (Kessen and Kuhlman, 1962, 132)

Can the Piagetian approach also be accommodated within S-R theory? The 1960 Dedham conference (Kessen and Kuhlman, above) varied in its answers. At the least it would require, as Berlyne then put it, "some important innovations" and he wished to recognise "new sources of motivation and reward..." (ibid, 127).¹ But the major difference, perhaps, is that for Piaget, the issue is process - that is, his is a developmental theory in which neither maturation nor learning is sufficient to account for the process. For him, equilibration is a

process, continuously operating in all interchanges between the growing subject and his environment (which) is the propellant for change and transition. (Flavell, 1963, 238; my emphasis)

Differentiation seems particularly difficult to assimilate into the S-R framework.

In fact, Piaget implies motive factors which

are partly self maintaining through neural circuits...tend to increase the organism's general activity...evoke specific forms of behaviour not strongly controlled by the environment, and prime or prepare consummatory responses which will occur when adequate stimulation is found.

as White puts the general revised basis for intrinsic motivation (1959, 304).

It is sometimes said that Piaget's is, as Anthony put it, "a psychology without affect". Woolf expands this:

¹ The discussion, especially Stevenson's paper, made the difficulties very clear; Stevenson in preferring (ibid, 134) the solipsistic notion that a stimulus is to be defined as what is taken in by the organism. Watson would have spun...

(Piaget) does not include drive-determined and affective behaviour partly because (he) was not interested in these aspects of development. He did not study them because he assumed that they have no bearing on the child's permanent assessment of and internal representation of the adult world... (Woolf, 1960, 170)

This is not quite fair. It is true that, as Woolf says, Piaget

selected only those periods when the child performed at his optimum because organic tension was not interfering with his adaptive processes... (ibid)

But Piaget does - if he has not given detailed argument for them - introduce the affective schemata; and Flavell argues that for Piaget, affect "does influence the selection of the reality content on which the structures rest". (Flavell, 1963, 81). It may be better to conclude as Anthony does that Piaget could "yet recast the psychology of affect". (Anthony, op cit, 268)

Piaget says, essentially, that it is of the nature of the ontogenetic relationship between child and environment that he actively seeks to understand it; that the assimilation/accommodation process creates a dynamic impellant to developmental change.¹ What motivates cognitive behaviour (which is whole-organism behaviour) is "the general motives or needs satisfied when the organism makes intellectual adaptations to reality". (Flavell, 1963, 78). "There is an intrinsic tendency to reach out into the environment again and again, and incorporate what it can". (ibid). Moreover, importantly for a later discussion of identification or modelling, in Piaget's own words:

It is necessary, if one wants to speak of an

¹ No-one seems to have pointed out the interesting parallel between Einstein's revision of Newton (which says that motion occurs because space is of this shape; and Piaget's revision of Freud which says that motives exist because the organism is of this nature.

instinctive tendency (to imitate) to have recourse to a still more general need, the need to reproduce interesting results or experiences. The tendency to imitate thus has its source in the mechanism of assimilation itself. (cited Flavell, op cit, 79)

For Piaget, affective and intellectual life are "interdependent"

...affective life is adaptation (which) implies continual assimilation of present situations to earlier ones (giving) rise to affective schemata or relatively stable modes of feeling or reacting (Piaget, 1951, 205-6)

But perhaps the whole affect - intellect distinction may suffer if the outcome is, as Anthony suggests, a new look at affect. Toynbee long ago noted that our language structure strongly conduces thinking in polar opposites - good and bad, heaven and earth, and so on. Of intellect and affect, Rokeach has said:

The traditional distinction between what is cognitive and what is affective may be a convenient one but is not a necessary one (Rokeach, 1960, 400).

Other lines of theory, partly similar to Piaget, suggest the same possibility. "Disequilibrium" has presumably something in common with Festinger's dissonance in which a difference between the perception of a situation and a belief about it can "act like a drive"; with Abelson's "cognitive imbalance"; with Berlyne's "conflict"; with Hebb's "dissonance". In each it is the process as a whole which is important. White notes this:

I propose instead that the real point is the transaction as a whole. If the behaviour gives satisfaction, this satisfaction is not associated with a particular moment in the cycle (White, 1959, 321).

It is therefore possible - and probably more parsimonious - to move away from the reductionist or atomistic explanation of S-R theory.¹

¹ Where definitions conflict: Mowrer talks of "a response within the central nervous system" (1960, 281) meaning what Stevenson (1962, 133) calls a stimulus; Mowrer quotes a student who said: "I never know in a behaviour sequence where the drive function ends and the reward function begins (op cit, 265).

BIBLIOGRAPHY

BIBLIOGRAPHY

BIBLIOGRAPHY

- Ames L.B. and Ilg F.L. (1964): Sex differences in test performances of matched girl-boy pairs in the five to nine year old range. J.Genet.Psychol. 104, 25-34.
- Anderson J.E. (1960): The prediction of adjustment over time. In Iscoe I. and Stevenson H.W. (1960).
- Anderson J.E. (1963): Personality organisation in children. In Dennis W. (1963)
- Anderson C.C. (1962): A developmental study of dogmatism during adolescence with reference to sex differences. J. Abn. Soc.Psychol. 65, 132-135.
- Angrilli A.F. (1960): The psychosexual identification of pre-school boys. J.Genet.Psychol. 97, 329-340.
- Annual Review of Psychology: 1960, 1961, 1964, 1970.
- Anshen R.N. (1949): The Family: Its Function and Destiny. Harper and Brothers.
- Anthony E.J. (1957): The system-makers: Piaget and Freud. Brit.J. Med.Psychol. 30, 255-269.
- Assn for the Study of Childhood. (1963): Children's Thinking. The 1962-62 lectures. (Wellington).
- Ausubel D.P. (1957): Theory and Practice of child development. Grune and Stratton.
- Baldwin A.L. (1948): Socialisation and the parent-child relationship. Child Developm. 19, 127-136.
- Bandura A. and Walters R.H. (1959): Adolescent Aggression. Ronald.
- Bandura A. and Huston A.C. (1961): Identification as a process of incidental learning. J. Abn. Soc. Psychol. 63, 311-319.
- Bandura A., Ross D., and Ross S.A. (1961): Transmission of aggression through imitation of aggressive models. J. Abn. Soc. Psychol. 63, 575-582.
- Bandura A., Ross D., and Ross S.A. (1963): A comparative test of the status envy, social power and secondary reinforcement theories of social learning. J. Abn. Soc. Psychol. 67, 527-34.
- Bandura A. and Walters R.H. (1963): Social Learning and Personality Development. Holt, Rinehart, Winston.
- Barron F. (1967): Complexity-simplicity as a personality variable. In Jackson D.M. and Messnick S. (1967)
- Barry H., Bacon H.E., and Child I.L. (1962). A cross-cultural survey of some sex differences in socialisation. In Rosenblith J.E. and Allinmith W. (eds) (1962).
- Beach F.A. (1965): Sex and behaviour. Wiley.

- Bieliavskas V.J. (1965): Recent advances in the psychology of masculinity and femininity. J. Psychol. 60, 255-263.
- Boier E.G. and Ratzburg F. (1953): The parental identifications of male and female college students. J. Abn. Soc. Psychol. 48, 569-572.
- Berlyne D.E. (1960): Conflict, arousal and curiosity. McGraw Hill.
- Bieri J. (1955): Cognitive complexity-simplicity and predictive behaviour. J. Abn. Soc. Psychol. 51, 263-268.
- Bieri J. (1960): Parental identification, acceptance of authority, and within-sex differences in cognitive behaviour. J. Abn. Soc. Psychol. 60, 76-79.
- Bieri J., Lobeck R. and Galinsky M.D. (1959): A comparison of direct and fantasy measures of identification. J. Abn. Soc. Psychol. 58, 253-258.
- Bieri J. (1967): The generality of cognitive complexity in the perception of people and inkblots. In Jackson D.M. and Messick S. (1967).
- Biller H.B. and Borstelman L.J. (1967): Masculine development: an integrative overview. Merrill Palmer Quarterly. 13, 253-294.
- Biller H.B. and Weiss S.D. (1970): The father-daughter relationship and the personality development of females. J. Genet. Psychol. 116, 79-93.
- Bing E. (1963): Effect of child rearing practices on development of differential cognitive abilities. Child Developm. 43, 631-648.
- Block J. and Mitrula E. (1963): Identification, ego-control and adjustment. Child Developm. 34, 945-953.
- Dobroff A. (1960): The stages of maturation in socialised thinking and in the ego development of two groups of children. Child Developm. 31, 321-338.
- Boehm L.E. (1961): Exploring children's thinking. Elementary School Journal. 61, April.
- Boehm L.E. Independence in Swiss and American children. In Dennis W. (1963).
- Boll E.S. (1957): The role of preschool playmates - a situational approach. Child Developm. 28, 327-342.
- Borstelman L.J. (1961): Sex of experimenter and sex typed behaviour of young children. Child Developm. 32, 519-524.
- Braine M.D.S. (1962) Piagetian reasoning: a methodological critique and alternative proposals. In Kessen W. and Kuhlman G. (1962).
- Braun J.S. (1963): Relation between concept formation ability and reading achievement at three developmental levels. Child Developm. 34, 675-682.

- Brehm J.W. and Cohen A.R. (1962): Explorations in cognitive dissonance. Wiley.
- Brim O.G. Jr. (1960): Personality development as role learning, in Personality development in children. Iseco I. and Stevenson H.W. (eds) University of Texas Press.
- Brim O.G. Jr. (1958): Family structure and sex role learning by children: a further analysis of Helen Koch's data. Sociometry. 11, 1-16.
- Brim O.G. (1957): The parent child relation as a social system: parent and child roles. Child Development. 28, 343-364.
- Brim O.G. and Wheeler S. (1966): Socialisation after childhood. John Wiley and Sons.
- Bowers P. and London P. (1965): Developmental correlates of role playing ability. Child Development. 36, 499-508.
- Bronfenbrenner U. (1958): Socialisation and social class through time and space. In Readings in Social Psychology. Maccoby S., Newcomb T. and Hartley E. (eds. P400 etseq.) Henry Holt (1958).
- Bronfenbrenner U. (1960): Freudian theories of identification and their derivatives. Child Development. 31, 15-40.
- Bronfenbrenner U. (1961): Toward a theoretical model for the analysis of parent child relationships in a social context, in Glidewell J. (ed) Parental attitudes and child behaviour. Thomas, Springfield.
- Bronfenbrenner U. (1961): The changing American child: a speculative analysis. J. Social Issues. 27 (1), 6-18.
- Bronson W.C. (1959): Dimensions of ego and infantile identification. J. Pers. 27, 532-545.
- Bronson W.C., Katten E.S. and Livson, H. (1959): Patterns of authority and affection in two generations. J. Abn. Soc. Psychol. 58, 143-152.
- Brown D.G. (1956): Sex role preference in young children. Psychol. Monog. 70, 14, Whole No. 421.
- Brown D.G. (1958): Sex-role development in a changing culture. Psychol. Bull. 55, 232-242.
- Brown J.A.C. (1961): Freud and the Post Freudians. Penguin Books.
- Byrne D., London O, and Reeves K. (1963): The effects of physical attractiveness, sex and attitude similarity on interpersonal attraction. J. Pers. 36, 259-271.
- Carmichael L. (ed) (1954): Manual of Child Psychology. Wiley, N.Y. 2nd ed.

- Carson A.S. and Rabin A.I. (1960): Verbal comprehension and communication. J. Ed. Psych. 51, 47-51.
- Case D. and Collinson J.M. (1962): The development of formal thinking in verbal comprehension. Brit. J. Ed. Psychol. (32), 103-111.
- Cass L.K. (1952): An investigation of parent-child relationships in terms of awareness identification projection and control. Amer. J. Orthopsych. 22, 305-331.
- Cattell R.B. (1957): Personality and Motivation, Structure and Measurement. World Book Co.
- Cattell R.B. (1965): The scientific analysis of personality. Penguin.
- Charlesworth W.R. (1964): Investigation and maintenance of curiosity behaviour as a function of surprise versus novel and familiar stimuli. Child Developm. 35, 1169-1186.
- Clausen J.A. and Williams J.R. (1963): Sociological correlates of child behaviour, in Stevenson H.W. (ed) Child Psychology, Yearbook N.S.S.E.
- Clausen J.A. (1964): Family structure, socialisation and personality, in Hoffman and Hoffman (1964).
- Cohen A.K. (1966): Deviance and control. Prentice-Hall. (Foundations of Modern Sociology series)
- Coleman J.S. (1961): The Adolescent Society. Free Press.
- Cottrell L.S. (1947): The adjustment of the individual to his age and sex roles, in Readings in Social Psychology. Newcomb T.M. and Hartley E.L. (eds) Henry Holt.
- Cox F.N. (1962): An assessment of children's attitudes towards parent figures. Child Developm. 33, 821-830.
- Crandall V.J. (1963): Achievement, in Stevenson H.W. (ed) Child Psychology, Yearbook N.S.S.E.
- Cronbach L.J. (1955): Processes affecting scores on "understanding of others" and "assumed similarity". Psychol. Bull. 52, 177-193.
- D'Andrade R.G. (1967): Sex differences and cultural institutions, in Maccoby E. (ed), 1967.
- Dansiger, K. (1957): The child's understanding of kinship terms. J. Genet. Psychol. 91, 213-232.
- De Lucia L.A. (1963): The toy preference test: a measure of sex role identification. Child Developm. 34, 107-117.

- Dennis W. (1963): Readings in child Psychology. Prentice Hall, 2nd ed.
- Deutch Helen (1945): The Psychology of Women (2 vols). Grune and Stratton.
- Dienes Z.P. (1959): Concept formation and personality. Leicester U.P.
- Donaldson M. (1963): A study of children's thinking. Tavistock.
- Dornbusch S.M. (1967): Afterword, in Maccoby E.E. (ed), (1967).
- Douvan E. (1960): Sex differences in adolescent character development. Merrill Palmer Quarterly, 6, 4, 203-211.
- Douvan E. and Adelson J. (1966): The Adolescent Experience. Wiley.
- Dubin R. and Dubin E.R. (1965): Children's social perceptions - a review of research. Child Develcom. 6, 808-838.
- DuBois P.H. (1960): Individual Differences, in Annual Review of Psychology.
- Durkin D. (1960): Sex differences in children's concepts of justice. Child Develcom. 31, 361-368.
- Ehrhardt A.A., Greenburg N. and Money J. (1970): Female gender identity and absence of fetal gonadal hormones: Turner's syndrome. Johns Hopkins Med. Jnl. 5, 237-248.
- Elkind D. (1962): Children's conceptions of brother and sister. J. Genet. Psychol. 100, 129-136.
- Elkind D. and Scott L. (1962): Studies in perceptual development. Child Develcom. 33, 619-630.
- Elliott R. (1961): Interrrelationships among measures of field dependence, anxiety and personality traits. J. Abn. Soc. Psychol. 63, 1, 27-36.
- Emmerich W. (1959): Parental identification in young children. Genet. Psychol. Monog. 60, 257-308.
- Emmerich W. (1959): Young children's discrimination of parent and child roles. Child Develcom. 30, 403-419.
- Emmerich W. (1961): Family role concepts of children ages six to ten. Child Develcom. 32, 609-624.

- Emmerich W. (1969): The parental role: a functional-cognitive approach. Soc. Child Devel. Monog. 34. 8.
- Epstein R. and Liverant S. (1963): Verbal conditioning and sex role identification in children. Child Develom. 99-106.
- Erikson E.H. (1963): Sex differences in the play configurations of American pre-adolescents. In Childhood in contemporary cultures. Mead M. and Wolfenstein M. (eds) Phoenix Books, Chicago. P. 324-341.
- Erikson E. (1965): Childhood and Society. Penguin.
- Ervin S.M. and Foster G. (1960-61): The development of meaning in children's descriptive terms. J. Abn. Soc. Psychol. 271-275.
- Ervin S.M. and Miller W.R. (1963): Language Development, in Stevenson H.W. (ed) Child Psychology, Yearbook N.S.S.E.
- Evans E.D. (ed) (1968): Children. Readings in behaviour and development. Holt, Rinehart, Winston.
- Farnsworth P.R. and McNemar Q. (1964): Development psychology, in Annual Review of Psychology. 15.
- Fauls L.B. and Smith W.D. (1955): Sex role learning of five year olds. J. Genet. Psychol. 25, 210-223.
- Feffer M.H. and Coureritch V. (1960): Cognitive aspects of role taking in children. J. Pers. 23, 383-396.
- Feshbach N.D. (1969): Sex differences in children's modes of aggressive responses toward outsiders. Merrill Palmer Quarterly. 15, 249-258.
- Festinger L. (1957): A theory of cognitive dissonance. Row, Peterson.
- Finney J.C. (1964): A factor analysis of mother child influence. J. Genet. Psychol. 70, 41-49.
- Fisher S. and Fisher R.L. (1959): A developmental analysis of some body image and body reactivity dimensions. Child Develom. 30, 389-402.
- Fisher S. (1965): Sex designations of right and left body sides and assumptions about male-female superiority. J. Pers. Soc. Psychol. 4.2, 576-580.
- Flavell J.H. (1961): The ontogenetic development of verbal communication skills. Unpublished memorandum: Dept. of Psychology, Univ. of Rochester, N.Y.
- Flavell J. (1963): The developmental psychology of Jean Piaget. Van Nostrand, Princetown.

- Fodor N. and Gaynor E. (eds) (1958): Freud, a dictionary of psychoanalysis. Premier Books, Fawcett.
- Ford G.S. and Beach F.A. (1965): Patterns of sexual behaviour. University Paperbacks. Methuen.
- Fowler H. (1965): Curiosity and Exploratory Behaviour. McMillan. Critical Issues in Psych. series.
- Freud S. (1925): Instincts and their vicissitudes, in Collected Papers, Vol. IV. Hogarth Press.
- Freud S. (1933): New introductory lectures in psychoanalysis. Hogarth.
- Freud S. (1948): Group psychology and the analysis of the ego. Hogarth.
- Freud S. (1949): An outline of psychoanalysis. Hogarth.
- Freud S. (1950): The Ego and the Id. Hogarth Press, London.
- Freud S. (1962): Two short accounts of psychoanalysis. Penguin Books.
- Freyberg P.S. (1962): The development of concepts, in Children's Thinking. Assoc. Study Childhood, Wellington, 1962.
- Friedan B. (1963): The feminine mystique. Penguin.
- Gage N.L. and Cronbach L.J. (1955): Conceptual and methodological problems in interpersonal perception. Psychol. Rev. 62, 411-422.
- Gardner L.P. (1947): An analysis of children's attitudes towards father. J. Genet. Psychol. LXX, March, 1947, 3-28.
- Gardner R.W. (1953): Cognitive styles in categorising behaviour. J. Pers. 22, 214-233.
- Gardner R.W., Holzman P.S., Klein G.S., Linton H.B. and Spence D.P. (1959): Cognitive control: a study of individual consistencies in behaviour. Psychol. Issues, 1, No. 4.
- Garrett D. (1970): Issues in Parent Education. Continuing Education in New Zealand, Vol. 3, No. 1, May.
- Getzels J.W. (1964): Creative thinking, problem solving and instruction, in Yearbook of the N.S.S.E. (1) Theories of Learning and Instruction. Hilgard E.W. (ed)
- Gibson E.J. (1963): Perceptual development, in Stevenson H.W. (ed) Child Psychology, Yearbook N.S.S.E.

- Glidewell J. (ed) (1961): Parental attitudes and child behavior. Thomas.
- Goffman E. (1963): Behaviour in public places. Free Press.
- Goffman E. (1969): The Presentation of the Self in Everyday Life. Allan Lane.
- Goffman E. (1970): Where the action is. Allan Lane.
- Goldberg S. and Lewis M. (1969): Play behaviour in the year old infant. Early sex differences. Child Developm. 40.1 21-32.
- Gollin E.S. (1958): Organisation characteristics of social judgements; a developmental investigation. J. Pers. 26, 139-156.
- Goodenough E.W. (1957): Interest in persons as an aspect of sex differences on the early years. Genet. Psychol. Monog. 55, 287-323.
- Goureritch V. and Peffer M.H. (1962): A study of motivational development. J. Genet. Psychol. 100, 361-375.
- Gray P.H. (1958): Theory and evidence of imprinting in humans. J. Psychol. 46, 155-177.
- Gray S.W. and Klaus R. (1956): The measurement of parental identification. Genet. Psychol. Monog. 54, 87-114.
- Gray S.W. (1957): Masculinity/femininity in relation to anxiety and social acceptance. Child Developm. 28, 3, 203-214.
- Green A.W. (1946): The middle class male child and neurosis. Amer. Sociol. Rev. 11, 31-41.
- Guilford J.P. (1959): Personality. McGraw Hill.
- Hall M. and Keith R.A. (1964): Sex role preference among children of upper and lower social class. J. Soc. Psychol. 62, 101-110.
- Harlow H.F. (1953): Mice, men, monkeys and motives. Psychol. Rev. 60, 23-32.
- Harlow H.F. (1954): Motivational forces underlying learning, in Learning Theory, Personality Theory and Clinical Research: the Kentucky symposium. Wiley.
- Harlow H.F. (1953): The nature of love. Amer. Psychologist, 13.

- Harper R.J., Anderson G.C., Christensen C.M., Hinka S.M. (1964): The Cognitive Process. Prentice Hall.
- Hartley R.E. (1959): Sex role pressures and the socialisation of the male child. Psychol. Rep. 5, 457-468.
- Hartley R.E. (1959-60) (b): Children's concepts of male and female roles. Merrill Palmer Quarterly, 6, 83-91.
- Hartley R.E. (1959-60) (a): Some implications of current changes in sex role patterns. Merrill Palmer Quarterly, 6, 153-164.
- Hartley R.E. (1961) (a): Current patterns in sex roles: children's perspectives. J. Nat. Assn. Womens Deans Counsellors, Vol. 25, 1, 3-13.
- Hartley R.E. (1961) (b): Sex roles and urban youth. Bulletin Family Development, 2.1, 1-12.
- Hartley R.E., Hardesty F.P. and Gorfain D.S. (1962): Children's perceptions and expressions of sex preference. Child Development, 33, 221-227.
- Hartley R.E. and Hardesty F.P. (1964): Children's perceptions of sex roles in childhood. J. Genet. Psychol. 105, 43-51.
- Hartley R.E. (1964) (a): Sex role development: a symposium. A developmental view of female sex role definition and identification. Merrill Palmer Quarterly 10.1, 3-16.
- Hartley R.E. and Klein A. (1959): Sex role concepts among elementary school-age girls. J. Marriage and Family Living. Feb. 59-64.
- Hartup W.W. (1962): Some correlates of parental imitation in young children. Child Development, 33, 85-96.
- Hartup W.W. (1964): Patterns of imitative behaviour in young children. Child Development, 35, 183-191.
- Hartup W.W. and Zook S.A. (1960): Sex role preferences in 3 and 4 year old children. J. Consult. Psychol. 24, 420-426.
- Harvey O.J., Hunt D.E. and Schroder H.M. (1961): Conceptual systems and personality organisation. Wiley, N.Y.
- Havighurst R.J. (1952): Developmental tasks and education. Longmans Green.
- Hayes K. (1962): Genes, Drives and Intellect. Psychol. Rep. 10, 299-342.
- Hebb, D.O. (1966): Drives and the Conceptual nervous system, in Bindra and Stewart (1966).

- Heilbrun A.B. (1964): Perceived maternal attitudes, masculinity-femininity of the maternal model, and identification as related to incipient psychopathology in adolescent girls. J. Gener. Psychol. 70, 33-40.
- Halper M.M. (1955): Learning theory and the self concept. J. Abn. Soc. Psychol. 51, 184-194.
- Hess R.D. and Torney J. (1962): Religion, age and sex in children's perceptions of family authority. Child Developm. 33, 731-739.
- Hetherington E. (1965): A developmental study of the effects of the dominant parent on sex role preference, identification and imitation in children. J. Pers. Soc. Psychol. 2, 188-194.
- Hilgard E.H. (1948): Theories of Learning. Appleton Century Crofts, N.Y.
- Hilgard E.R. (ed) (1964): Theories of Learning and Instruction. Yearbook of the N.S.S.E. (1).
- Hill D.L. and Walters R.H. (1969): Interaction of sex of subject and dependency training procedures in a social reinforcement study. Merrill Palmer Quarterly. 15, 2, 185-198.
- Hill W.F. (1960): Learning theory and the acquisition of values. Psychol. Rev. 67, 317-331.
- Hill W.F. (1964): Contemporary developments within stimulus-response learning theory, in Yearbook of the N.S.S.E. (1) Theories of Learning and Instruction, Hilgard E.R. (ed).
- Hoffman M.L. (1960): Power assertion by the parent and its impact on the child. Child Developm. 31, 129-143.
- Hoffman M.L. (1963): Child rearing practices and moral development. Child Developm. 34, 295-318.
- Hoffman M.L. (1963) (a): Personality, family structure and social class as antecedents of parental power assertion. Child Developm. 34, 869-884.
- Hoffman M.L. and Hoffman L.W. (eds) (1964): Review of Child Development Research. Russell Sage Foundation.
- Holzman P.S. and Klein G.S. (1954): Cognitive system principles of levelling and sharpening; individual differences in assimilation effects in visual time error. J. Psychol. 37, 105-122
- Houston H.S. (1966): Adult impressions of the "typical New Zealand boy". Unpublished paper, Massey University.
- Houston H.S. (1967): Familial correlates of sex role development in boys; an exploratory study. Unpublished mimeographed paper, Massey University.
- Houston H.S. (1968) (a): Sibling interaction. A paper given to the Assn. for Study of Childhood, Wellington, 1968.

- Houston H.S. (1968): An appraisal of sex role development in New Zealand boys. Unpublished Ph.D. dissertation. Massey University.
- Houston H.S. (1970): Marriage and the Family in New Zealand. Sweet and Maxwell.
- Hudson L. (1968): Contrary imaginations. Penguin.
- Hunt J. McV. (1960): Experience and the development of motivations; some re-interpretations. Child Development. 31, 489-504.
- Hunt J.M. (1961): Intelligence and experience. Ronald Press.
- Hunt J. McV. (1965): Traditional personality theory in the light of recent evidence. Amer. Scientist 53, 80-96.
- Inhelder B. and Piaget J. (1958): The growth of logical thought from childhood to adolescence. Routledge and Kegan Paul.
- Isaacs S. (1951): Intellectual Growth in Young Children, Social development in young children, Routledge and Kegan Paul, London, Abridged edition.
- Isaacs S. (1951) (a): Social development in young children. Routledge and Kegan Paul. Abridged edition 1951.
- Iscoe I. and Stevenson H.W. (eds) (1960): Personality development in children. Univ. of Texas Press.
- Jackson D.M. and Messick S. (1967): Problems in Human Assessment. McGraw Hill.
- Johnson M.M. (1963): Sex role learning in the nuclear family. Child Development. 34, 319-333.
- Johnson R.C. (1962): A study of children's moral judgements. Child Development. 33, 327-354.
- Johnson R.C., Johnson G. and Martin L. (1961): Authoritarianism, occupation and sex role differentiation of children. Child Development. 32, 271-276.
- Johnston R.C. (1962): A study of children's moral judgements. Child Development. 33, 329-354.
- Kagan J. (1956): The child's conception of the parent. J. Abn. Soc. Psychol. 53, 257-258.
- Kagan J. (1958): The concept of identification. Psychol. Rev. 65, 296-305.
- Kagan J. (1964): Acquisition and significance of sex typing and sex role identity. In Hoffman and Hoffman (1964).

- Kagan J. (1964): American longitudinal research on psychological development. Child Development. 35, 1-32.
- Kagan J. and Moss H.A. (1962): Birth to Maturity. Wiley.
- Kagan J., Hogken B. and Watson S. (1961): Child's symbolic conceptualisation of parents. Child Development. 32, 625-636.
- Kagan J. and Freeman M. (1963): Relation of childhood intelligence maternal behaviours and social class to behaviour during adolescence. Child Development. 34, 899-911.
- Kagan J., Moss H.A. and Sigel I.S. (1963): Psychological significance of styles of conceptualisation, in Basic Cognitive Processes in Children. Wright J.C. and Kagan J. (eds) Monog. Soc. Res. Child Dev. 28 (2).
- Kass N. (1964): Risk in decision making as a function of age, sex and probability preference. Child Development. 35, 577-584.
- Kerckhoff A.C. (1969): Early antecedents of role-taking and role playing. Merrill Palmer Quarterly, 15, 229-248.
- Kessen W. and Kuhlman C. (eds) (1962): Thought in the young child. Monog. Soc. Res. Child Dev., 27.2.
- Kessen W. (1964): Remarks on papers presented during symposium on reinforcement effects. J. Genet. Psychol. 104, 253-258.
- Koch H.L. (1955): The relation of certain family constellation characteristics and the attitudes of children towards adults. Child Development. 26, 1, 13-40.
- Koch H.L. (1957): The relation in young children between characteristics of their playmates and certain attributes of their siblings. Child Development. 28, 3, 175-202.
- Koch H.L. (1960): The relation of certain formal attributes of siblings to attitudes held toward each other and toward their parents. Monog. Soc. Res. Child Dev. Vol. 25, No. 4, Serial No. 78.
- Kogan N. and Wallach M.A. (1964): Risktaking. Holt Rinehart Winston.
- Kogan N. and Wallach M.A. (1967): Risk taking as a function of the situation, the person and the group, in New Directions in Psychology III. Holt Rinehart Winston.
- Kohlberg L. (1963): Moral development and identification, in Stevenson H.W. (ed), Child Psychology, Yearbook N.S.S.S. (1)
- Kohlberg L. (1964): Development of moral character and moral ideology. In Hoffman and Hoffman (1964).

- Kohlberg L. and Zigler E. (1966): The impact of cognitive maturity on the sex role attitudes in the years four to eight. Genet. Psych. Monog. 89-168.
- Kohlberg L. (1967): A cognitive developmental analysis of children's sex role concepts and attitudes, in Maccoby E. (ed), 1967.
- Kohn M.L. and Carroll E.E. (1960): Social class and the allocation of parental responsibilities. Sociometry. 26, 297-313.
- Kozarevsky M. (1950): Functional analysis of sex roles. Amer. Sociol. Rev.
- Kuhlen R.G. and Thompson G.G. (1963): Psychological Studies of Human Development. Appleton Century Crofts.
- Lansky L.M. and McKay G. (1963): Sex role preferences of kindergarten boys and girls - some contradictory results. Psychol. Rep. 10, 43-53.
- Lansky L.M. (1964): The family structure also affects the model: sex role identification in parents of preschool children. Merrill Palmer Quarterly 10.1, 39-50.
- Lasko J.K. (1954): Parental behaviour toward first and second born children. Genet. Psychol. Monog. 49, 97-137.
- Lazarus R.S. and Opton E.M. (1967): Personality - Selected readings. Penguin.
- Lazowick L.M. (1955): On the nature of identification. J. Abn. Sec. Psychol. 51, 175-183.
- Lefkowitz M.M. (1962): Some relationships between sex role preference of children and other parent and child variables. Psychol. Rep. 10, 43-53.
- Leonard M.R. (1966): Fathers and daughters. Internat. Jnl. Psychoanal. 47, 325-333.
- Levin H. and Sears R.R. (1963): Aggression in doll play, in Dennis W. (ed) (1963).
- Lewis M.M. (1962): Language, thought and personality. Harrap.
- Linton R. (1942): Age and sex categories. Amer. Sociol. Rev. 7, 589-603.
- Linton R. (1947): Concepts of role and status, in Readings in Social Psychology. Newcomb T.M. and Hartley E.L. (eds) Henry Holt, 1947.
- Lockwood D.H. and Guernsey B. (1962): Identification and empathy in relation to self dissatisfaction and adjustment. J. Abn. Sec. Psychol. 65, 343-347.
- Long B.H., Henderson E.H. and Ziller R.C. (1967): Developmental changes in the self concept during middle childhood. Merrill Palmer Quarterly. 13, 201-215.

- Lundy R.M. (1958): Self perceptions regarding masculinity, femininity and descriptions of same and opposite sex sociometric choices. Sociometry, 21, 233-246.
- Lunzer E.A. (1961): Recent studies in Britain based on the work of Jean Piaget. National foundation for Educational Research in England and Wales.
- Luria A.R. (1961): The role of speech in the regulation of normal and abnormal behaviour. Pergamon Press.
- Luria Z., Goldwasser M. and Goldwasser A. (1963): Response to transgression in stories by Israeli children. Child Development, 34, 271-280.
- Lynn D.B. (1959): A note on sex differences in masculine and feminine identification. Psychol. Rev. 66, 126-135.
- Lynn D.B. (1962): Sex role and parental identification. Child Development, 33, 555-564.
- Lynn D.B. and Sawrey W.L. (1959): The effects of father-absence on Norwegian boys and girls. J. Abn. Soc. Psychol. 59, 258-262.
- McCandless B.R., Bilous C.B. and Bennett H.L. (1961): Peer popularity and dependence on adults in preschool age socialisation. Child Development, 32, 511-518.
- McCandless B.R. (1963): Children and adolescents. Holt Rinehart.
- Maccoby E.S. and Gildos P.K. (1954): Methods of child rearing in two social classes, in Readings in child development. Martin W.E. and Stendler C.B. (eds) Harcourt Brace. 380-396.
- Maccoby E.S., Newcomb T.M. and Hartley S.L. (1958): Readings in Social Psychology. Third edition. Henry Holt.
- Maccoby E.S. (1959): Role taking in childhood and its consequences for social learning. Child Development, 30, 239-252.
- Maccoby E.S. (1961): The taking of roles in middle childhood. J. Abn. Soc. Psychol. 63, 493-504.
- Maccoby E.S. (1964): Developmental psychology, in Annual Rev. of Psychol., Vol. 15.
- Maccoby E.S. (ed) (1967): The development of sex differences. Tavistock, 1967.
- Maccoby E.S., Wilson W.C. and Burton R.V. (1958): Differential movie viewing behaviour of male and female viewers. J. Perg. 26, 259-267.
- McClelland D.C. (1951): Personality. Holt Rinehart.

- McDavid J. (1958): Personality and situational determinants of conformity. J. Abn. Soc. Psychol. 58, 241-249.
- McDonald F.J. (1964): The influence of learning theories on education, in Yearbook of the N.S.S.S. Theories of Learning and Instruction, Hilgard E.R. (ed).
- McKee J.P. and Sheriffs A.C. (1957): The differential evaluation of males and females. J. Pers. 25, 356-371.
- Martin W.E. (1960): Rediscovering the mind of the child. Merrill Palmer Quarterly, 6, 67-76.
- Martin W.E. and Stendler C.B. (1954): Readings in child development. Harcourt Brace.
- Marwell G. (1964): Problems of operational definitions of "empathy", "identification" and related concepts. J. Soc. Psychol. 63, 87-102.
- Maslow A.H. (1943): A theory of human motivation. Psychol. Rev. 50, 370-396.
- Maslow A.H. (1962): A theory of human motivation, In Krech D., Crutchfield and Ballachey S.L., Individual in society. McGraw Hill.
- Mead G.H. (1947): Language and the development of the self, in Readings in Social Psychology. Newcomb T.M. and Hartley S.L. (eds). Henry Holt, 1947.
- Mead M. (1950): Male and female. Collance.
- Medinus G.R. (1962): Objective responsibility in children; a comparison with the Piaget data. J. Const. Psychol. 101, 127-133.
- Meltzer H. (1935): Children's attitudes towards parents. Amer. Jnl. of Orthopsych., V, 244-265.
- Meltzer H. (1943): Sex differences in children's attitudes towards parents. J. Const. Psychol. LXII, 311-326.
- Mercado S.J., Guerrero R.D. and Gardner R.W. (1963): Cognitive control in children of Mexico and the United States. J. Soc. Psychol. 59, 199-208.
- Miller D.R. and Swanson G.E. (1958): The changing American parent. Wiley.
- Miller D.R. and Swanson G.E. (1960): Inner conflict and defence. Holt Rinehart.
- Miller N.S. and Dollard J. (1945): Social learning and imitation. Kegan Paul.

- Hilton G.A. (1957): The effects of sex role identification upon problem solving skills. J. Abn. Soc. Psychol. 55, 208-212.
- Hirschman P. (1965): Sex role concepts and sex typing in childhood as a function of school and home environment. Child Developm. 36, 1033-1048.
- Hirschman P. (1967): A social learning view of sex differences. In Maccoby E.E. (ed) (1967).
- Hittman L.R. and Terrell G. (1964): An experimental study of curiosity in children. Child Developm. 35, 891-896.
- Honey J. (1965): Sex research. New Developments. Holt, Rinehart and Winston.
- Honey J. (1965a): Influence of hormones on social behaviour. Ann. Roy. Medicine. 16, 67-82.
- Harris D. (1967): The Naked ape. Corgi.
- Hourer O.H. (1959): Learning Theory and Personality. Ronald.
- Hourer O.H. (1960): Learning Theory and Behaviour. Wiley.
- Murphy G. (1967): Personality: a Biosocial Approach. Harper.
- Murphy L.B. (1962): The Widening World of Childhood. Basic Books.
- Mussen P.H. (1960): Developmental psychology. In Annual Review of Psychology (1960).
- Mussen P.H. (1964): Some antecedents and consequences of masculine sex typing in adolescent boys. Psychol. Monog. 75, 2: No. 506.
- Mussen P.H. (1967) Early socialization, learning and identification. In New Directions in Psychology III. Holt, Rinehart and Winston.
- Mussen P.H. and Dietler L. (1959): Masculinity, identification, and father-son relationships. J. Abn. Soc. Psychol. 350-356.
- Mussen P.H. and Dietler L. (1960): Child rearing antecedents of masculine identification in kindergarten boys. Child Developm. 31, 39-400.
- Mussen P.H. and Rutherford E. (1963): Parent-child relations and parental personality in relation to young children's sex role preferences. Child Developm. 34, 569-607.
- Mussen P.H. (1964): Theories of Adolescence. Rand, House.
- Nash J. (1965): The father in contemporary culture and current psychological literature. Child Developm. 36, 261-297.
- Newcomb T.M. and Hartley P.L. Readings in Social Psychology. Henry Holt.
- O'Jennan A.H. (1963): The Child's Society: Clubs, Games and Clinics. Science Research Associates.
- Palermo D.C. and Epstein L.F. (1963): Research Readings in Child Psychology. Holt, Rinehart and Winston.

- Parsons T. (1954): Age and sex in the social structure of the United States. In Martin W.E. and Stenler C.B. (eds) Readings in Child Development. Harcourt Brace.
- Parsons T. (1963): The Incest Taboo in relation to social structure and the socialization of the child. In Incelso and Incelso (1963). 136-149.
- Parsons T. and Bales R.F. Family, socialization and interaction process. Free Press of Glencoe. (1955).
- Patterson G.R. and Anderson D. (1964): Peers as social reinforcers. Child Developm. 35, 954-960.
- Payne D.E. and Mussen P.H. (1956) Parents-child relations and father identification among adolescent boys. J. Am. Soc. Psychol. 52, 358-362.
- Pettigrew T.F. (1958): The measurement and correlates of category width as a cognitive variable. J. Pers. 26, 532-544.
- Piaget J. (1960): Language and Thought of the Child. Routledge Paperback.
- Piaget J. (1962): Play, Dreams and Imitation in Childhood. Routledge and Kegan Paul.
- Prentice W.H. (1964) Some cognitive aspects of motivation. In Harper et al. (1964).
- Price-Williams D.R. (1962): Abstract and concrete modes of classification in a primitive society. Brit. J. Educ. Psychol. 32, 50-61.
- Rabban H. (1950): Sex role identification in young children in two diverse social groups. 42, 81-158. Genet. Psychol. Monog.
- Rabin A.I. (1958): Kibbutz children: research findings to date. Children. 5:5, 179-184.
- Rodke H.J. (1946): The relation of parental authority to children's behaviour and attitudes. Univ. Minn. Press.
- Rubinsky F.G., Allinmith W., and Grindler R.F. (1963): Resistance to temptation and sex differences in children's use of fantasy confession. Child Development. 34, 955-962.
- Rus L. (1960): Parental antecedents of identification. Herrill Palmer Quarterly. 6, 77-82.
- Riesman D. (1965): The Lonely Crowd. Yale. (Revised edition).
- Ritchie J. and Kitchin J.S. (1970): Patterns of Child Rearing in New Zealand. Reed.
- Rokeach M. (1960): The Open and Closed Mind. Basic Books.
- Rosen B.C. (1964): Social class and the child's perception of the parent. Child Developm. 35, 1217-1231.
- Rosenberg B.C. and Sutton-Smith B. (1959): The measurement of masculinity and femininity in children. Child Developm. 30, 573-580.
- Rosenberg B.C. and Sutton-Smith B. (1961): Ordinal position and sex role identification. Genet. Psychol. Monog. 70, 297-320.

- Rosenberg D.B. and Artton-Smith B. (1964): The measurement of masculinity and femininity in children: a revalidation. J.Genet.Psychol. 101, 259-266.
- Rosenberg D.B., Artton-Smith B. (1966): Sibling association, family size and cognitive ability. J.Genet.Psychol. 109, 271-279.
- Rosenberg D.B. and Artton-Smith B. (1968): Family interaction effects on masculinity and femininity. J.Pers.Soc.Psychol. 8, 417-420.
- Barry, H., Bacon H.K. and Child I.L. (1962): A cross-cultural survey of some sex differences in socialization. In Rosenblith J.S. and Allinworth W. (eds). The Causes of Behaviour. Allyn and Bacon.
- Reichert H.K. and Haccoby E.R. (1966): Parent's differential reactions to sons and daughters. J.Pers.Soc.Psychol. 4, 237-243.
- Rudolph B.K. (1964): Reinforcement and personality development in children. J.Genet.Psychol. 101, 243-252.
- Russell D.H. (1956): Children's Thinking. Ginn and Co.
- Rydzek J and Legurski (1967): A socio-cultural theory of appropriate sex role identification and level of personal adjustment. J.Pers. 35, 31-49.
- Sampson P.R. (1962): Birth order, mood achievement, and conformity. J.Soc.Soc.Psychol. 61, 155-159.
- Sanford R.N. (1955): The dynamics of identification. Psychol.Rev. 62, 406-418.
- Serason L. (1960): Empirical findings and theoretical problems in the use of anxiety scales. Psych. Bull. 57, 403-415.
- Serason L.S. (1966) Personality: an objective approach. Wiley.
- Schachter S. (1959): The Psychology of Affiliation. Stanford, U.P.
- Schaefer E.S. (1961): Converging conceptual models for maternal behaviour and for child behaviour. In Childsall J.(ed) (1961).
- Schaefer E.S. and Bayley H. (1963): Maternal behaviour, child behaviour, and their intercorrelations from infancy through adolescence. Hongg.Soc.Res.Child Developm. 28:3.
- Schuck R. (1963): Sex of sibling, birth order position and female disposition to conform in two-child families. Child Developm. 34, 918.
- Scott J.P. (1968) Early Experience and the Organization of Behaviour. Brooks-Cole.
- Sears P.S. (1951): Ball play aggression in normal young children; influence of age, sex, sibling status, father's absence. Psychol.Hongg. 6:6. No.323.
- Sears R.R. (1950): Ordinal position in the family as a psychological variable. Amer.Soc.Rev. 15, 397-401.
- Sears R.R. (1957): Identification as a form of behaviour development. In Harris D.B. (ed) The Concept of Development. Univ.Minn.Press. pp 149-161.

- Sears R.R. (1960): The growth of conscience. In Isaac I. and Stevenson H.W. (eds) (1960).
- Sears R.R. (1965): Development of gender role. In Beach S.A. Sex and Behaviour. Wiley.
- Sears R.R. (1970): Relation of early socialization, experiences to self concepts and gender roles in middle childhood. Child Development. 41, 267-290.
- Sears R.R., Maccoby E.E., and Levin H. Patterns of Child Rearing. New Peterson. (1957)
- Sears R.R., Pintler H.H. and Sears R.S. (1966): Effects of father separation on preschool children's doll play aggression. Child Development. 46: XVII.
- Sears R.R. Rau L., and Alpert R. (1966): Identification and child Rearing. Tavistock.
- Secord P.F. and Backman C.B. (1964): Social Psychology. McGraw Hill.
- Soldman J. (1958): The Child: A Book of Readings. Rinehart.
- Shears L.H. and Behrens H.G. (1969): Age and sex differences in pay-off demands during Tetrad game negotiations. Child Development. 40:2, 559-568.
- Slare H.B. (1963): The psychological ecology of a nursery school. Child Development. 34, 979-992.
- Sigel I.E. (1956): The need for conceptualization in research in child development. Child Development. 21, 241-252.
- Sigel I.E. (1960): Influence techniques: a concept used to study parental behaviours. Child Development. 31, 799-806.
- Sigel I.E. (1965): Styles of categorisation in elementary school children. See Wachtal P.L. (1968).
- Simpson H. (1935): Parent preferences of young children. Contributions to Education. No. 652. Teach. Coll. Columbia. Bureau of Public.
- Skinner B.F. (1962): Reinforcement Today. In Grossenbith J.E. and Allinmith W. (eds) The Causes of Behaviour. Allyn and Bacon.
- Slater P. (1961): Towards a dualistic theory of identification. Herrill Palmer Quarterly. 7, 113-126.
- Slater P. (1961a): Parental role differentiation. Amer. J. Sociol. 67, 296-308.
- Smolser H.J. and Smolser W.T. (Eds) (1963): Personality and Social Systems. Wiley.
- Smith H.T. and Stone L.J. (1961) Developmental psychology. In Annual Review of Psychology, 1961.
- Spake K.L. (1935): The experimental approach to concept learning. Psychol. Rev. 42, 275-279.
- Sowers A. (1937): Parent-child relationships from the child's point of view. J. Exp. Educ. 205-231.

- Stagner R. (1961): Psychology of Personality. McGraw Hill.
- Stevenson H.W. Piaget, behaviour theory and intelligence. In Kessen W. and Kullman C.(eds) (1962).
- Stevenson H.W. (ed) (1963): Child Psychology. Yearbook of the H.S.S.E. 1.
- Stogdill R.H. (1937): Survey of experiments of children's attitudes toward parents. J.Gen. Psychol. 11. 293-303.
- Stoke S.H. (1954): An inquiry into the concept of identification. In Readings in Child Development. Martin W.B. and Steiner.C.B.(eds). Harcourt Brace.
- Stotland E. and Dunn R.R. (1962): "Identification", "oppositeness", authoritarianism, self-esteem and birth-order. Psychol.Monog. 76:9, 1-21.
- Sullivan E.V., McCullough G. and Stagner R. (1971): A developmental study of the relationship between conceptual, ego and moral development. Child Develop. 41:2, 399-412.
- Sutton-Smith B. (1966): Theories of play and games for cognitive development. Unpublished paper for a Seminar at Massey University. W.H.W.
- Sutton-Smith B., Rosenberg D.G. and Morgan E.P. (1963): Development of sex differences in play choices during adolescence. Child Develop. 34, 419-426.
- Sutton-Smith B., Roberts R. and Rosenberg D.G. (1964): Sibling associations and role involvement. Harrill Palmer Quarterly. 10, 25-38.
- Sutton-Smith B and Rosenberg D.G. (1965): Age changes in the effects of ordinal position on sex role development. J.Comp. Psychol. 107, 61-73.
- Sutton-Smith B., Rosenberg D.G. and Houston H.S. (1968): Sibling perception of family models. Unpublished paper presented to the Eastern Psych. Assn. Washington.
- Sutton-Smith B., Rosenberg D.G. and Lundy W. (1968): Father absence effects in families of different sibling compositions. Child Develop. 39:4, 4213-4221.
- Tajfel R and Turner J. (eds) (1985): Person Perception and Interpersonal Behaviour. Stanford U.P.
- Tesch R.J. (1952): The role of the father in the family. J.Fam.Psych. 2:4.
- Terman L.H. and Miles G.C. (1936): Sex and personality. McGraw Hill.
- Terman L.H. and Tyler L.E. (1951): Psychological sex differences. In Carmichael L.(ed). Journal of Child Psychology. Wiley. (2nd.ed).
- Torrell G. (1963): Manipulatory motivation in children. In De Cosco J.P. (ed). Human Learning in the School. Holt, Rinehart.
- Thoday J.H. and Patten A.S.(eds) (1968): Genetic and Environmental Influences on Behaviour. Oliver and Boyd.

- Thomas A. et al. (1964): Behavioural Individuality in Children. Univ. London Press.
- Tolman E.C. (1943): Identification and the post-war world. J. Am. Soc. Psychol. 33, 144-148.
- Tims S. (1976): The social implications of equal pay. In Proceedings of the Seminar on Equal Pay for Equal Work. Industrial Relations Centre Victoria University of Wellington.
- Tyler F.B., Rofferty J.F. and Tyler B.B. (1962): Relationships among motivations of parents and their children. J. Genet. Psychol. 101, 69-81.
- Tuldenham R.D. (1952): Studies in reputation. Psychol. Monog. 66, 1.
- Tyler L. (1956): The Psychology of Human Differences. Appleton-Century-Crofts.
- Underwood B.J. and Richardson J. (1956): Some verbal materials for the study of concept formation. Psychol. Bull. 53, 81-95.
- Vellekoop C. (1968): Migration plans and vocational choice of youth in a small New Zealand town. N.Z.J. Educ. Stud. 3:1, 28-39.
- Vernon P.E. (1960): Intelligence and Attainment Tests. Univ. London Press.
- Vernon P.E. (1964): Creativity and intelligence. Educ. Res. 6, 163-169.
- Vernon P.E. (1964a): Personality Assessment. Methuen.
- Vincke W.R. (1956): Concept formation in children of school age. In Selman (1958).
- Vincke W.R. (1962): The Psychology of Thinking. McGraw Hill.
- Vincke W.R. and Cullickson C.R. (1964): Age and sex differences in the formation of collations. Child Development. 35, 1217-1231.
- Voice of America (undated): The Potential of Women. Forum Lectures.
- Wroegh K. (1968): Masculinity and femininity in the preschool years. Child Development. 39:4, 1253-1257.
- Wachtel P.L. (1968): Style and capacity in analytic functioning. J. Pers. 36, 202-212.
- Wootjen W.B. and Grasha J.B. (1965): Sex differences: a case of educational evasion. Teachers Coll. Record. Dec.
- Wallach H. (1962): Active-analytic and passive-global cognitive functioning. In Resnick S. and Ross J. (eds). Measurement in personality and cognition. Wiley.
- Wallach H.A. (1963): Research on children's thinking. In Stevenson H.W. (ed) (1963).
- Wallach H.A. and Casan A.J. (1959): Attribute criterionity and sex-linked conservatism as determinants of psychological similarity. J. Am. Soc. Psychol. 59, 43-50.
- Walker B.N. (1964): Measuring masculinity and femininity by children's game choices. Child Development. 35, 961-971.

- Warr K.D., Born H.B., and Liddle E.A. (1962): Fostering Intellectual Development in Young Children. Teachers College, Columbia Bureau of Public.
- Warren J. (1966): Birth order and social behaviour. Psychol.Bull. 65:1, 38-49.
- Webb A.P. (1963): Sex role preferences and adjustment in early adolescence. Child Development. 34, 609-618.
- Weinstein K.A. and Geisel A. (1960): An analysis of sex differences in adjustment. Child Developm. 31, 721-728.
- White R.W. (1959): Motivation reconsidered: the concept of competence. Psychol.Rev. 66, 297-333.
- White R.W. (1962): Competence and the psycho-sexual stages of development. In Rosenblith J.R. and Allinmith W.(eds). The Causes of Behaviour. Allyn and Bacon.
- Whiting J.B.H., Kluckhohn R. and Anthony A. (1958): The function of male initiation ceremonies at puberty. In Readings in Social Psychology. Hecoby E.R., Newcomb T.H. and Hartley E.L.(eds). Henry Holt. (3rd ed.).
- Whiting J. and Child I.L. (1953): Child Training and Personality: a cross-cultural study. Yale.
- Whiting J.B.H. (1960): Resource mediation and learning by identification. In Iscoe I. and Stevenson H.(Eds). (1963). pp.112-126.
- Whiting J.B.H. (1964): Socialisation process and personality. In Psychol. Anthropol. Hsu F.K.K. (ed). Dorsey Press.
- Whiting J.B.H. (1962): Theories of learning and behaviour. In Rosenblith J.R. and Allinmith W.(Eds). The Causes of Behaviour. Allyn and Bacon.
- Williams C.D. (1964): Some evidence for a hierarchy of needs. J.Gener.Psychol. 70, 85-88.
- Wilson G.D. and Patterson J.R. (1963): A new measure of conservatism. Brit.J.Soc.Clin.Psychol. 7, 264-269.
- Winch R. (1962): Identification and its familial determinants. Bobbs-Merrill.
- Winer P. (1962): The relationship of certain attitudes toward the mother to sex role identity. Dissert.No. 22, 4416.
- Winer J.D.(1949): Age trends and sex differences in the wishes, identifications, activities and fears of children. Child Development. 18, 145-170.
- Witkin H.A., Lewis H.B., Helman H., Machover K., Heissner P.B., and Wapner S (1954): Personality Through Perception. Harper.
- Witkin H.A., Iyk R.B., Paterson H.F., Goodenough D.R., and Kerp.S.A. (1962): Psychological Differentiation. Wiley.
- Woolff P.H. (1960): The developmental psychology of Jean Piaget and psychoanalysis. Psychol.Insues. 24, Spring.5.
- Wright B. and Turkin S. (1966): The nature and origin of feeling feminine. British J.Psych. 5, 110-119.

- Wright J.C. and Egan J. (1963). Basic cognitive processes in children. Monsh. Soc. Res. Child Developm. 33:2, 1963.
- Wright D.H. (1961): The oversocialized view of man. Amer. Sociol. Rev. 26, 485-493.
- Wylie R.C. (1964): The Self Concept. Univ. Nebraska Press.
- Yarrow H.R. (1963): Problems of methods in parent-child research. Child Developm. 34, 215-226.
- Young K. (1967): Personality and problems of adjustment. Regan Paul.
- Zigler E. and de Lebay L. (1962): Concept switching in middle-class, lower-class and retarded children. J. Abn. Soc. Psychol. 65, 267-273.
- Zurich H. (1964): Children's reactions to failure. J. Genet. Psychol. 104, 19-24.