

769

11
S
(18)

ROLE-TAKING AS A COGNITIVE PROCESS

ROLE-TAKING AS A COGNITIVE PROCESS
IN THE WRITINGS OF GEORGE HERBERT MEAD
AND JEAN PIAGET

By

MARIE HOPE PIERCE, B.A.

A Thesis

Submitted to the School of Graduate Studies
in Partial Fulfilment of the Requirements
for the Degree
Master of Arts

McMaster University

March 1976

MASTER OF ARTS (1976)
(Sociology)

McMASTER UNIVERSITY
Hamilton, Ontario

TITLE: Role-taking as a Cognitive Process
 in the Writings of George Herbert Mead and
 Jean Piaget

AUTHOR: Marie Hope Pierce, B.A. (Laurentian University)

SUPERVISOR: Professor Victor W. Marshall

NUMBER OF PAGES: v,108

ABSTRACT

Role-taking, as considered in the writings of the social psychologist George Herbert Mead, is a developmental construct essential for social interaction. Since its early formulations, however, it has suffered from conceptual confusion and misrepresentation. The present study analyzes the nature and development of role-taking ability in the works of G.H. Mead and Jean Piaget in order to provide clarification of the concept and elucidation of the factors considered conducive for its development.

It is argued that Jean Piaget's cognitive developmental framework, reinterpreted in Meadian terms, provides important extensions to the theory of role-taking: by relating the development of language and this ability in children; by offering a more thorough analysis of the development of meaning; by providing further clarification of the specific features of the interaction situation important for development.

Examination of current research strategies suggests that present global and static measures of social interaction and role-taking be replaced by the original formulations of Mead and Piaget which emphasize role-taking as a cognitive process occurring in interaction. Systematic and detailed exploration of the interaction situation at the individual level is needed. In addition, analyses must consider the child's stage of development in conjunction with interactions in the social environment.

ACKNOWLEDGEMENTS

I wish to express my appreciation to my Supervisor Dr. Vic Marshall, for his initiation of this study and continued suggestions and encouragement. I would also like to thank the members of my committee Dr. Marylee Stephenson and Dr. Alf Hunter for their comments and criticisms. I wish also to acknowledge the influence of Dr. Geoff Tesson and Dr. Walter Schwager who stimulated and encouraged my interest in socialization theory. Special thanks are owed to my husband Glenn for his patience and understanding during the writing of this thesis.

TABLE OF CONTENTS

	<u>Page</u>
Chapter One INTRODUCTION	1
Chapter Two GEORGE HERBERT MEAD	
a/ Introduction	4
b/ Genesis of Mind and Self	6
c/ Nature of Mind and Self	14
d/ Critique	25
e/ In Summary	35
Chapter Three JEAN PIAGET	
a/ Introduction	37
b/ Stages of Development	39
(i) Sensori-Motor Stage	39
(ii) Preoperational Stage	41
(iii) Operational Thought	51
c/ Nature of Intelligence	58
d/ Conclusion	64
Chapter Four CURRENT RESEARCH STRATEGIES	
a/ Introduction	68
b/ Nature of Role-taking Abilities	69
c/ Causal-analytic Studies	81
d/ In Summary	92
IN CONCLUSION	93
REFERENCES	99

Chapter One

INTRODUCTION

Taking the role of the other considered essential for social interaction was a term instituted and made prominent in the social psychology of George Herbert Mead where it served as the essential mechanism in the development of mind and self in the social process. Since Mead's original formulations, however, it has suffered from conceptual confusion and misrepresentation. This has been due in part to the lack of specification of the construct by Mead but in many cases there has been a reinterpretation of the process to one of static determinism (Coutu 1951; Turner 1956, 1962; Lauer and Boardman 1971). Appeal is made for a return to Mead's original conceptualization of role-taking as a cognitive process occurring in interaction allowing an individual to anticipate the other's behavior and then act accordingly.

Extensive analysis of the nature and development of this ability in the writings of G.H. Mead and J. Piaget will be undertaken in an attempt to offer conceptual clarification of the concept and elucidation of the factors considered conducive to its development.

Mead's analysis emphasizes that mind and self are products of social interaction and he focuses on the way in which the individual adjusts to his/her environment. The principle mechanism for this adjustment and the essence of mind and self is role-taking. In order to engage in acts requiring cooperation

the individual must role-take, s/he must incorporate the acts of the others into him/herself. The individual must be aware of the meaning of his/her gesture if s/he is to control his/her actions. The meaning is provided by others and a mechanism is needed to enable the individual to take the role of the other, to respond as the other responds. Mead resorts to the vocal gesture allowing self-stimulation and the significant symbol providing common meanings to account for this ability.

Problems inherent in Mead's analysis, however, point to the need for a developmental framework focusing on the interrelationships between language and role-taking development and further clarification of the components of social interaction conducive to development. It is argued that Jean Piaget offers an important extension to the Meadian analysis of this concept.

Piaget's theory of cognitive development, based on extensive empirical analyses, emphasizes the changing nature of the child's abilities. Utilizing his concepts of egocentrism and decentration it will be shown that a parallel development from egocentrism, the inability to distinguish between self and others, to decentration, the ability to coordinate perspectives and dimensions, exists in the impersonal and interpersonal spheres. Emphasis will be placed on the importance of considering the interaction between the child's cognitive level and the social environment in which the social environment cannot be considered as a whole but as a series of relationships

that change as a function of the child's cognitive capabilities.

It will also be shown that research in this area, although providing some extension and clarification of role-taking as conceived of by Mead and Piaget, has, in general resorted to the use of static and global measures and has ignored the emphasis these theorists place on role-taking as a process occurring in social interaction. Future research will have to be concerned with systematic and detailed exploration of the interactive situation in conjunction with analysis of the child's abilities.

Chapter Two

GEORGE HERBERT MEAD

a/ Introduction

For Mead, the self and the mind are products of the social process rather than things which exist independently of and/or prior to that process. He provides a functional theory of mind and self which focuses on the way in which the individual adjusts to the social environment. The mechanism enabling this adjustment, the essence of mind and self, is the ability to role-take.

Role-taking is conceived of as a cognitive process which serves as a guide for action involving the taking of the attitude of the other. This ability develops in two stages: the sequential taking of the attitudes of particular individuals and the taking of the attitude of the generalized other involving simultaneous role-taking and a coordination of various viewpoints into an organized whole.

The ability to role-take is the product of language in terms of the vocal gesture and the significant symbol which enable self-stimulation and provide a system of common meanings.

After outlining the nature of the development of the mind and the self and hence, role-taking, analysis of reflective thought precipitated by the appearance of the novel will be undertaken to illustrate the importance of taking into account the other in interaction.

It will be shown that by employing language as the major

mechanism for development, Mead gets caught up in a circular argument where at times he states that language allows the development of the role-taking ability and is only made possible by significant symbols. At other times, however, he states that role-taking is a precondition for the use of significant symbols. Although he outlines a developmental theory of role-taking he does not provide one for language.

His major difficulties point to a need for a developmental framework focusing on the relationships between language and thought conceived of as the process of role-taking and it will be argued that Jean Piaget's theory of cognitive development provides this essential extension to Mead.

b/ Genesis of Mind and Self

Mind and self are products of social interaction and arise out of and result from the individual's conduct in the social world. Mead asserts the importance of an already existing social process which is prior to the individual. An individual can develop a mind and a self only in interaction with others in the cooperative process, in the confines of what Mead terms the act. Stress is placed on the social act which requires the cooperation of more than one individual for its completion. This necessitates a continual process of adjustment and readjustment of the behavior of the individuals participating in the social act to each other. The individual must somehow incorporate the ongoing acts and attitudes of others into him/herself. S/he must be able to point out the meaning of his/her gesture to self and reflect back on him/herself from the other's perspective in order to control his/her actions.

The mind and the self are twin emergents precipitated in the same process. The development of the mind is the first phase in the development of the self for as Mead states:

The essence of self is cognitive...The thinking or intellectual process - the internalization and inner dramatization, by the individual, of the external conversation of significant gestures which constitutes his chief mode of interaction with other individuals belonging to the same society - is the earliest experiential phase in the genesis and development of the self.

(1934:173)

Social interaction and language are the essential conditions for the development of both the mind and the self.

Consciousness of meaning is the essence of mind and an analysis of how the gesture of an individual comes to call out the same response in the individual making it as in the other also involves an analysis of the genesis of mind. Mind emerges when the individual is able to point out meaning to him/herself and others. Meaning consists of a three-fold relationship among phases of the social act and involves the relationship between the gesture of one individual, the adjustive response to that gesture by a second individual and completion of the social act initiated by the gesture of the first individual. The adjustive response of the second individual gives meaning to the gesture of the first. The individual must take the role of the other, put him/herself in the place of the other and respond as s/he would respond.

To the extent that the animal can take the attitude of the other and utilize that attitude for the control of his own conduct, we have what is termed mind; and that is the only apparatus involved in the appearance of mind.

(1934:191)

The individual is born into an ongoing social process and interacts with others in a conversation of gestures in which one's movements call out a response in another and that response serves as a stimulus for the first and so on. As yet, there exists no consciousness of meaning in the individual.

Gradually images are built up of the response which the gesture of one form will bring out in the other. These images or habitual experiences are necessary for the occurrence of consciousness of meaning but are not sufficient conditions (1964:127). The individual must be forced to make a distinction between the stimulus and the response. This can only occur in the problematic situation where there is inhibition of action and the child must focus attention on certain aspects of the stimulus in order to make the appropriate response. The individual, in this situation, develops an awareness of the other. Because the meaning of his/her gesture is determined by the response of the other, some mechanism must exist which enables the individual to call out in him/herself the same response to his/her gesture. Both these abilities are the product of the vocal gesture and language which allow self-stimulation and provide a system of symbols based on common meaning.

For Mead, no other gesture is so successful as the vocal gesture in affecting the individual similarly as it affects others. Speech alone stimulates the speaker in the same manner as it affects the hearer. The speaker can hear what s/he says and in hearing what s/he says s/he is able to respond to his/her own utterances in the same manner in which the hearer might respond.

The importance, then, of the vocal stimulus lies in this fact that the individual can hear what he says and in hearing what he says is tending to respond as the other person responds.
(1934:69-70)

But this is not sufficient, in addition to the vocal gesture, the individual must be able to interact using significant symbols.

Significant symbols are symbols "which implicitly arouse in the individuals making them the same response which they explicitly arouse, or are supposed to arouse, in other individuals, the individuals to whom they are addressed..." (1934:47). Significant symbols are based on common systems of meaning built up through cooperative group action. Meaning can be stated in terms of symbols or language because "language simply lifts out of the social process a situation which is logically or implicitly there already" (1934:78).

These significant symbols indicate certain characteristics of the situation and in so doing hold them apart from the immediate environment. A system exists based upon common experiences which aids in determining which responses are more appropriate than others. This system provides some basis for the individual to assume that the symbol one uses is one that will call out the same response in all the individuals involved in the interaction. This helps make possible role-taking since "a symbol is nothing but the stimulus whose response is given in advance" (1934:181). The child is born into this already existing system of symbols and must learn to utilize them.

Mead is not clear as to the way in which the child advances from the vocal gesture to the significant symbol which implies consciousness of meaning. Awareness of the other

is a precondition for this development but how this awareness advances to taking the attitude of the other is not expanded upon in his theory. At times he seems to indicate that role-taking is a precondition for a symbol to become significant and at other times he stresses that role-taking is made possible through such symbols by providing a common system of meanings.

Although the way in which language allows the development of mind or consciousness of meaning is not clear, there can be no doubt as to the importance Mead places on it. "The critical importance of language in the development of human experience lies in this fact that the stimulus is one that can react upon the speaking individual as it reacts upon the other" (1934:69).

In order to adequately control his/her actions, the individual must not only be aware of the other and attend to the effect his/her gestures has on the other, s/he must also reflect back upon his/her own actions from the point of view of the other. This also is implied in the use of the significant symbol; the response becomes a stimulus for later action by the individual. The self emerges when the mind is self-conscious.

The distinctive nature of selfhood is found in the capacity of the individual to take the role of first, particular others and then the generalized other and thus become an object to him/herself. An individual can become a self only by taking the attitudes of others towards itself; by stimulating him/herself as s/he stimulates others. The

development of the self is concurrent with the development of the ability to take roles:

The individual experiences himself as such, not directly, but only indirectly, from the particular standpoints of other individual members of the same social group, or from the generalized standpoint of the social group as a whole to which he belongs. For he enters his own experience as a self or individual, not directly or immediately, not by becoming a subject to himself but only in so far as he first becomes an object to himself just as other individuals are objects to him or in his experience; and he becomes an object toward himself only by taking the attitude of other individuals toward himself...

(1934:138)

An individual can become reflexive, an object to him/herself only in interaction with others in the cooperative process. S/he must first become aware of others before self-consciousness can develop.

As in the case of the mind, language is also the fundamental causal factor in the genesis of the individual self. But in addition to language and social interaction already discussed, Mead places special emphasis on play and the game in the development of the self.

The child plays at being something or somebody. "A child plays at being a mother, at being a teacher, at being a policeman; that is, it is taking different roles, as we say" (1934:150). The child excites him/herself, s/he has in him/herself the stimuli which may call out the particular response. There is a simple succession of one role after another and what the child is at one moment does not determine

what s/he is at another. Playing at involves an elementary form of role-taking, the verbalized fantasy by which the child learns to take the role of the other.

In the game, the child must "take the attitude of everyone else involved in the game" and "these different roles must have a definite relationship to one another" (1934:151). The child must simultaneously take the attitudes of everyone involved and also reflect back on his/her role from the standpoint of others.

Although these two processes enhance the development of the self, the child has not yet, however, achieved self-consciousness in the full sense of the term. S/he must not only take the attitudes of others toward him/herself but must also take their attitudes towards the social activities in which they are engaged. S/he must generalize particular attitudes into a single attitude or viewpoint, the generalized other:

...only in so far as he takes the attitudes of the organized social group to which he belongs toward the organized, cooperative social activity or set of activities in which the group as such is engaged, does he develop a complete self or possess the sort of complete self he has developed.

(1934:155)

Only by taking the general attitude do things have common meaning and the individual can control his/her behavior. This generalized attitude is acquired through language. By learning the symbols of his/her groups, the child comes to internalize their definitions of events or things, including their definitions of his/her own conduct.

There are then, two stages in the development of the self: the organization of the particular attitudes of other individuals toward the self and the organization of particular attitudes plus the organization of the social attitudes of the generalized other:

At the first of these stages, the individual's self is constituted simply by an organization of the particular attitudes of other individuals toward himself and toward one another in the specific social acts in which he participates with them. But at the second stage in the full development of the individual's self that self is constituted not only by an organization of these particular individual attitudes, but also by an organization of the social attitudes of the generalized other or the social group as a whole to which he belongs.

(1934:158)

Both are incorporated into the structure of the self through language and role-taking.

The distinction between the genesis of the mind and the self employed in the above discussion was somewhat arbitrary as actual separation of the development of these two features of the individual is not possible. They emerge in the same process and at approximately the same time. But they are not synonymous. The essence of self is cognitive; the self includes but is more than the mind. Mead distinguishes between consciousness as reference to the field of experience and self-consciousness. The self emerges when the mind is self-conscious; that is, conscious of itself as an object.

Mead's starting point is social experience in which both the mind and the self emerge as products of social interaction and language enabling the process of role-taking. The nature of these processes need now be explored.

c/ Nature of Mind and Self

Although the mind and the self are products of social interaction, it will be shown that they are processes which undergo continual reconstruction and that reflective thought, an essential mechanism for adjustment which is precipitated by the occurrence of the novel in the confines of the act, has as its essential nature the ability to role-take.

The preceding analysis of the genesis of the mind and the self indicates a theory of social determinism in which the individual is entirely the product of society, but Mead argues that this is not the case. Growth and development is not complete after the mind and the self have risen in the child. The individual has been given the necessary abilities to enable interaction and can now construct his/her own world, reconstruct and modify his/her self.

Human society, we have insisted, does not merely stamp the pattern of its organized social behavior upon any one of its individual members, so that this pattern becomes likewise the pattern of the individual's self; it also, at the same time, gives him a mind, as the means or ability of consciously conversing with himself in terms of the social attitudes which constitute the structure of his self and which embody the pattern of human society's organized behavior as reflected in that structure. And this mind enables him in turn to stamp the pattern of his further developing self (further developing through mental activity) upon the structure or organization of human society and thus in a degree to reconstruct and modify in terms of his self the general pattern of social or group behavior in terms of which his self was originally constituted.

(1934:263)

Both mind and self are social processes in which there is continual analysis and reconstruction enabling the build up of knowledge and experience which aid the individual to act intelligently. Mead provides a functional theory of mind and self.

In conceiving of the self as a process, Mead distinguishes between its two basic and complementary aspects: the "Me" and the "I".

The "Me" is that aspect of the self which has its genesis in symbolic interaction through taking the role of both the particular and generalized others. This aspect of the self was described in the socialization process discussed in the earlier section.

The "I" is the active, creative element, it is the response of the individual to the attitudes of the community as it appears in its own experience. But the self cannot appear in consciousness as an "I", only as a "Me":

Such an "I" is a presupposition, but never a presentation of conscious experience, for the moment it is presented it has passed into the objective case, presuming, if you like, an "I" that observes - but an "I" that can disclose itself only by ceasing to be the subject for whom the object "Me" exists.

(1964:42)

This "I" accounts for the individual actively shaping and choosing his/her environment. This distinction between the social and creative natures of the self is further expanded upon in Mead's treatment of time within the analysis of the act and will become apparent in later discussions.

Mead's main focus of attention is on the way in which the individual is able to interact with others in the social process. The very nature of mind and self enables the individual to engage in cooperative activity. Consciousness or mind is conceived of as teleological or purposive, it serves as a tool in the adjustment of the individual to novel situations. Reflection must ensue if the individual's actions are to be intelligently controlled. The basic mechanism allowing this is role-taking which is a central construct in Mead's theory. Social interaction and adjustment is made possible by this ability. The very essence of intelligence involves this ability.

...the whole nature of intelligence is social to the very core - that this putting of one's self in the place of others, this taking by one's self of their roles or attitudes, is not merely one of the various aspects or expressions of intelligence or of intelligent behavior, but is the very essence of its character.

(1934:141)

A general analysis of the way in which the individual engages in interaction will allow a further analysis of the nature of role-taking as Mead conceives it.

The basis for reflective thinking is the emergence of the novel or the problematic situation in which the inhibition of action occurs. Prior to the problematic situation, the object of perception is 'taken for granted'. This 'taken for granted' world is logically antecedent to the perceptual world in which the precept arises in experience. The world

we live in is first of all the world that is there unreflectively, the world in which we act. This undoubted world does not require consciousness on the part of the organism. But knowledge arises from, consciousness is a response to, and experience takes place in the world that is there.

The major extension of Mead's analysis of the nature of mind or consciousness as functional, as a mechanism of adjustment comes in his analysis of the act. Analysis of the act which stresses the continual interaction between the organism and the environment is basically an analysis of the reflective situation and is the key to the nature of the mind.

Our primary adjustment to environment lies in the act which determines the relation between the individual and the environment. An act is an ongoing event that consists of stimulation and response and the results of that response.
(1938:364)

Mind is conceived of as an ongoing cognitive process in which adjustment is the result of selection and due to the organization of perspectives. It is initiated by a want or problem and directed toward the end of satisfying the want or problem.

The act takes place in the present which is the locus of reality but the present is defined with reference to the novel. The starting point for reflective thinking is the problematic situation. This problematic situation is characterized by Mead as the occurrence in the present of the novel:

A present, then, as contrasted with the abstraction of mere passage, is not a piece cut out anywhere from the temporal dimension of uniformly passing reality. Its chief referent is to the emergent event, that is, the occurrence of something which is more than the processes that have led up to it and which by its change, continuance, or disappearance, adds to later passages a content they would not otherwise have possessed.

(1959:23)

It must be stressed that the novel cannot be reduced to its past conditions alone. Although the appearance of the novel has necessary conditions for its existence, there is a recognizable qualitative difference which is the mark of the emergent; it is more than the effect of some immutable cause (1938:23).

Our statement in terms of emergence simply puts it as a resultant and does not give it any relationship to the process out of which it arose. When conditions arise, we are in a new world, but that new world has not any mechanical causal relationship to the world out of which it came.

(1938:641)

The occurrence of the emergent or novel delimits the locus of the problem which is the stimulus for reflective thinking. It enters experience as an exception to both established habits and mental attitudes which neither habitual ways of acting nor categorical interpretations will answer. In order to adequately consider the novel, interpretative categories must change so as to bring the exception within the scope of reason. The novel therefore gives rise to the construction of new interpretative categories and consequently, new habits.

An initial stimulus occurs that is accompanied on the part of the individual by an immediate sensuous stimulation and a response towards this stimulation which consists of an attitude toward it. Accompanying this attitude are memory images of past responses. This attitude acts as an impulse for the individual when s/he cannot complete the act. The individual cannot respond to it based on past experiences, and directs his/her actions towards satisfying the want developed.

Perception, "a relation between a highly developed physiological organism and an object or environment in which selection emphasizes certain elements (1938:8)" occurs as a result of this incompleting act and the individual selectively attends to certain stimuli that will bring about successful action. There are numerous alternative responses and the individual must isolate the contents that call out certain responses. Which stimuli the individual attends to depends on his/her need or present attitude and past experiences or responses.

The past impinges on the present in many ways. The way in which the individual perceives the object and looks for a solution is determined to some degree by his/her past responses, past attitudes. The past exists as a perspective in the present experiences of the individual organism. It serves as an interpretation of the present which allows intelligent conduct to proceed; the individual looks in the past for a reference that will enable him/her to undertake intelligent conduct in the present.

But the past is not a constant, it is not independent and unaffected by what is going on in the present. Knowledge of the past arises within the present activity; its precise structure contains meanings which are determined by its relation to the present. The individual 'chooses' from his/her past those responses which are relevant to success in present action. The past is being continually reconstructed in such a way that will enable the individual to deal with the emerging novelty.

Manipulation occurs when the individual makes a response. Choosing a response and exercising control over his/her response is only possible if the individual takes the role of the other into account and reflects back on the self from the other's role. S/he must stimulate him/herself to respond in the same way as s/he stimulates the other.

The individual must also organize his/her response in such a way as to create a whole new behavior. S/he must organize his/her successful reaction in such a way that it will be pertinent not only for the particular individual but others as well. S/he must coordinate perspectives. If his/her response is to be of any use for further action, if it is to become a stimulus for further action, the individual must organize it with other responses, s/he must connect them with each other. In this way, the response can become a stimulus for many other situations. The individual tries to develop relatively permanent features of conduct for a response is of little use if it can only be employed in that particular

situation and cannot serve as a stimulus for later action.

"... the problem must happen to an individual, it can have no other locus than in his biography, but the terms in which he defines it and seeks its solution must be universal, that is, have common import" (1938:59). The individual must abstract from the individual to the common perspective. The results of the reconstruction will be a new individual as well as a new social environment.

The foregoing analysis of the act illustrates Mead's emphasis on the selective nature of the individual. S/he constructs his/her act rather than responding in predetermined ways. The individual purposively controls and organizes his/her responses by attending to specific stimuli and ignoring others. Mead's treatment of temporality also accounts for the uniqueness of each individual. Each person's perspective is a unique combination of intersectings in relation to a specific past and future.

Mead's analysis of the temporal in the philosophy of the act leads to a theory of perspectives and to the concept of sociality as a central organizing principle.

He develops a perspectual theory of relativity in which the point of reference is the perceptual situation. A perspective is the relation between the organism and the environment and involves a particular frame of reference that takes place in the present after the emergence of the novel. It denotes the basic situation of the perceptual object as there over against the organism as a physical object.

Perspectives exist in the present within the confines of the act. Each perspective is unique in that the way in which the individual organism views the object of perception is influenced by the past (attitudes of past responses) and the future (goal to be attained). But at the same time, the individual must be concerned with relationships outside him/herself within the present. In the case of the response to an object s/he must be concerned with future responses to it in differing situations, and in the case of the social act, others must be taken into account for its successful completion. Both these situations involve the necessity for the intersection of many perspectives.

Instead of positing real characteristics of objects independent of experience, Mead maintains the importance of the constitutive nature of the individual. Until a problematic situation occurs, the objects do not exist for the individual; they only emerge within the act. Their qualities are determined by the individual organism but these vary with the context or situation in which they occur. The perspective emerges out of the relation of the individual and the percepts. This confirmation of the importance of the individual organism in determining its perspective affirms the existence of numerous perspectives. Objects or events are dependent upon a individual and what is seen from the standpoint of one individual is not necessarily what is seen from the standpoint of the other.

But previous analysis has shown the importance of the organization of perspectives to enable adequate adjustment in

interaction. Mead needs to explain the mechanism for this organization and appeals to the principle of sociality as this principle is elucidated in his theory of mind. Sociality, "the capacity of being several things at once" (1959:49) involves two dimensions which shows its essential nature to be that of role-taking.

The process of continual integration of the novel into a new perspective involving reinterpretation in terms of its conditioning past and anticipated future as well as in terms of correlative individuals illustrates the temporal and structural dimensions of the concept. The reflective individual is able to pass from one perspective to another (temporal sociality) as well as relate it to the whole or organized perspectives (structural dimension). The individual can place him/herself in the others position and look back at him/herself from the other's viewpoint. The fundamental capacity of the mind is its capacity to enter into various perspectives; to take the attitudes of others. The mechanism of role-taking assumes a fundamental place in the organization or perspectives. In fact "...it is only in so far as the individual acts not only in his own perspective but also in the perspective of others, especially in the common perspective of a group, that a society arises " (1959:165).

The mind and the self emerge in the social process but after their emergence they are subject to continual analysis and reconstruction as the individual engages in social interaction. Reflection must ensue if the individual's

actions are to be intelligently controlled and analysis of the nature of reflective thought precipitated by the appearance of the novel illustrates the importance of taking the role of and coordinating various perspectives in interacting with others.

d/ Critique

According to Mead, role-taking is a central mechanism in the development of the self and the mind. It is, to some extent, a processual concept exhibiting a developmental history in the life of the individual. Role-taking is also considered the essence of intelligence and the central mechanism enabling adjustment in social interaction. When Mead states the development of the self, the mind, the generalized other and social interaction, he is also indicating the development of the ability to role-take.

Although Mead develops an extended analysis of the development of role-taking he does not offer much toward the understanding of role-taking as such for the term remains undefined. It is clear, however, that role-taking is not overt behavior or conduct but a cognitive activity or process which serves as a guide for action. The individual takes the role of the other to get insight into the other person's possible behavior and this allows anticipation of the behavior of the other and hence control of action.

Taking the role of the other is not to be equated with the process of playing the role of the other. That is, it does not mean behavior, performance or overt activity based on socially prescribed ways of behaving in particular situations. Walter Coutu, in an appeal for clarification, presents an excellent critique of contemporary confusion of the sociological concept of role-playing with the psychological concept of role-taking expounded by G.H. Mead. He states:

Role-taking, then, is a psychological concept referring to a mental or cognitive process, while role-playing is a sociological concept referring to a social function which all people holding a particular position or status are expected to perform in overt conduct.

(1951:181)

Ralph Turner (1956) also stressed the need for viewing it as a process in interaction, not socially prescribed ways of acting.

What is involved in role-taking for Mead seems to be synonymous with taking the attitude of the other; a putting yourself in the place of those with whom you interact, grasping the point of view of others, an assumption of the perspectives of others:

If we contrast play with...an organized game, we note the essential difference that the child who plays in a game must be ready to take the attitude of everyone else in that game and that these different roles must have definite relationships to each other.

(1934:151)

Role-taking in human behavior...

involves not only communication in the sense in which birds and animals communicate with each other, but also an arousal in the individual himself of the response which he is calling out in the other individual; a taking of the role of the other, a tendency to act as the other person acts.

(1947:183)

Mead's use of the term attitude refers to responses present in behavior. In taking the attitude of the other, the individual is anticipating the other's responses to either

his/her behavior or to a social object. An attitude represents alternative responses to an object or gesture. Attitudes are present at the beginning of acts as tendencies to respond and serve to control the whole process.

Attitudes are the responses which are present in our behavior either in the advance of the stimulation of things, or already aroused, yet await the occasion for their full expression.

(1964:336)

As already discussed, Mead indicates two stages in the full development of the self which reflect two types of role-taking ability: the sequential taking of the attitudes of particular individuals and the taking of the attitude of the generalized other involving simultaneous role-taking and a coordination of various viewpoints into an organized whole. Analysis of the way in which the individual develops the ability to role-take and the mechanisms responsible for the development from one stage to another need now be discussed.

I have argued that role-taking is the pivotal concept in both the mind and the self and that the development of this ability is the result of the same mechanisms involved in introducing the mind and the self in the individual; namely, social interaction and language.

In discussing social interaction, Mead places special emphasis on verbal interaction but he also explores the influence of the problematic situation, play and games.

The development of the ability to role-take has as its essential precondition a development of the awareness of the

other. Consciousness of others precedes a socially constructed self-consciousness; there is knowledge of other selves before there is self-knowledge. The individual can develop self awareness only by taking the role of the other. But how is knowledge of other selves possible? When and how does awareness of the other develop? Attempts to communicate and interact presuppose concern for the response of the other and this concern is a social dimension of selfhood which is presupposed in Mead's account of the emergence of the social self.

Mead points to a possible mechanism influential in this development of the awareness of the other but whether it is a sufficient condition it is not known. Through interaction, images are built up in the individual which are images of past responses. In the problematic situation, however, there is inhibition of action and the individual is forced to attend to the stimulus that is bringing out the response. If this situation takes place in interaction with another individual, the child might possibly become aware of the existence of the other and the role that s/he plays in the completion of the act.

Mead stresses the importance of the play and the game in the development of the ability to role-take. The play stage provides the child with elementary role-taking activities. The game situation, however, with its organized nature makes the child aware of the rules of the game and the importance of the other's viewpoints. This organization in terms of the rules of the game controls the responses of the individual

and makes him/her aware of the need to take the group's attitude towards its activity:

The game has a logic, so that an organization of the self is rendered possible: there is a definite end to be obtained; the actions of the different individuals are all related to each other with reference to that end so that they do not conflict; one is not in conflict with himself in the attitude of another man on the team...they are interrelated in a unitary, organic fashion.

(1934:158-59)

The distinctive experience of the game is that the child is put in the position of taking a number of parts simultaneously and relating them to each other as well as to the self. In the game the child must adjust him/herself to the demands of a number of people, for one must play according to the rules of the game.

Besides postulating the organized nature of the game as differing from the play of the child, Mead does not extend his analysis into specific features of these situations that are conducive to development. It appears that exposure alone to the game situation will not allow development from one stage of role-taking ability to another (see below, Chapter 3). There must be other aspects of the situation conducive to development.

Mead ignores the existence of differences in ability to role-take and differences in rate of development of this ability. He ignores the fact that children and many adults have considerable difficulty in learning to differentiate viewpoints (Flavell 1968; Kohlberg 1969). Indeed it appears

that Mead assumes that all individuals have the same ability to role-take after the mind has developed. This lack of consideration of differences in ability results in a lack of detailed analysis into the types of interaction conducive to the development of this ability. Why is it that some individuals have better role-taking capacities than others? Is role-taking an all or none affair? These issues will be discussed below.

Mead stresses the importance of common activities in the development of role-taking but subordinates this to the common structures of meaning already provided by language. If one, however, acknowledges the possibility of differences, one could extrapolate from Mead's stress on common activities and experiences and suggest that the more variety and quantity of interaction the individual gets, the more s/he is able to role-take.

Mead ignores the role of affective elements in the rise of the ability to role-take in social interaction. Situations in which there is a strong emotional tie between the child and another person would tend to enhance development through identification more so than a situation where this does not exist (cf. Winch 1962; Sears, Maccoby & Levin 1957; Secord and Backman 1964). Analysis into the relative importance of interactions with peers and adults might also provide insights into specific features of the interaction situation influential in development of the ability to role-take.

The acquisition of language in the child is the central

argument in Mead's analysis of the development of the ability to role-take. Language in terms of significant symbols provides the mechanism enabling the child to take the perspective of the other. Central to this argument is the way in which the child progresses from the vocal gesture to the use of the significant symbol which requires the consciousness of meaning.

Mead dismisses imitation as the mechanism for the development from the vocal gesture to the significant symbol. Imitation, by definition, involves a direct and identical reproduction of the stimulus by the response. But there is no sufficient evidence that one gesture generally or appropriately calls out the same gesture in the other organism. "Imitation as the mere tendency on the part of an organism to reproduce what it sees or hears other organisms doing is mechanically impossible....It would mean that we have in our nature already all these various activities, and that they are called out by the sight of other people doing the same thing" (1934:60). He views imitation as the indirect result of role-taking not its precondition and concludes that imitation depends on the individual influencing him/herself as others influence him/her.

Instead, Mead relies on the vocal gesture to call out the same response in the self as in the other. At times he seems to state that the vocal gesture is all that is needed in the development of the ability to role-take. He stresses the importance of individuals producing the same sounds and thus reinforcing the sounds they have in common but this is at best a necessary condition for the development of significant

symbols. Not only is it necessary that both organisms produce similar sounds but that each similarly interprets the sound of the other.

In his solution to this problem, Mead becomes caught up in a circular argument and avoids the difficulties in the analysis of language by invoking the notion of role-taking. Mead, at times, indicates that social communication depends upon the development of the ability to take roles; that role-taking is a precondition for the significant symbol:

Gestures become significant symbols when they implicitly arouse in an individual making them the same response which they explicitly arouse, or are supposed to arouse in other individuals ...the individual's consciousness of the content and flow of meaning involved depends on his thus taking the attitude of the other toward his own gestures.

(1934:47)

At other times, he stresses that language allows the development of the role-taking ability, that it is only made possible by such symbols:

Such is the process by which personality arises. I have spoken of this as a process in which a child takes the role of the other, and said that it takes place essentially through the use of language...Language in its significant sense is that vocal gesture which tends to arouse in the individual the attitude which it arouses in others, and it is this perfecting of the self by the gesture which mediates the social activities that gives rise to the process of taking the role of the others.

(1934:160-61)

Mead is caught up in the argument that in order to utilize significant symbols the individual needs to role-take but role-taking ability is the product of language and significant symbols.¹ He does not provide an adequate mechanism to account for the development from the vocal gesture to the significant symbol.

What is needed is a developmental framework which explores the nature of language development in the individual and relates this to the development of the ability to role-take. Specific attention must be paid to the way in which the child's vocal gestures gradually become significant symbols. It is surprising that although Mead provides a developmental analysis of role-taking, he does not provide one for language. Considering the intimate relationship between these two processes it is a significant omission on his part.

Mead discusses the mechanisms for the appearance of the self and mind and hence role-taking but nowhere does he analyze the factors conducive for the development from one stage of this ability to another. Instead Mead falls back on language which allowed the initial development of mind. The mechanisms which were conducive to the development in the first instance are also conducive in the later instance.

Research has shown that adequate communication is based on the ability of the communicator to take into account the listener. Mead stresses this point but he also wants language

1. This point is also made by Charles Morris (1946:45)

to account for this ability. He is forced to conclude that social interaction allows the development of the ability to role-take and adequate social interaction is only possible if the individual is able to role-take. A developmental perspective which takes into account the ability of the individual, the nature of the social interaction, and interrelates the two might provide an adequate explanation of these phenomena.

e/ In Summary

Mead's emphasis is on the way in which the individual adjusts to his/her environment and the principal mechanism in this adjustment, the essence of mind and self, is role-taking. The individual takes the attitude of the other in order to anticipate and control his/her future actions. Reflective thought which ensues as the result of the appearance of the novel has as its essential component the ability to take the role of and coordinate the viewpoints of others.

The ability to role-take is developmental and although Mead discusses the importance of play, the game and the problematic situation, special emphasis is placed on the mechanism of language in terms of the vocal gesture and the significant symbol. Although Mead provides a developmental analysis of role-taking he does not provide one for language and as a result gets caught up in a circular argument in which role-taking accounts for language in terms of significant symbols and language accounts for the ability to role-take.

Utilization of Mead's concept of role-taking to re-interpret the cognitive developmental theory of Jean Piaget allows an important extension of the Meadian analysis of the importance of language in development. Unlike Mead, Piaget adopts a developmental perspective and focuses on the framework of the interrelations of thought and language development. He demonstrates stages of thought and language development, which in turn reflect different levels of communication with social communication representing a later and higher level.

Piaget also deals with specific features of the interaction situation conducive to development. Analysis of the principal features of Piaget's theoretical framework will be undertaken in the following chapter.

Chapter Three

JEAN PIAGET

a/ Introduction

Theoretical analysis into the development of the child in the writings of Jean Piaget illustrates the changing nature of the child's cognitive abilities. Using egocentrism as the central concept linking cognitive development in the impersonal and interpersonal spheres, it will be shown that a parallel development exists between the child's ability to distinguish and coordinate different dimensions and perspectives in these areas. Just as the young child is unable to decenter when organizing physical phenomena s/he is also unable to decenter when organizing interpersonal relations. The development of the self reveals the same progression as in impersonal relations and at any stage of development it is governed by the same laws of organization that rule the whole of mental life at that period. The self evolves from one which is entirely egocentric to one which can take the other person's point of view into account.

Although Piaget does not specifically discuss role-taking abilities and development, by utilizing Mead's analysis of role-taking it will be shown that Piaget's concept of egocentrism and his conception of development as an increase in the ability to decenter provides the foundation for analysis of this ability which is essentially cognitive in nature.

Piaget has not expanded on the influences of social

factors in cognitive development to any major degree in recent works but they form an integral, essential and implicit aspect of his theory. The starting point for development is action by the individual and it is only by constant interchange with both the physical and social worlds that development proceeds. Development is conceived of as a process involving an interplay between the child's existing structures and properties of the environment. The nature of the influence is not constant and changes according to the child's cognitive level.

Piaget's theoretical framework based on extensive empirical research provides an important extension to the Meadian analysis of the development of role-taking abilities. Piaget's analysis clarifies the part played by language in role-taking development and expands on Mead's analysis concerning the importance of social relationships.

After outlining the nature of development of role-taking skills and elucidating the factors considered by Piaget as important in this development, analysis of the essential features of intelligence will be undertaken with the aim of providing a conception of what is involved when an individual role-takes. It will be shown that many similarities exist between Mead and Piaget concerning this concept but that Piaget offers important extensions to Meadian theory especially by providing a developmental framework.

b/ Stages of Development

The development of cognitive functions is characterized by a succession of stages which consist of different levels of equilibrium and development. Each stage involves the development of certain abilities and processes which make possible certain other abilities in later stages.

The social life of the individual is very important for development and the social and the individual cannot be separated for they are, of necessity, intertwined. Piaget emphasizes that one cannot invoke the term social life as a whole, as something out there that influences the child in the same way throughout the course of development. Instead one must focus on a series of relationships which differ according to the individual's level of development and various types of interaction. As he states,

The interaction with his social environment in which the individual indulges, varies widely in nature according to his level of development, and consequently in its turn it modifies the individual's mental structure in an equally varied manner.

(1966:157-58)

There are three major stages in mental development: the sensori-motor, the preoperational and the operational.

(i) Sensori-motor Stage

The basic point of departure for the development of cognitive structures is action. Sensori-motor thought precedes the appearance of language and consists basically of actions performed on various objects by the child. The child assimilates

these objects to his/her own 'point of view'.

There are already structures at this level of development and a practical intelligence based on the manipulation of objects exists. The actions which constitute this stage are coordinated under a schemata of action. There is a process of elaboration and differentiation of these actions so they can be applied to new situations. The child incorporates new objects into old schemata. For example, the child encounters a new object, a ball, and s/he puts it into his/her mouth. The ball is incorporated into the schemata of sucking. These beginnings are not in thought since there is not yet representation in thought, but in action itself.

From the point of view of the subject the social environment is not distinct from the physical. There is no differentiation between the self and the external world. Objects are not conceived of as external to the self or attached to personal consciousness of the self. The child reacts to people in the same way s/he reacts to objects. There is "no interchange of thought, since at this level the child does not know thought; nor consequently, is there any profound modification of intellectual structures by the social life surrounding him" (1966:158).

Actions are the starting point for future operations of intelligence and one can see in these the roots of future operations. There are developed a series of structures that are indispensable for structures of later thought.

Although Mead does not provide a structural developmental

analysis of mind, emphasis is also placed on action by the individual as the starting point for development. It is by constant interchange with the social environment that the child becomes aware of a self as distinct from other selves. Before consciousness of meaning or mind develops through language, however, the child engages in a conversation of gestures which allows the development of images. Mead is not clear on the nature of these pre-linguistic images but Piaget's analysis of schemata of action provides a possible clarification of this issue.

(ii) Preoperational Stage

The second stage of development in the child is characterized by the appearance of the symbolic function and language. With this acquisition new social relations appear which enrich and transform the individual's thought.

Language is indispensable to the elaboration of thought in that it allows the individual to reconstruct past actions, anticipate future ones and engage in verbal exchange with other individuals by providing a collective system of signs. "With the appearance of language, the child must cope not only with the physical universe, as was the case earlier on, but also with two new and closely allied worlds: the social world and the world of inner representations" (1968b:18).

Representative thought, consisting of a simultaneous differentiation and coordination between 'signifiers' and 'signified', is a necessary preparation with respect to the formation of operations. In order to pass from sensori-motor

action to internalized or purely internal action, the intervention of a system of symbols or signs is necessary.

"Without language the operations would remain personal and would consequently not be regulated by interpersonal exchange and cooperation. It is in this dual sense of symbolic condensation and social regulation that language is indispensable to the elaboration of thought" (1968b:98).

Unlike the previous stage in which the child was able to create images as the need arose, the child must accommodate him/herself to this first social pressure because language has already been elaborated socially and contains a fully elaborated system for organizing various experiences.

Unlike Mead who utilizes language as the major contributing factor in the development of the mind and the self, for Piaget it is a necessary but not a sufficient condition for the development of logical operations which are characterized as the ability to decenter.

By making a distinction between the individual symbol and the collective sign Piaget accounts for the development of meaning. The beginning of thought springs from the capacity for distinguishing significant and significates and relies both on the intervention of symbols and the discovery of signs; it does not result entirely from the incorporation of verbal signs from the social environment. This ability (i.e. the ability to distinguish) lies in the symbolic function of which language is only a part. "A symbolic function exists which is broader than language and encompasses

both the system of verbal signs and that of symbols in the strict sense. It can thus be argued that the source of thought is to be sought in the symbolic function...the essence of the symbolic function lies in the differentiation of the signifiers (signs and symbols) from the signified (objects or events that are schematic or conceptualized)" (1968b:91).

The symbolic function consists of the individual symbol and the collective sign and the acquisition of language, i.e. the system of collective signs, in the child coincides with the formation of the symbol, i.e. the system of individual signifiants.

In discussing the acquisition of the symbolic function, Piaget is dealing with the problem posed by Mead in describing and accounting for the transition from the 'gesture' to the 'significant symbol'. But whereas Mead gets caught up in a circular argument, Piaget relates it to the cognitive development of the child in general and the interrelationships of the processes of assimilation and accommodation. Piaget provides a developmental analysis of language formation and illustrates the changing nature of the child's abilities to communicate based on his/her intellectual capabilities. The child does not incorporate the collective signs into his/her present schemata all at once, it is a gradual process occupying the whole of childhood.

The constitution of the symbolic function is the product of specialized development in imitation defined as accommodation and symbolic play defined as assimilation. Accommodation

(especially as deferred imitation) supplies the child with his/her first signifiers. Assimilation (especially as symbolic play) provides the significate to which the signifier refers and the meaning of the symbols originate in this assimilation.

...deferred imitation, i.e. accommodation extended in the form of imitative sketches, provides significant, which play or intelligence applies to various significates in accordance with the free or adaptive modes of assimilation that characterize these responses. Symbolic play thus always involves an element of imitation functioning as a significant, and early intelligence utilizes the image in like manner, as a symbol or significant.

(1966:126)

The child does not accommodate him/herself to this new system entirely; s/he borrows from this collection as much as suits him/her. What is borrowed is assimilated in accordance with his/her intellectual structures. The child is midway between the collective sign and the individual symbol:

...these verbal signs will for a long time remain unsuitable for the expression of the particular entities on which the subject is still concentrated. This is why, as long as egocentric assimilation of reality to the subject's own action prevails, the child will require symbols; hence symbolic play or imaginative play, the purest form of egocentric and symbolic thought, the assimilation of reality to the subject's own interests and the expressions of reality through the use of images fashioned by himself.

(1966:127)

Language use proceeds from egocentric communication to social communication in which role-taking takes place. Due to the child's inability to decenter, s/he engages in

egocentric communication at this stage of thought. That is, the child is not aware of differences in perspectives; s/he does not differentiate his/herself as speaker from the auditor and therefore does not adapt the message to a listener.

Egocentric communication disappears with age and extensive social interaction and is replaced by social speech in which the child does take into account the different perspective of the listener and adjusts his/her message accordingly.

Egocentric communication is only one manifestation of the general phenomenon of egocentrism characteristic of the very young child.

Intellectually, the child's thought is from moment to moment centered on a given relation and cannot take into account numerous relations at once. This is one of the most important intellectual features of this stage of development. In order to attain a stage of development which is characterized by equilibrium a child must first obtain the ability to engage in 'reflective abstraction'; that is, s/he must recognize that there are certain invariants or common properties to objects that remain constant. The child must be able to reverse operations performed on the object.

Experiments carried out by Piaget on the concept of conservation show that the child at this stage is unable to decenter. That is, at any given time s/he focuses on a certain aspect of an object and does not take into account all the possible factors. For example, when confronted with the transformation of water from a small glass to a taller one,

the child centers on only one property of the glass (height, for example) instead of compensating for the height by the width and conserving the amount of water. "Conversely, and precisely because intuitive thought is centered on a given relation, it is phenomenalist and grasps only the perceptual appearance of reality. It is therefore prey to suggestion coming from immediate experience, which it copies and imitates instead of correcting" (1966:160).

This practice of centering on certain features of an object by the child is paralleled by egocentrism in the social sphere. However dependent on surrounding intellectual influences, the young child assimilates them in his/her own way. S/he reduces them to his/her own point of view and therefore distorts them without realizing it simply because s/he cannot yet distinguish his/her own point of view from that of others through failure to coordinate or group the points of view. There is a lack of coordination, a failure to group relations with other individuals as well as objects.

The child's early social behavior remains midway along the road between egocentrism and 'true socialization'. The child is centered on him/herself and cannot dissociate his/her own point of view from that of others. "It is highly probable, then, that the social exchanges characteristic of the preoperatory level are precooperative; that is, at once social from the point of view of the subject and centered upon the child and his own activity from the point of view of the observer. This is precisely what is meant by infantile

egocentrism" (1969:118). This is illustrated in the situation where the child attempts to participate in organized games which have specific rules. The child believes that s/he is obeying the rules but in reality assimilates them to his/her own point of view and ignores the fact that others are involved in the game. S/he does not coordinate the various perspectives of the individuals involved.

Egocentrism has been the most misused and misunderstood of Piaget's concepts and as a result he has largely stopped referring to it in the majority of his works. But the significance of the concept must not be overlooked or underestimated. Herein lies the link between the individual's intellectual or cognitive development and his/her relations with others. Both are seen in the light of the child's inability to perform operations. Operations to Piaget form the central concept in his theory comparable in importance to equilibrium (see below, the nature of intelligence).

Whereas in the cognitive sphere the child is unable to decenter; in the social sphere the child is unable to dissociate his/her ego from that of others. S/he is, therefore, unable to take the role of the other person and then return to his/her own role. It is interesting to note that nowhere in Piaget's theory does he have a theory on roles or role-taking. But, by utilizing the Meadian analysis of the importance of role-taking and from the implications of Piaget's views on decentration and the characteristics of operations, provision is made for the foundation of a theory on role-taking

parallel and interdependent to that of cognitive development.

Social egocentrism is parallel to cognitive egocentrism.

But because initial egocentrism results from a simple lack of differentiation between ego and alter, the subject finds himself exposed during the same period to all the suggestions and constraints of his fellows, and he accommodates himself without question, simply because he is not aware of the private nature of his viewpoint.

(1966:161)

The period of maximum egocentricity coincides with maximum pressure from examples and opinions of others.

The very nature of the type of social relation in which the child finds him/herself prevents development of the true state of equilibrium necessary for reason. The child is in a social relationship which is coercive and in which s/he cannot take the role of the other person. According to Piaget, constraint is always the ally of childish egocentrism because the child cannot establish a genuinely mutual contact with the adult. Egocentrism and coercion are mutually reinforcing.

Egocentrism in so far as it means confusion of the ego and the external world, and egocentrism in so far as it means a lack of cooperation, constitute one and the same phenomenon. So long as the child does not dissociate his ego from the suggestions coming from the physical and social world he cannot cooperate, for in order to cooperate one must be conscious of one's ego and situate it in relation to thought in general. And in order to become conscious of one's ego it is necessary to liberate oneself from the thought and will of others. The coercion exercised by the adult or the older child is therefore inseparable from the unconscious egocentrism of the young child.

(1965:93)

In his studies on the moral judgment of the child, Piaget likened moral realism to childish realism and attributed the cause to the type of social relationship in which the child existed; that is, one of constraint and coercion.

Language itself also prevents development and, in fact, favours the egocentrism of the child. Although language is a necessary acquisition to enable the child to participate in society and to operate intellectually, language also serves as an obstacle to the development of operational thought. "To the extent that, centering on situations (static) rather than on transformations and thus configurations rather than on the passage from one to the other, it prevents thought from attaining the reversibility (or reciprocity) indispensable to its functioning, to the profit of 'privileged representations' which become deforming precisely to the extent that they are privileged" (1951:3-4).

Under these conditions coercions of other people are not enough to engender logic in the child's mind. In order to reason logically the child must be able to establish the relationships of differentiation and reciprocity which characterize the coordination of viewpoints.

The structures which are associated with the beginnings of thought preclude the formation of the cooperative social functions which are indispensable for logic to be formed. Piaget's conclusion, therefore, is that a certain type of social relationship must be present before a child can be freed from his/her egocentrism and be able to participate in

social as well as logical operations:

As soon as language and the semiotic function permit not only evocation but also communication with other people, the universe to be represented is no longer formed exclusively of objects (or of persons as objects), as at the sensori-motor level, but contains also subjects who have their own views of the situation that must be reconciled with those of the child, with all that this situation involves in terms of separate and multiple perspectives to be differentiated and coordinated. In other words, the decentering which is a prerequisite for the formation of operations applies not only to a physical universe but also necessarily to an interpersonal or social universe. Unlike most actions, the operations involve a possibility of exchange, of interpersonal as well as personal coordination, and this cooperative aspect constitutes an indispensable condition for the objectivity, internal coherence (that is, their equilibrium) and universality of operational structures.

(1969b:95)

Thus is seen the essential relationship between the individual's social and cognitive development. Both are parallel in development and it is only through interactions with those with whom the child can cooperate will egocentrism decline and decentration result.

Whereas Mead views the incorporation of language as signifying the end of egocentrism and the appearance in the individual of the ability to role-take, Piaget, by relating language use to the child's cognitive capabilities and by providing a developmental analysis of language, shows it to be only one factor in the development of role-taking abilities which occupies the whole of childhood.

(iii) Operational Thought

The stage of operational thought is characterized by the ability of the child to decenter and conserve both at the intellectual and interpersonal levels. The child is no longer dominated by certain features (especially perceptual) of an object but can compensate for certain transformations by 'grouping' these transformations. No longer is the child confused by the water experiment in which the liquid is poured from a small to a larger glass. S/he now realizes that certain characteristics remain invariant. The child is now capable of logical thought in the true sense of the word.

The fundamental difference between the preoperatory and the operatory level is that at the preoperatory level assimilation to the child's own actions prevailed; whereas the operatory level is dominated by assimilation to the general coordinations of action and therefore to operations.

(1969b:118)

The child's thinking becomes logical only through the organization of systems of operations which obey the laws common to all groupings. Through reversibility the child is able to return to his/her original point of departure and hence repeat the same act and start to generalize. Logic, for Piaget, consists of a system of relationships which permit coordinations. The mind goes beyond its immediate point of view to group relations and attains a state of coherence and noncontradiction paralleled by cooperation in the social sphere. This development of the logical groupings is achieved at both the intellectual and social levels:

The child of seven years begins to be liberated from his social and intellectual egocentricity and becomes capable of new coordinations which will be of the utmost importance in the development of intelligence and affectivity. With respect to intelligence, we are now dealing with the beginnings of the construction of logic itself. Logic constitutes the system of relationships which permit the coordination of viewpoints corresponding to different individuals, as well as those which correspond to the successive percepts or intuitions of the same individual...the same system of social and individual coordinations engenders a morality of cooperation and personal autonomy in contrast to intuitive heteronomous morality of the small child ... Here we have two new realities which are closely related since both result from the same inversion or conversion of primitive egocentricity.

(1968b:41)

The young child is freed from his/her egocentrism and is finally capable of cooperation because s/he no longer confuses his/her own point of view with that of others. S/he is able to decenter in terms of social interactions and coordinate these different viewpoints. The decentering of cognitive constructions necessary for the development of operations is inseparable from the decentering of affective and social constructions. The child is able to role-take in the Meadian sense and engage in social communication.

In discussing moral development, Piaget makes explicit his viewpoint on the close interrelationship between it and intellectual development:

...the organization of moral values that characterize middle childhood is, by contrast, comparable to logic itself; it is the logic of values or of action among individuals, just

as logic is a kind of moral for thought
...Without exaggeration this system can
be compared to the 'groupings' of relations
or concepts that characterize logic, the only
difference being that here values are
grouped according to a scale rather than
by objective relationships.

(1968b:57-58)

The process of decentration is not accomplished in isolation but through continuous contact with the social environment in which emphasis is placed on the action of the individual in bringing about change. The child's capacity to decenter seems to be contingent upon the type of social intercourse s/he is able to engage in.

Instead of assuming that all social interactions offer the same basic stimulation for development, Piaget places importance on specific types of social relationships. Verbal interaction which requires the child to support and defend his/her statements is considered a necessary condition for the decline of egocentrism. The disequilibrium which results from this type of situation points to the need to role-take and consider numerous perspectives in the child.

Piaget focuses on the cooperative interactive situation in contrast to the coercive one and concludes that peer interaction is the major liberating factor in the decline of egocentrism. The asymmetrical power relationship between the parent and the child will not engender in the child the necessity of considering numerous dimensions indicative of operational thought. It is only when the child is interacting with those equal to him/herself will egocentrism decline. In

dealing with others on a basis of equality and reciprocity, the child will experience disconcerting differences between personal and external viewpoints. Whereas such differences in relating to parents can be accepted as due to their superior knowledge or position, such is not the case with peers.

In the course of his contacts (and especially his conflicts and arguments) with other children, the child increasingly finds himself forced to examine his own precepts and concepts in the light of those of others, and by so doing, gradually rids himself of cognitive egocentrism.

(Flavell, 1963:279)

Situations which require the child to explain his/her position, to take into account of and become aware of the other will allow the gradual decline of egocentrism. The same processes which allow the development of the ability to role-take also allow the individual to become aware of a self as separate from others.

Mead, in an indirect way, also places emphasis on the importance of the cooperative situation for development. Whereas Piaget views the peer group as an unique source of role-taking opportunities for the child, Mead does not single out any particular group as having specific forms of influence but instead stresses the social act in general. Any situation requiring cooperation or a coordination of viewpoints offers stimulation for development.

Piaget sees an essential relationship between the cooperative interactive situation and the nature of intelligence.

The more the child becomes capable of engaging in operational thought the more able s/he is to cooperate at the social level for it involves a reciprocity between individuals who know how to differentiate their viewpoints. As was shown in the stage of preoperational thought, the type of social relationship the child is in influences his/her cognitive development and his/her social involvement. It was shown that cooperation is the only type of social relationship that can free the child from his/her social and intellectual egocentrism.

Is the grouping the cause or the effect of cooperation? Grouping is a coordination of operations; cooperation is a coordination of viewpoints or of action associated with different individuals. "Their affinity is thus obvious, but does operational development within the individual enable him to cooperate with others, or does external co-operation, later internalized in the individual, compel him to group his actions in operational systems?" (1966:163). To this question Piaget replies..."Without interchange of thought and cooperation with others the individual would never come to group his operations into a coherent whole, therefore, operational grouping presupposes social life" (1966:163). The grouping is therefore a form of equilibrium of inter-individual as well as individual actions.

This form of equilibrium cannot be considered as the result of individual thought alone or as an exclusively social product. Internal operational activity and external cooperation

are merely complementary aspects of one and the same whole since the equilibrium of one depends on the other.

It is precisely by a constant interchange of thought with others that we are able to decentralize ourselves in this way, to coordinate internally relations deriving from different viewpoints.

Piaget concludes that:

logical thought is necessarily social, the fact remains that the laws of grouping constitute general forms of equilibrium with both the equilibrium of inter-individual interaction and that of the operations which every socialized individual is capable when he reasons internally in terms of his most personal and original ideas. To say that an individual arrives at logic only through cooperation thus simply amounts to asserting that the equilibrium of his operations is dependent on an infinite capacity for interaction with other people and therefore on complete reciprocity.

(1966:165)

For Piaget, social relations also obey the law of gradual stabilization. Cognitive equilibrium and social equilibrium are only two aspects of the same thing. They are both ideals to which development is directed but which have not been attained as yet. Each individual is at some time subject to authority from persons or groups.

Mead considers the environment as offering the same basic stimulation throughout development but Piaget's developmental analysis emphasizes the changing nature of the social environment based on the child's changing intellectual capabilities. Aspects of the social environment vary in their

influence according to the child's cognitive level.

The starting point for development which occurs in stages consisting of different levels of equilibrium is action by the individual. Development proceeds from egocentrism in which there is a lack of differentiation between ego and alter to decentration in which the child is able to take into account and coordinate various dimensions and perspectives. The nature of the social differs according to the child's cognitive level and importance is placed on specific types of interaction situations especially peer interactions. Language is not considered the essential mechanism in development and Piaget illustrates the changing nature of the child's ability to communicate based on his/her intellectual capabilities. The essential features of intelligence as conceived of by Piaget will now be explored.

c/ Nature of Intelligence

Human action consists of a continual and perpetual mechanism of readjustment and equilibrium and Piaget defines intelligence as a form of equilibrium towards which all cognitive structures lead (1962:120). Intelligence is not a static phenomenon. Mental development is characterized by a succession of increasingly more general, differentiated and extensive conceptual schema and by a gradually increasing ability to coordinate the objects of the environment into a coherent whole. The process by which these structures are formed is one of the most important aspects of Piaget's system since, to him, knowledge consists of a continuous construction.

The construction of these structures is characterized as an adaptive process between the system already organized at some level and its environment in which emphasis is placed on the action of the subject. Assimilation and accommodation are the basic mechanisms in the process of gradual development toward an eventual system in a state of equilibrium between internal and external factors. The subject assimilates reality (physical and social) into his/her already existing schema and accommodates these schema to reality.

The relationship between the child and the environment changes, as a function of this interchange, from one form of equilibrium to another. These different equilibrium relationships constitute stages of development. Each stage is characterized by the appearance of original structures whose

construction distinguishes it from previous stages but is built up upon them. These states of equilibrium can be distinguished according to various dimensions and they differ in the size of their field of application; their mobility; and their permanence and stability.

The abstraction of common properties of operations performed upon distinct sets of objects is the basis for new and higher systems of organization. This 'reflective abstraction' consists basically in the ability of the subject to decenter.

In decentering the child is able to take into account numerous perspectives or dimensions at once and to organize these into a coherent system. In the stage of advanced operations there is a process of simultaneous decentration. On the other hand, in the period of preoperational thought, the child is egocentric; that is, the child centers on only one dimension or perspective at a time and cannot coordinate the various dimensions.

The concept of stages has been the subject of criticism by numerous theorists who question the various assumptions inherent in the concept. The stages of development of cognitive structuring, according to Piaget, form an invariant sequence, are hierarchical in nature and form an integrated whole. The major problem with this concept is the misinterpretation that Piaget has equated stage with age and hence, his theory is one of biological maturation. Critics point to the different age trends in various cultures as proof

that Piaget is incorrect. It cannot be overemphasized, however, that Piaget has frequently reiterated that age and stage cannot be equated and that children progress through the various stages at different rates of development depending on maturational and environmental factors.

It has already been stated that development proceeds in the direction towards an equilibrated structure but the characteristics of this 'ideal' state have not been elaborated. To fully understand the nature of this equilibrated state one must understand the role that 'logic' plays in Piaget's theory.

Piaget has attempted to analyze the possible correspondance existing between the structures described by logic and the actual thought processes studied by psychology. According to Piaget, logic is the mirror of thought and the essential characteristic of logical thought is that it is operational.

Piaget calls the conceptual schemes of relations between objects operations. An operation is "an internalized action (which) is coordinated with other operations into an integrated operational grouping" (1968b:78). The development and coordination of these operations is one of the most fundamental facts of psychological thought. These operations have as their source the concrete actions of the child:

Knowledge is not a copy of reality. To know an object, to know an event, is not simply to look at it and make a mental copy, or image, of it. To know is to modify, to transform the object, and to understand the process of this transformation, and as

a consequence to understand the way the object is constructed. An operation is thus the essence of knowledge; it is an interiorized action which modifies the object of knowledge.

(1962a:8)

There are four essential characteristics of operations.

First, an operation is an action that can be internalized, that is, carried out in thought as well as materially. Second, it is a reversible action. The child can return to his/her point of departure, repeat the act and generalize the action to many contexts. Third, an operation always supposes some conservation, some invariant. Fourth, no operation exists alone but is related to a system of operations in a total structure. This final stage consisting of an equilibrated structure is the ideal to be reached in development.

Piaget postulates an equilibrium model for change that is essentially dialectic in nature. Equilibrium is defined as the "compensation resulting from the activities of the subject in response to external intrusion" (1968b:101). It is a process that maintains a balance between assimilation and accommodation.

Emphasis in development is placed not only on the environment but also on the organization of the system interacting with the environment. The awareness of momentary disequilibrium motivates the child to develop schema. In contrast to the learning theorists who regard motivation as a directionless inner tension or drive that activates

behavior, Piaget stresses that 'needs' cannot be identified apart from cognitive schemes. The child experiences a state of disequilibrium when s/he becomes aware that s/he cannot fit some external occurrence or object into his/her existing schema and s/he must modify these schema to some extent.

Piaget's analysis of equilibrium and the importance of disequilibrium in the development of schema, bears striking similarity to Mead's analysis of reflective thought. Although Mead stresses that he conceives of the mind as a process, his analysis of the nature of reflective thought as resulting from the emergence of the novel which cannot be incorporated into existing response categories, provides a structural interpretation of the organization and change of attitudes or responses.

Klaus Riegel (1973) has argued that because Piaget views development as a progression to a more complete equilibrium, that he has abandoned the earlier dialectic nature inherent in the concepts of assimilation and accommodation. He argues that contradictions are necessary for scientific thought; one must be aware that there are different interpretations and perspectives on things that must be taken into account. But Riegel underestimates Piaget's continuing emphasis on the above concepts throughout development. The ideal state of equilibrium to be reached is that of operations. The essential feature of these operations is that things are organized into a whole and that numerous perspectives can be taken into account. The concept of decentering emphasizes this. The

dialectic still exists. The child experiences disequilibrium in numerous instances in interaction and must modify his/her schema.

This model of equilibrium has also been used as evidence that Piaget views development as a totally independent thing which occurs only in the mind of the individual and is not influenced by social factors. Hamlyn (1971) for example, has argued that Piaget's emphasis on assimilation and accommodation illustrates that the child 'constructs' the world as s/he sees necessary without any influence from the social environment. He accuses Piaget of ignoring the fact that a social world already exists with which the child must interact and accept its various definitions of reality that exist. This argument can be dismissed in the light of previous analysis and the thesis that an essential parallelism exists between development in the impersonal and interpersonal spheres.

Development is characterized by Piaget as an adaptive process involving the mechanisms of assimilation and accommodation and proceeds to the stage of operational thought. The characteristics of operations apply to both the impersonal and interpersonal spheres. Just as the young child proceeds from egocentrism to decentration in dealing with physical objects s/he also proceeds in this direction in dealing with interpersonal relations through the increasing ability to role-take.

d/ Conclusion

Piaget views the development of intelligence as an adaptive process involving the mechanisms of assimilation and accommodation which is characterized by a succession of increasingly more general, differentiated and extensive conceptual schemes and by a gradually increasing ability to decenter. Development proceeds from egocentrism, the centering on only one dimension or perspective to operational thought consisting of decentering by taking into account and organizing into a coherent whole numerous dimensions or perspectives.

Although Piaget does not specifically discuss the development of role-taking abilities, by utilizing the concepts of egocentrism and decentration, I have argued that a parallelism in development exists between the child's ability to distinguish and coordinate dimensions and perspectives in the impersonal and interpersonal spheres. Piaget stresses the interrelationships between the two:

Variable structures - motor or intellectual
on the one hand and affective on the other -
are the organizational forms of mental activity.
They are organized along two dimensions -
intrapersonal and social (interpersonal).
(1968b:5)

Role-taking is a cognitive developmental process and also proceeds from complete egocentrism involving a lack of differentiation between ego and alter to the ability to take into account and coordinate perspectives.

The nature of the ability to role-take is similar to that of operational thought and involves the essential characteristics of operations. It requires (a) internal reflection (b) the ability to return to the point of departure, in this case, own point of view (c) ability to maintain own point of view at the same time as taking the role of others (invariant) and (d) the ability to coordinate the various points of view into an organized whole. These features of role-taking are similar to those postulated by Mead; that is, awareness of the other as separate from the self; simultaneous taking of the role of the other while relating it to his/her own perspective and coordination of these roles into a whole.

What aspects of the other individual's viewpoint are taken into account in role-taking are not discussed by Piaget. In the light of previous analysis it probably involves the process by which the individual apprehends certain attributes of the other individual. Based on past experiences and present perceptual input, the individual infers the possible needs, intentions, opinions and so on of the other individual. By this process, the individual is able to engage in co-operative behavior.

It must be stressed that the development of the ability to role-take varies from individual to individual due to different experiences during the course of development.

The factors conducive to the development of intelligence in the individual are also the factors which bring about the decline in egocentrism and an increase in role-taking ability.

Piaget extends Mead's analysis on social interaction and postulates an interaction view of change and development in which there is an interplay among the child's existing schema and properties of the social and physical worlds. The external influences vary with the changing cognitive structure of the child's mind and in discerning the influence of various factors, the level of development must be considered.

This position is further expanded upon by Piaget in his focus on equilibrium involving a balance between assimilation and accommodation as a central factor in development. Development proceeds in a dialectic fashion and through repeated social interactions, a state of disequilibrium is experienced which motivates the child to change his/her schema. When the child cannot fit some external occurrence into his/her existing schema (assimilation) s/he must modify these schema (accommodation). Specific types of interaction situations are discussed which are conducive to development along these lines.

Piaget stresses that the social environment is not a whole but consists of a series of relationships and the nature of these relationships is what influences development. Social interaction is a necessary condition for transition from one developmental stage to another. But it is not just the amount of social participation and experience in interaction that enables the child to progress but the particular type of interaction situation. All social interactions do not offer the same basic stimulation for development and Piaget focuses on the cooperative interactive situation of peer relationships

in contrast to the coercive child-adult one.

As with Mead, Piaget acknowledges the importance of language in the development of thought and role-taking. But in contrast, Piaget does not rely on it as the essential mechanism allowing internalized representations; he does not reduce thought to language. Instead, he presents a developmental analysis of language formation and illustrates the changing nature of the child's ability to communicate based on his/her intellectual capabilities. The child does not utilize language all at once but instead assimilates it a little at a time. Language use proceeds from egocentric communication to social communication in which role-taking takes place.

Piaget is concerned with cognitive development and like Mead does not extensively deal with the nature of affective development or the influences of affect on development. He states that intelligence and affectivity are indissociable and that affectivity explains acceleration or retardation of development (1962:129) but does not extensively analyze the specific features of the affective situation.

Piaget provides an essential extension to the Meadian analysis of the nature and development of role-taking abilities by adopting a developmental framework which more adequately analyzes the relationship between language and role-taking. He also emphasizes the importance of considering the level of development when ascertaining the importance of environmental factors on development. The implications of Mead's and Piaget's views on role-taking must now be considered in relation to current research.

Chapter Four

CURRENT RESEARCH STRATEGIES

a/ Introduction

I have argued that G.H. Mead and Jean Piaget view role-taking as a cognitive process and speak about the necessity of overcoming an egocentric perspective for one which acknowledges and takes into account other individuals. Both affirm the developmental nature of this ability and stress its importance in the interaction situation.

A survey of the descriptive-theoretical and causal-analytical research on role-taking ability will be undertaken to illustrate the present research strategies, offer suggestions for future ones and to point to ways in which research stemming from the two theoretical traditions may complement and extend each other.

The research survey is not intended to cover all aspects of the role-taking literature and related concepts such as empathy and person perception and it is by no means exhaustive. Focus will be placed on analyses concerned with role-taking as a cognitive process and those studies directly related to the Meadian and Piagetian theoretical frameworks.

b/ Nature of Role-taking Abilities

One of the major inadequacies of Mead's theory derives from the fact that it was developed in the absence of systematic empirical evidence and as a result there exists a lack of specificity concerning the major constructs. Mead provided no methodology for subsequent verification of concepts and research in this area has focused on the further clarification and operationalization of the ability to role-take. The whole area of role-taking skills has been only hazily conceptualized, specific studies concentrating on the nature and dimensions of this ability have been sparse and the major drawback of the studies that have been carried out is the reinterpretation of role-taking from a cognitive process essential for interaction to a static phenomenon.

It is beyond the scope of this paper to review the wealth of literature which has stemmed from and utilized the many conceptual distinctions of the Meadian tradition. Modifications of Mead's conception of role-taking have occurred with the introduction of the sociological concept of role as prescribed ways of acting and confusion of role-playing with role-taking (Lindsmith and Strauss 1968; Newcomb 1950; Sargent 1950). As a result, in many instances these analyses represent a radical departure from Mead and the dynamic nature of the concept has been substituted instead by a static deterministic one.

Utilizing Mead's emphasis on role-taking as an adjustive mechanism in social interaction, accuracy in role-taking defined

as the correct prediction of the responses of others has served as the major operational definition of this ability (cf. Taft 1955; Stryker 1957). Although methods vary, the basic paradigmatic task is one in which an individual is required to make inferences of some sort about various others and if the subject is highly accurate in his/her prediction, it is concluded that the subject has role-taking abilities. These studies have been severely criticized (Gage and Cronbach 1955; Cline 1964) on the grounds of contamination by various other variables and the problem of assumed similarity. They represent simplistic analyses of a highly complex phenomenon in which no stress is placed on the importance of interactive effects. A shift away from role-taking accuracy to role-taking activity which represents a more true reflection of Mead's definition of the concept is needed.

It is only recently after considerable confusion and misrepresentation that analysis into the ability to role-take based on Mead's interpretation is being undertaken. Coutu (1951) outlined the nature of the confusion of role-taking with role-playing and although he restated Mead's position, he offered little in the way of conceptual clarification and analysis of the nature of role-taking.

Turner (1956, 1962) has extensively analyzed the nature of the concept in an attempt to refocus attention on role-taking as a process rather than a static phenomenon consisting of prescribed ways of acting. He stresses the fluid nature of interaction: "the idea of role-taking shifts emphasis

away from the simple process of enacting a prescribed role to devising a performance on the basis of an imputed other role" (1962:23).

Turner extended Mead's analysis of role-taking as the taking of the attitude of the other to an imaginative construction of the other's role which is composed of numerous attitudes or tendencies to act towards objects. An individual takes the attitude of the other by placing him/herself in the other's position until the attitude in question is indicated. Turner does not, however, provide an analysis into the mechanisms involved in this process or the way in which they can be utilized in research.

Extending Turner's analysis, Lauer and Boardman (1971) distinguished between dichotomous types of role-taking: reflective/nonreflective in which reflective role-taking expresses the process whereby the role of the other reflects the expectations or evaluations of the self as seen in the other role; appropriate/nonappropriate role-taking where appropriate role-taking involves the internalization of the attitudes of the other and; synesic/nonsynesic role-taking where synesic role-taking is the imaginative construction of the other's attitude such that not only is his/her behavior anticipated, but an understanding of his/her feelings is gained (1971:138-139). Basic role-taking is nonreflective, nonappropriate and nonsynesic and consists of the process whereby an individual imaginatively constructs the attitudes of the other and thus anticipates the behavior of the other.

Recent analysis has served to refocus attention on the importance of the dynamic, interactive nature of the ability to role-take and although the above research distinguishes between various kinds of role-taking, very little information concerning the nature of the ability, its developmental aspects or what features of the other the individual apprehends is provided.

The Meadian analysis of role-taking has been useful in extending Piaget's theory of cognitive development in the impersonal sphere to the interpersonal one. Piaget's extensive empirical research provides a developmental framework and is heuristic in pointing to possible ways in which role-taking may be operationalized.

Research stemming from the Piagetian analysis of the development of cognitive abilities has taken as its point of departure the concepts of egocentrism and decentration and has attempted to confirm the existence of a parallel development in the impersonal and interpersonal spheres. Attempts have been made to clarify and extend the dimensions of role-taking, a process broadly defined as the ability to decenter.

The nature of the development of role-taking has been analyzed by various authors but the major problem with these studies, however, is the difficulty of comparison between the various tasks developed and the various stages hypothesized.

Burns and Cavey (1957) asked children to describe the feelings of others in familiar situations and found a developmental trend in this ability. Rothenberg (1970) measured

children's social sensitivity in ability to judge changing actor's feelings in tape recorded stories. Increased social sensitivity seemed to be a function of age and I.Q. More popular children were also more socially sensitive. Neither of these studies postulated stages in development.

Devries (1970) was concerned with role-taking as an expression of non-egocentrism in a binary choice social guessing game. Age changes in social guessing behavior reflected a shift from acting without taking the role of the other in the game into account to acting in terms of anticipating the other's behavior. Five stages in the development of this ability were hypothesized: (1) no recognition of the existence of individual perspectives (2) no awareness of different motivational perspectives (3) recognition of opposed goals of players but the child cannot take the other's viewpoint (4) the child takes the other's viewpoint in hiding strategy (5) the child takes the other's viewpoint in guessing strategy.

Melvin Feffer extended Piaget's analysis of cognitive development to the interpersonal sphere and suggests that decentering provides the essential variable. He extends Piaget's equilibrium model to interpersonal behavior and one is immediately aware of the similarities between this and Mead's analysis of role-taking:

The dovetailing of responses involved in effective social interaction requires that each participating individual modify his intended behavior in the light of his anticipation of the other's reaction to his behavior.

In order to accurately anticipate this reaction, one must view his intended behavior from the perspective of the other. Modifying one's behavior in the light of this anticipation further requires that one must also view the intended action from his own perspective at the same time. The cognitive organization of the individual capable of effective social organization can be interpreted as one in which different viewpoints are considered simultaneously in relation to each other such that the distortion engendered by a given perspective or centering is equilibrated or corrected by another perspective.

(1966:415-16)

Feffer designed a projective role-taking task to measure the child's ability to decenter his/her attention from the immediate perceptual aspects of the environment and his/her initial point of view. Subsequent studies show that role-taking development as measured by this task is correlated with cognitive development.

Three levels of role-taking ability are hypothesized:

(1) simple refocusing and a lack of coordination between perspectives (2) consistent elaboration and sequential coordination between perspectives (3) change of perspective and a simultaneous coordination of perspectives.

John Flavell (1968) took as his point of departure the early works of Piaget emphasizing the dependence of effective communication on role-taking skills. In agreement with a previous analysis by Sarbin (1954), it was concluded that the "Common component of all behavior in the general role-taking area is the discrimination of the other's role attributes" (1968:12). The individual apprehends the attributes

of the other.

In this pioneering work, Flavell and his associates developed various tasks designed to measure perceptual and figurative role-taking ability and role-taking ability as it relates to communicative performance. From these tasks they concluded that a child must know five things before s/he can achieve a role-mediated end. (1) the child must be aware of the existence of different perspectives (2) the child must be aware of the need to use role-taking activity (3) the child must have the ability to analyze and predict the other's perspective (4) the child must coordinate the different perspectives and (5) the child must know how to apply them in particular situations. The first three components are described as general role-taking abilities and the last two as task specific role-taking abilities. These skills do not necessarily form a developmental hierarchy but from discussions in Flavell's work it is apparent that he considers them to do so.

Generally Flavell's work postulates three stages in the development of this ability: the self's recognition that the other can have cognitions about the self as well as about other external objects; that the self is not only an object for the other but also a subject; that both self and other can go on considering each other's views of the other ad infinitum (adapted from Selman 1971:1721).

The first comprehensive analysis of the relationship between the various role-taking stages was undertaken by

Selman. He combined Flavell's and Feffer's views on role-taking development. "Role-taking implies the ability to make specific inferences about another's capacities, attributes, expectations, feelings and potential reactions. It also implies the ability to differentiate the other's view from one's own, the ability to shift balance and evaluate both cognitive and perceptual input" (1971:1721). He developed a series of four role-taking levels on the basis of Flavell's and Feffer's analyses and the developmental principles of differentiation (distinguishing perspectives) and integration (relating perspectives). They were analyzed on the basis of mature moral judgements.

Level 0 Egocentric Role-taking

distinguishing perspectives: the inability to make a distinction between a personal interpretation of social action and what he considers to be a true or correct perspective.

relating perspectives: child does not relate them.

Level 1 Subjective Role-taking

distinguishing perspectives: child sees himself and others with potentially different interpretations of same social situation.

relating perspectives: child cannot maintain his own perspective and simultaneously put himself in place of others in attempting to judge their actions.

Level 2 Self-reflective Role-taking

distinguishing perspectives: child is aware that people think or feel differently because each has his own set of values or purposes.

relating perspectives: child has the ability to reflect on the self's behavior and motivation as seen from outside self, from the other's point of view. This is done sequentially not simultaneously.

Level 3 Mutual Role-taking

distinguishing perspectives: child is able to differentiate the self's perspective from the generalized perspective.

relating perspectives: the self and the other can consider each party's point of view simultaneously and mutually.

Other studies not directly related with testing hypotheses concerning Piaget's work have also illustrated the developmental nature of interpersonal perceptions and explored the nature of children's understanding of social interaction.

Studies showing the developmental nature of children's perceptions of other persons reflect the relationship between social descriptions and cognitive development and parallels between them.

Scarlett (1971), in asking children to describe other peers, showed that there existed a developmental trend from more global undifferentiated behavioral descriptions to more differentiated dispositional descriptions.

Livesley and Bromley (1973) who believed that the impressions a child has of others may influence their patterns of interaction, focused on a developmental analysis of the way in which children perceive others. They showed that ability develops from describing persons in terms of physical characteristics to that of making more internal judgments

concerning motives and feelings. There was a change from more concrete to more abstract descriptive abilities. The most interesting finding, however, was the major sex differences in descriptions. Girls described people in more abstract concepts earlier than boys.

Instead of hypothesizing about the changing nature of the child's ability to role-take these authors analyzed the changing nature of how children describe others and their understanding of interaction.

Using a more original technique and criticizing the more static approach of authors such as Flavell, Doris Flapan (1968) ascertained the developing nature of role-taking abilities by showing children motion pictures of interaction scenes. She found an increase with age in the ability to infer intentions and feelings and less reliance on only physical descriptions of the actors in the movies.

Research focusing on interpersonal competence stressed the various skills needed for interpersonal interaction and how these skills are developmental in nature. These studies recognized empathy as one of the primary processes underlying human interaction and communication. Theorists agree on the cognitive nature of this ability (Foote and Cottrell 1955; Berscheid and Walster 1969).

That the ability to role-take is cognitive in nature has been confirmed by numerous studies. Moir (1974) analyzed the relationship between various role-taking tasks and moral judgment and showed that they were highly correlated with one

another but when intelligence was partialled out this correlation largely disappeared. This suggests that what communality exists between these various tasks is largely determined by their associations with intelligence.

Rubin (1973) analyzed the relationship among the various dimensions of egocentrism using factor analysis and showed the existence of a central factor common to all the various aspects of this concept. Although a number of techniques being employed to measure egocentrism and more specifically role-taking were not included in the analysis, the study offers support for the existence of a general ability to decenter.

The major drawback of these studies is that although they show a positive relationship between decentering in the cognitive and social spheres, they employ rather static measures of role-taking. Analysis is not undertaken to measure this ability in actual interaction situations where its influence should be most apparent as postulated by both Mead and Piaget. Researchers in this area would benefit from the analyses being undertaken within the Meadian framework.

The various studies reviewed differ somewhat in their techniques and the stages postulated but all of them insist on the importance of two variables in role-taking ability: awareness of different perspectives and the coordination of these perspectives. They also offer important extensions to both theorists' analyses of the developmental progression of role-taking. It remains for further research to confirm

the nature of these stages.

It has been shown that the aspects of the other that the individual apprehends also reflect a developmental progression. A general hierarchy of difficulty of tasks can be hypothesized based on what aspects of the other the individual must perceive: (1) tasks requiring perceptual role-taking abilities; (2) tasks requiring the subject to view perspectives of others with respect to the manipulation of physical objects; (3) tasks requiring the subject to perceive feelings, motives and intentions of others in interpersonal situations.

The majority of studies attempting to discern the nature of role-taking abilities have focused on the Piagetian framework and those concentrating on Mead are only in the early stages of conceptualization. These studies offer important extensions to Mead's and Piaget's analyses of the dimensions and the development of this ability especially in the area of what is perceived in the process of role-taking. They point to the importance of taking into account the nature of the situation and the difficulty of the task when measuring role-taking but fail to provide dynamic measures of this ability and instead rely on static ones. This research has, however, confirmed the developmental and cognitive nature of role-taking abilities.

c/ Causal-analytic Studies

George Herbert Mead and Jean Piaget focus on social interaction as the principal factor liberating the child from his/her initial egocentrism. Action by the individual is the starting point for development and it is by constant interchange with others that the child develops the ability to role-take. Given the emphasis both theorists place on social interaction it is surprising that few empirical studies based on both theoretical frameworks exploring the influence of various social factors contributing to the development of role-taking abilities have been undertaken. Analyses based on Mead are practically non-existent and those undertaken have concentrated instead on correlates of the self concept (for a review of the research in this area see Wylie 1961). Those concerned with Piagetian analysis are more numerous and as a result, research based on both theorists will be discussed in conjunction with each other.

Initial studies have taken as their point of departure the importance of social interaction and have hypothesized that the greater the number and variety of interaction experiences the greater the rate of development of the ability to role-take (Kohlberg 1969; Weinstein 1969; Lauer and Boardman 1971). These studies are not concerned with variations in role-taking abilities except as they may be a function of the extent and breadth of the actor's experiences in interaction with others. It is assumed that all types of interaction offer the same basic stimulation

for development.

This analysis has also served as the basis for numerous 'cultural deprivation' studies (Jessor 1968). The only study undertaken to determine the possible effects of social class on egocentrism was performed by Sullivan and Hunt (1967). It was assumed that the child in a lower class has less variety in his/her experiences and less interaction with the environment and therefore should be less developed than a child from a middle class environment. They found that lower class children did not differ from middle class children on role-taking ability when I.Q. was controlled. Any results mentioned by this study cannot be taken at face value, however, due to serious methodological deficiencies and the questionable validity of the 'cultural deprivation' assumption.

One would assume that social class is a very important variable in cognitive as well as social development but instead of using such a global measure accompanied by unfounded assumptions, actual measures of the quantity and type of interaction children from different social class backgrounds have would be more beneficial.

Although the hypothesis concerning the importance of the quantity and variety of experience sounds plausible in a simplistic sense, it offers little in the way of pointing to specific features of the interaction situation conducive to development. It does not consider the question of the degree to which previous interaction is effective in providing

the necessary basis for adequate role-taking.

According to Piaget, the specific type of interactive situation most conducive to development is interaction with peers. It is only when the child is engaged in interaction with peers with whom s/he can cooperate that egocentrism will decline.

Research undertaken to explore this relationship has been predominately concerned with analyzing whether peer popularity is related to the ability to decenter or role-take. The basic assumption in these studies is that the more popular children will engage in more social interaction and therefore will be less egocentric. Goldschmid (1968) found that children with higher conservation scores tended to be more popular. Popularity was directly related to social sensitivity in a study by Rothenberg (1970).

Rardin (1971) attempted to explore some aspect of peer interaction besides quantity although this was a very important aspect of his hypothesis. He was interested in the affective nature of the interaction and assumed that more popular children would have positive interaction relationships as well as more interaction. The individual's progress in cognitive development would vary with the affective quality of his/her peer relations. Popularity was found to be directly related to social development but its relationship to concept development was unclear.

There is no causal mechanism involved in analyzing peer popularity. One can never tell whether popularity was 'caused'

by better role-taking abilities or whether they developed simultaneously. A more extensive conceptual analysis of peer interactions with specific contexts being studied is needed rather than just 'quantity' of peer interactions assumed to be indicated by popularity. These studies have avoided analyzing the specific nature of the relationships between peers; that is, the cooperative versus the coercive postulated by Piaget.

Various studies focusing on the nature of the home relationship have been more careful in attempting to ascertain aspects of the relationship considered important in development.

Hess and Shipman (1965) analyzed two types of family control and found that children in situations where control was person-centered instead of position-centered were more developed. Their study placed importance on non-authority instead of authority situations in influencing development.

In studying various types of decision making strategies in the family, Swanson (1974) who compared Mead and Piaget, showed that in families where decision making patterns were not arbitrary but stressed diverse and integrated points of view, children scored higher on Piaget-type measures. Children in these families would have to coordinate and integrate various points of view before coming to a decision.

The major difficulty with the above studies has been the use of global measures of interaction instead of measuring the actual nature of interaction between individuals. Also,

they have avoided the emphasis by Piaget and to some degree Mead, on the importance of the cooperative nature of the interaction situation whether between peers or adults. Dimensions of cooperation and coercion need to be developed before results other than inconclusive ones will be found.

The most thoroughly explored area of research has been that concerned with the importance of language on the development of role-taking abilities. Both Mead and Piaget agree on the importance of verbal interaction in development. The major problem of research in this area stems from the close interrelationship between role-taking and language posited by the theorists. In order to adequately communicate, an individual must put him/herself in the role of the listener and adjust the message accordingly. Mead, besides confirming this point, also wanted language to account for the ability to role-take but did not provide a developmental analysis into how the individual acquires language. Piaget extended Mead's position by providing the developmental framework and by stressing the need to consider the child's cognitive level in conjunction with language development. He posited two forms of communication: egocentric and socialized and stated that cognitive egocentrism is the major contributing factor in the communication inadequacies of young children.

The majority of studies in this area have focused on confirming the general nature of development from egocentric to socialized speech instead of analyzing the nature of the

relationship between role-taking and communication. It has been confirmed that the young child engages in egocentric communication and that role-taking performance and communication performance increases with age (Flavell 1968). Studies by Rubin (1971), Alvy (1968) and Kohlberg (1968) also confirm the developmental nature of egocentric speech and its relationship to cognitive development in general although they disagree on the functions and frequency of egocentric speech.

In attempting to discern the influence of communication or verbal interaction on role-taking, studies have tended to use only one set of behaviors and inferred both role-taking and communication skills from the same behavior, that is, operationally role-taking ability is primarily communicative ability.

Some researchers have measured role-taking and communication abilities assessed independently but results are inconclusive (Cowan 1966; Feffer & Gourevitch 1960; Feffer & Sucholliff 1966).

Piaget stresses that verbal interaction is important in the decline of egocentrism and the development of role-taking abilities. Specific features of verbal interaction considered conducive to development must be explored.

Murray (1972) showed that when children were confronted by other children with arguments contrary to their viewpoints, their conservation scores increased.

The most promising studies in the causal-analytic area were carried out by Hollos and Cowan (1973) and West (1974).

These studies tried to discern the possible importance verbal interaction would have on the development of both cognitive and role-taking abilities. Both studies varied the social settings of the children in the samples according to amount of interaction available.

Hollos and Cowan analyzed children in three social settings which differed on one critical variable: the amount of verbal interaction that the children had with their parents and peers. It was shown that although the setting had effects on role-taking abilities, it did not influence the development of logical operations to the same degree. The authors concluded that there was a 'threshold' of verbal interaction needed for development and that after this was reached there was no further influence. Role-taking ability was not a linear function of amount of interaction.

West followed up the above study but stressed the Piagetian hypothesis on the importance of peer interactions which, in contrast to adult-child interactions, are based on symmetrical power relationships. As a result, she studied children in a kibbutz setting as compared to those in a town setting. It was assumed that children in the kibbutz would have a greater variety of peer experiences. She found no major differences in ability between the groups and supported the threshold hypothesis of Hollos and Cowan.

The major drawback of these two studies is the lack of interaction measures at the individual level. The authors

used only assumed group differences in level of interaction. Also, no analysis of the nature of interaction was undertaken. Although the importance of verbal interaction was stressed, neither studies measured possible types of verbal interaction to explore this influence. Hollos and Cowan mentioned that all types of interaction in their study were of Bernstein's restricted type but did not expand on this feature.

Piaget emphasizes the importance of peer interaction but conflicting results have been reported by Rubin (1972) and Kohlberg (1968) concerning the degree of egocentric communication and popularity. Whereas Rubin found the less egocentric child more popular, Kohlberg found the more popular child engaged in more egocentric communication. The major difficulty seems to be a definitional one. Whereas Rubin based his measurement of egocentric communication on the child's inability to take the role of the other, Kohlberg's analysis assumed the child could take the role of the other. According to Kohlberg, the child who perceives someone as similar to him/herself will engage in more egocentric speech. This implicitly implies perceiving the self as differentiated from the other, that is, nonegocentrism as defined by Piaget. These studies also suffer from the same drawbacks discussed earlier on peer interaction and popularity.

Kerchoff (1969) stressed the importance of explanatory instead of expressive responses to a child's inquiries as facilitating the development of role-taking abilities.

The research that may prove to be the most beneficial in pointing to types of verbal interaction is that carried out by Basil Bernstein on social class differences in language use.

Bernstein's emphasis is on the form of the social relationship and how this influences the orders of meaning. Some situations result in context-dependent speech and a particularistic order of meaning in which principles are implicit. Other situations result in context-independent speech and a universalistic order of meaning in which principles are verbally explicit and elaborated. These differences are distinguished in terms of two speech codes: restricted and elaborated. Whether the child's speech and order of meaning is restricted or elaborated depends on the child's socializer's (parents or peers) use of restricted or elaborated codes.

In looking at various social structures that give rise to different communication codes, Bernstein emphasized social class differences but more particularly family structures and their approach to social control. Two types of relationships were developed in his analysis of the decision making patterns of these families. There are those which stress positional control in which the emphasis the controller places on the child is in terms of general attributes (sex, age) and very little discretion is accorded the child in terms of the control relationship. In person oriented families emphasis is placed on aspects specific to the child (intentions) and a great deal of discretion is

accorded the child.

It is believed that Bernstein's emphasis on the two types of relationships bears some resemblance to Piaget's distinction between the constraining relations of interactions with adults and the reciprocal nature of relations with peers. Bernstein's analysis points to possible research strategies that may be employed in the future which could extend Piaget's and Mead's analysis of the importance of verbal interaction.

Research in this area has progressed from the simplistic assumption that quantity and diversity of interaction are the only variables important for development to attempts at ascertaining specific features of the interaction situation. But studies still resort to quantity when measuring specific types of interaction as in the case of peer and verbal interaction and they also tend to utilize global measures such as popularity and social class instead of measuring the actual nature of interaction at the individual level. Researchers must get beyond these strategies and analyze specific aspects of particular interaction situations. The strategies adopted are surprising in the light of Mead's and Piaget's emphasis on the dynamic nature of the interaction situation.

The major drawback of all the studies, however, is the disregard of the importance placed by Piaget on the level of development of the child in conjunction with the social environment. Researchers have not explored this area and assume that factors conducive to development remain constant

throughout childhood. Adoption of a developmental interactive perspective is essential if adequate analysis of the nature of factors influencing development of the ability to role-take is to be undertaken.

d/ In Summary

Descriptive-theoretical and causal-analytical studies of role-taking have in some cases extended the Meadian and Piagetian frameworks especially in the area of the nature of this ability. Research has confirmed the cognitive and developmental nature of this ability but studies have generally attempted simplistic analyses and have ignored the importance both theorists place on role-taking as a process taking place in interaction. Conceptualizations of role-taking being developed in the Meadian tradition will offer important modifications to the static ones developed by Piagetian researchers.

In attempting to ascertain the features of the interaction situation conducive to development researchers have been content with only the grossest of indices of environmental influence emphasizing quantity instead of actual measures of type of interaction at the individual level. Systematic and detailed exploration of the interactive situation and utilization of the important extension of the Meadian analysis of role-taking provided by the developmental framework of Jean Piaget, is needed before researchers will be better able to analyze and understand the interrelationships of the development of role-taking abilities and social features contributing to this development. No amount or degree of correlation between such distal variables as peer popularity or amount of verbal interaction can serve as a substitute for adequate analysis of actual interaction.

IN CONCLUSION

Analysis of role-taking in the writings of George Herbert Mead and Jean Piaget was undertaken in an attempt to determine the nature and development of this ability and to ascertain factors conducive to its development.

For G.H. Mead, role-taking, the essence of mind and self, is the central mechanism enabling the individual to adjust to his/her environment. This ability which is developmental in nature is essential for the successful completion of the act and is the product of action by the individual in the social process.

When interacting with the environment, the individual encounters the novel which results in the inhibition of action because the individual cannot respond to it on the basis of established habits and interpretative categories. These must undergo change so as to bring the exception within the scope of reason. In choosing the appropriate response, however, the individual must take the role of the other. In the case of the response to an object others must be taken into account if the response is to be useful in future situations and in the case of the social act, others must be taken into account for its successful completion. The meaning of an individual's gesture is provided by the other and role-taking, a cognitive process in which the individual takes the attitude or response of the other, must

occur if the individual is to anticipate the behavior of the other and hence control his/her own action.

The starting point for development is action by the child who initially engages in a conversation of gestures. Mead's analysis of the development of the mind and the self is also an analysis of the development of the ability to role-take. This development proceeds in two stages: the sequential taking of the attitudes of particular individuals and the taking of the attitude of the generalized other involving simultaneous role-taking and a coordination of various viewpoints into an organized whole.

Although Mead discusses the importance of the problematic situation in the development of the awareness of the other, play for providing initial role-taking experiences and the game with its organized nature enabling the development of the ability to coordinate perspectives, his major emphasis is on language in terms of the vocal gesture and the significant symbol. The vocal gesture allows self-stimulation and the significant symbol provides common meanings. Mead encounters problems, however, when accounting for the transition from the vocal gesture to the significant symbol which requires consciousness of meaning. As a result, he resorts to role-taking to account for the development to significant symbols but he also wants significant symbols to account for the development of the ability to role-take. Although he provides a developmental analysis of role-taking he does not provide one for language and does not explain the way in which language

is incorporated in the child.

Jean Piaget provides important extensions to the Meadian exposition of role-taking by relating the development of language and this ability, by offering a more thorough analysis of the development of meaning, and by providing further clarification of the specific features of the interaction situation considered conducive for development.

Although Piaget does not deal with the development of role-taking abilities, I have argued that by reinterpreting his cognitive developmental theory in Meadian terms and by utilizing Piaget's concepts of egocentrism and decentration, a parallel development exists between the impersonal and interpersonal spheres.

Development of cognitive functions is characterized by a succession of stages which consists of different levels of equilibrium and development. There is a continual process of equilibrium between the mechanisms of assimilation and accommodation. The child assimilates reality (physical and social) into his/her already existing schema and accommodates these schema to reality. The characteristics of operations are also the characteristics of role-taking which requires (1) internal reflection (2) the ability to maintain own point of view at the same time as taking the role of others (3) ability to return to point of departure and (4) the ability to coordinate the various points of view into an organized whole.

Like Mead, the starting point for development is action by the individual and there are three stages of development.

In the sensori-motor stage, there is no differentiation between the self and the environment and schemata of action are developed. The preoperational stage is characterized by the appearance of the symbolic function composed of both the individual symbol and the collective sign. Meaning develops in the child as the result of the interrelationships of the processes of assimilation in terms of symbolic play and accommodation in terms of imitation. The child does not accommodate him/herself to the system of collective signs but borrows from this collection as much as suits him/her. What is borrowed is assimilated in accordance with his/her intellectual structures. Piaget argues that the child's use of language reflects his/her cognitive abilities and he provides a developmental analysis of language use from the egocentric to the socialized. The operational stage of thought is characterized by the ability of the child to decenter/role-take in which s/he acknowledges and coordinates dimensions and perspectives.

Piaget stresses that all social interaction does not offer the same basic stimulation for development and that the nature of the social differs according to the child's cognitive level. Focus is placed on the importance of the cooperative nature of interactions with peers in contrast to the coercive nature of interactions with adults.

Both theorists provide extensive analyses into what is involved in the cognitive process of role-taking but they offer little in the way of understanding what aspects of the

other the individual apprehends in this process. Research based on Mead and Piaget has confirmed the developmental and cognitive nature of role-taking and has extended their analyses concerning the aspects of the other the individual takes the role of. It has been shown that this also is developmental in nature and proceeds from apprehending physical attributes to inferring emotions and motives.

Research based on the Meadian framework is in its initial stages but that based on Piaget is quite extensive. Although both theorists emphasize that role-taking is a cognitive process occurring in interaction, research has tended to employ static measures of this ability instead of analyzing its nature in actual interaction situations.

Social interaction is the most important factor in development according to Mead and Piaget but they do not provide extensive analysis into the specific features of the interaction situation considered essential for development. Although Piaget stresses peer interaction and both stress verbal interaction, they do not expand on the specific features of these situations to any major degree. As a result, research has focused on quantity of interaction instead of exploring specific features of the situation. Studies have been satisfied with the grossest of measures of interaction such as peer popularity and social class or they have utilized global measures instead of analyzing the amount of quality of interaction at the individual level.

On the basis of these considerations, I suggest that

future research return to Mead's and Piaget's emphasis on role-taking as a cognitive process occurring in interaction and instead of being content with global and static measures analyze specific features of the situation at the individual level. A developmental perspective should also be adopted in which the level of the child is considered in conjunction with the social situation. Researchers will benefit from considering both theorists' views of role-taking and the ways in which they complement and conflict with each other.

REFERENCES

- Alvy, K.T. "Relation of age to children's egocentric and cooperative communication", Journal of Genetic Psychology, 1967, 112: 275-86.
- Beaver, Alma The Initiation of Social Contacts of Preschool Children, Teachers College Press, New York, 1932.
- Bernstein, Basil "A socio-linguistic approach to socialization with some reference to educability: Section 1", Human Context, 1970, 2(1): 1-19. .
- Bernstein, Basil "A socio-linguistic approach to socialization with some reference to educability: Sections 2,3", Human Context, 1970, 2(2):233-277.
- Bernstein, Basil Class, Codes and Control, Paladin Pub. Co., St. Albans, 1971.
- Bittner, C.J. "G.H. Mead's social concept of the self", Sociology and Social Research, 1931, XVI:6-22.
- Blumer, H. Symbolic Interaction: Perspective and Method, Prentice-Hall, Englewood Cliffs, 1969.
- Borgatta, E. "Role-playing specification, personality and performance", Sociometry, 1961, 24:218-233.
- Borke, H. "Interpersonal perception of young children: egocentrism or empathy?", Developmental Psychology, 1971, 5:263-269.
- Brainerd, C.J. "The age-stage issue in conservation acquisition", Psychon. Sci., 1972, 29:115-116.
- Burns, N. & Cavey, L. "Age differences in emphatic ability among children", Canadian Journal of Psychology, 1957, 11:227-230.
- Campbell, J.D. "Peer relations in childhood", in Hoffman, M. & L. Hoffman (eds.), Review of Child Development Research, Volume 1, Russel Sage Foundation, New York, 1964.
- Chin, Grace Lee George Herbert Mead: Philosopher of the Social Individual, Kings Crown Press, New York, 1945.
- Cline, V.B. "Interpersonal perception", in B. Maher (ed.), Progress in Experimental Personality Research, Volume 1, Academic Press, New York, 1964.

- Cohen, D.J. "Justin and his peers: an experimental analysis of a child's social world", Child Development, 1962, 33:697-717.
- Cohen, B.D. & Klein, J.F. "Referent communication in school age children", Child Development, 1968, 39:597-609.
- Cottrell, L.S. "Interpersonal interaction and the development of the self", in D. Goslin (ed.), Handbook of Socialization Theory and Research, Rand McNally, Chicago, 1969.
- Coutu, Walter Emergent Human Nature, Alfred A. Knopf, New York, 1949.
- Coutu, Walter "Role-playing vs role-taking: an appeal for clarification", American Sociological Review, 1951, 16: 180-187.
- Cowan, P.A. "Cognitive egocentrism and social interaction in children", American Psychologist, 1966, 21:623.
- Denzin, N. "Childhood as a conversation of gestures", Sociological Symposium, 1971, 7:23-35.
- Denzin, N. "Genesis of self in early childhood", Sociological Quarterly, 1972, 13:291-314.
- DeVries, R. "The development of role-taking as reflected by behavior of bright, average and retarded children in a social guessing game", Child Development, 1970, 41:759-770.
- Doan, Frank Emergence and Organized Perspectives: A Study in Philosophy of George Herbert Mead, unpublished Ph.D. dissertation, University of Toronto, 1952.
- Doan, Frank "Notations of G.H. Mead's principle of sociality", Journal of Philosophy, 1956, 53: 607-615.
- Doby, John "Man the species and the individual: a sociological perspective", Social Forces, 1970, 49:1-15.
- Elkind, D. "The child's conception of right and left", Journal of Genetic Psychology, 1961, 99:269-276.
- Elkind, D. Children and Adolescents: Interpretative Essays on Jean Piaget, Oxford U. Press, New York, 1974.
- Elkind, D. & Flavell, J. (eds.), Studies in Cognitive Development, Oxford U. Press, New York, 1969.
- Feffer, Melvin "The cognitive implications of role-taking behavior", Journal of Personality, 1959, 27:152-168.

- Feffer, M. & Gourevitch, V. "Cognitive aspects of role-taking in children", Journal of Personality, 1960, 28:383-396.
- Feffer, M. & Suchotliff, L. "Decentering implications of social interactions", Journal of Personality and Social Research, 1966, 4:415-422.
- Feffer, M. "Sympton expression as a form of primitive de-centering", Psychological Review, 1967, 74:16-28.
- Feffer, M. "A developmental analysis of interpersonal behavior", Psychological Review, 1970, 77:197-214.
- Flapan, D. Children's Understanding of Social Interaction, Teachers College Press, New York, 1968.
- Flavell, J. "Piaget's contributions to the study of cognitive development", Merrill-Palmer Quarterly, 1963, 9:245-252.
- Flavell, J. The Developmental Psychology of Jean Piaget, Van Nostrand, New York, 1963.
- Flavell, J. "Role-taking and communication skills in young children", Young Children, 1966, 21:164-177.
- Flavell, J., Botkin, R., Fry, C., et al, The Development of Role-Taking and Communication Skills in Children, Wiley, New York, 1968.
- Flavell, J. "An analysis of cognitive-developmental sequences", Genetic Psychology Monographs, 1972, 86:279-350.
- Foote, N. & Cottrell, L. Identity and Interpersonal Competence, U. of Chicago Press, Chicago, 1955.
- Fry, C.L. "Training children to communicate to listeners", Child Development, 1966, 37:675-685.
- Fry, C.L. "Training children to communicate with listeners who have various listener requirements", Journal of Genetic Psychology, 1969, 114:153-166.
- Furth, H.G. Piaget and Knowledge: Theoretical Foundations, Prentice-Hall, Englewood Cliffs, 1969.
- Gage, N.L. & Cronbach, L.J. "Conceptual and methodological problems in interpersonal perception", Psychological Review, 1955, 62:411-422.
- Garvey, C. & Hogan, R. "Social speech and social interaction: egocentrism revisited", Child Development, 1973, 44:562-568.

- Glucksberg, S., Krauss, R.M., Weisberg, R. "Referential communication in nursery school children", Journal of Experimental Child Psychology, 1966, 3:333-342.
- Glucksberg, S. & Krauss, R.M. "What do people say after they have learned how to talk?", Merrill-Palmer Quarterly, 1967, 13:309-316.
- Glucksberg, S., Krauss, R.M., & Higgins, E. "The development of referential communication skills", in F. Horowitz (ed.), Review of Child Development Research, Volume 4, U. of Chicago Press, Chicago, 1975.
- Hamlyn, D.W. "Epistemology and conceptual development", in T. Mischel (ed.), Cognitive Development and Epistemology, Academic Press, New York, 1971.
- Hastorf, A., Schneider, D., & Polefka, J. Person Perception, Addison-Wesley, Reading Mass., 1970.
- Hess, R.D., Shipman, V. "Early experience and the socialization of cognitive modes in children", Child Development, 1965, 36:869-886.
- Hollos, M., & Cowan, P.A. "Social isolation and cognitive development of logical operations and role-taking abilities", Child Development, 1973, 44:630-641.
- Hunt, J. McV. Intelligence and Experience, Ronald Press, New York, 1961.
- Hunt, J. McV. "Piaget's observations as a source of hypotheses concerning motivation", Merrill-Palmer Quarterly, 1963, 9:263-275.
- Inhelder, B. "Some aspects of Piaget's approach to cognition", Monographs of the Society for Research in Child Development, 1962, 27:19-34.
- Inhelder, B., "Learning cognitive structures", in P. Mussen (ed.), Trends and Issues in Developmental Psychology, Holt, Rinehart & Winston, New York, 1969.
- Jessor, R. & Richardson, S. "Psychological deprivation and personality development", in Perspectives on Human Deprivation: Biological, Psychological and Sociological, U.S. Dept. of Health, Education and Welfare, Washington, 1968.
- Kerckhoff, A. "Early antecedents of role-taking and role-playing ability", Merrill-Palmer Quarterly, 1969, 15:229-47.
- Kessen, W. "Thought in the young child", Monographs of the Society for Research in Child Development, 1962, 27:1-176.

- Kohlberg, L., Yaeger, J., & Hjertholm, E. "The development of private speech: four studies and a review of theories", Child Development, 1968, 39:692-736.
- Kohlberg, L. "Stage and sequence: the cognitive developmental approach to socialization", in D. Goslin (ed.), Handbook of Socialization Theory and Research, Rand McNally, Chicago, 1969.
- Kolb, W.L. "A critical evaluation of Mead's 'I' and 'Me' concepts", Social Forces, 1944, 22:291-296.
- Krauss, R. & Rotter, G.S. "Communication abilities of children as a function of status and age", Merrill-Palmer Quarterly, 1968, 14:161-173.
- Krauss, R. & Glucksberg, S. "The development of communication competence as a function of age", Child Development, 1969, 40:255-266.
- Kuhn, D. "Mechanisms of change in the development of cognitive structures", Child Development, 1972, 43:833-844.
- Laing, R.D., Phillipson, H., & Lee, A.R. Interpersonal Perception, Tavistock Pub., London, 1966.
- Langer, J. "Disequilibrium as a source of development", in P. Mussen (ed.), Trends and Issues in Developmental Psychology, Holt, Rinehart & Winston, New York, 1969a.
- Langer, J. Theories of Development, Holt, Rinehart & Winston, New York, 1969b.
- Lauer, R. & Boardman, L. "Role-taking: theory, typology and propositions", Sociology and Social Research, 1971, 55:137-148.
- Lee, Harold "Mead's doctrine of the past", Tulane Studies in Philosophy, 1963, 12:52-75.
- Lee, L.C. "Concomitant development of cognitive and moral modes of thought", Genetic Psychology Monographs, 1971, 83:93-146.
- Lindsmith, A. & Strauss, A. Social Psychology, Holt, Rinehart and Winston, New York, 1968.
- Livesley, W.J. & Bromley, D. Person Perception in Childhood and Adolescence, John Wiley, New York, 1973.
- Loof, W.R. "Egocentrism and social interaction across the life span", Psychological Bulletin, 1972, 78:73-92.

- Manis, J. & Meltzer, B. Symbolic Interaction: A Reader in Social Psychology, Allyn and Bacon, Boston, 1967.
- Mead, G.H. Mind, Self and Society, edited and with an introduction by Charles W. Morris, University of Chicago Press, Chicago, 1934.
- Mead, G.H. The Philosophy of the Act, University of Chicago Press, Chicago, 1938.
- Mead, G.H. George Herbert Mead on Social Psychology, edited by Anselm Strauss, University of Chicago Press, 1956.
- Mead, G.H. The Philosophy of the Present, Open Court Pub., La Salle, Ill., 1959.
- Mead, G.H. Selected Writings, edited by Andrew Reck, Bobbs-Merrill, New York, 1964.
- Meltzer, B. "Mead's social psychology", in J. Manis & B. Meltzer (eds.), Symbolic Interaction, Allyn and Bacon, Boston, 1967.
- Miller, D. "G.H. Mead's conception of the present", Philosophy of Science, 1943, 10:40-46.
- Miller, P.H. et al "Thinking about people thinking about people...a study of social cognitive development", Child Development, 1970, 41:613-623.
- Mischel, T. Cognitive Development and Epistemology, Academic Press, New York, 1971.
- Moir, J.D. "Egocentrism and the emergence of conventional morality in pre-adolescent girls", Child Development, 1974, 45:299.
- Morris, C.W. Signs, Language and Behavior, George Braziller, New York, 1946.
- Murray, F.B. "Acquisition of conservation through social interaction", Developmental Psychology, 1972, 6:1-6.
- Natanson, Maurice The Social Dynamics of G.H. Mead, Public Affairs Press, Washington, D.C., 1956.
- Neale, J.M. "Egocentrism in institutionalized and non-institutionalized children", Child Development, 1966, 37:97-101.
- Newcomb, T.M. Social Psychology, Dryden Press, 1950.

- Oestereich, Emil "Toward a sociology of cognitive structures", Social Research, 1972, 39:134-154.
- Pfeutze, Paul The Social Self, Bookman Ass., New York, 1954.
- Piaget, Jean "Egocentric thought and sociocentric thought", trans. G. Tesson, Cahiers Internationaux de Sociologie, 1951, 10(1-2):34-49.
- Piaget, Jean "Genetic psychology and epistemology", Diogenes, 1952, 1:49-63.
- Piaget, Jean Logic and Psychology, Manchester U. Press, Manchester, 1953.
- Piaget, Jean & Inhelder, B. The Growth of Logical Thinking, Routledge and Kegan Paul, London, 1958.
- Piaget, Jean The Language and Thought of the Child, Routledge and Kegan Paul, London, 1959.
- Piaget, Jean "Three Lectures", Menninger Clinical Bulletin, 1962a, 26(3):7-39.
- Piaget, Jean Play, Dreams and Imitation in the Child, Norton, New York, 1962b.
- Piaget, Jean "The stages of intellectual development of the child", Menninger Clinical Bulletin, 1962c, 26(3):120-145.
- Piaget, Jean The Early Growth of Logic in the Child, Routledge and Kegan Paul, London, 1964.
- Piaget, Jean The Moral Judgment of the Child, Free Press, New York, 1965.
- Piaget, Jean The Psychology of Intelligence, Littlefield, Adams & Co., New Jersey, 1966.
- Piaget, Jean Structuralism, Harper Torchbooks, New York, 1968a.
- Piaget, Jean Six Psychological Studies, Vintage Books, New York, 1968b.
- Piaget, Jean The Child's Conception of the World, Littlefield, Adams and Co., New Jersey, 1969a.
- Piaget, Jean The Psychology of the Child, Basic Books, New York, 1969b.
- Piaget, Jean Science of Education and the Psychology of the Child, Orion Press, New York, 1970a.

- Piaget, Jean Genetic Psychology, W.W. Norton Co., New York, 1970b.
- Piaget, Jean The Child and Reality, Viking Books, New York, 1973.
- Rardin, D. & Moan, C. "Peer interaction and cognitive development", Child Development, 1971, 42:1685-1699.
- Reck, Andrew "The philosophy of G.H. Mead (1863-1931)", Tulane Studies in Philosophy, 1962, 12:770-782.
- Riegel, K.F. "Influence of economic and political ideologies on the development of developmental psychology", Psychological Bulletin, 1972, 78:129-141.
- Riegel, K.F. "Dialectic operations: the final period of development?", Human Development, 1973, 16:346-370.
- Rose, Arnold "A systematic summary of symbolic interaction theory", in A. Rose (ed.), Human Behavior and Social Processes, Houghton-Mifflin, Boston, 1962.
- Rothenberg, B. "Children's social sensitivity and the relationship to interpersonal competence, intrapersonal comfort and intellectual level", Developmental Psychology, 1970, 2(3):335-350.
- Rubin, K. "Non-social speech in 4 year old children as a function of birth order and interpersonal situation", Merrill-Palmer Quarterly, 1971, 70:41-49.
- Rubin, K. "Relationship between cognitive communication and popularity among peers", Developmental Psychology, 1972, 7:364.
- Rubin, K. "The relationship between moral judgment, egocentrism and altruistic behavior", Child Development, 1973, 44: 661-665.
- Rubin, K. "Egocentrism in childhood: a unitary construct?", Child Development, 1973, 44:102-110.
- Sarbin, T. "The concept of role-taking", Sociometry, 1943, 6:273-285.
- Sarbin, T. "Role theory", in G. Lindzey (ed.), Handbook of Social Psychology, Volume 1, Addison-Wesley, Cambridge, 1954.
- Sargent, S. Social Psychology, Ronald Press, New York, 1950.
- Scarlett, H., Press, A., Crockett, W. "Children's descriptions of peers", Child Development, 1971, 42:439-453.

- Sears, R., Maccoby, E. & Levin, H. Patterns of Child Rearing, Row, Evanston, 1957.
- Secord, P. & Backman, C.W. Social Psychology, McGraw-Hill, New York, 1964.
- Selman, R. "The relation of role-taking to the development of moral judgment in children", Child Development, 1971a, 42:79-91.
- Selman, R. "Taking another's perspective: role-taking development in childhood", Child Development, 1971b, 42: 1721-1734.
- Selman, R. "A structural-developmental analysis of levels of role-taking in middle childhood", Child Development, 1974, 45:803-807.
- Smith, H.W. "Some developmental interpersonal dynamics through childhood", American Sociological Review, 1973, 38:543-552.
- Stevens, E. "Sociality and the act in G.H. Mead", Social Research, 1967, 34:613-648.
- Stotland, E. & Walsh, J. "Birth order and an experimental study of empathy", Journal of Abnormal and Social Psychology, 1963, 66:610-614.
- Stryker, S. "Role-taking accuracy and adjustment", Sociometry, 1957, 20:286-296.
- Stuart, R.B. "Decentration in the development of children's concepts of moral and causal judgments", Journal of Genetic Psychology, 1967, 111:59-68.
- Sullivan, E.V. & Hunt, D. "Interpersonal and objective decentering as a function of age and social class", Journal of Genetic Psychology, 1967, 110:199-210.
- Swanson, G. "Family structure and reflective intelligence in children", Sociometry, 1974, 37:459-490.
- Tagiuri, R. & Petrullo, L. Person Perception and Interpersonal Behavior, Stanford U. Press, Stanford, 1958.
- Taft, R. "The ability to judge people", Psychological Bulletin, 1955, 52:1-23.
- Tillman, M.K. "Temporality and role-taking in G.H. Mead", Social Research, 1970, 37:533-546.

- Toulmin, S. "The concept of stages in psychological development", in T. Mischel (ed.), Cognitive Development and Epistemology, Academic Press, New York, 1971.
- Troyer, W.L. "Mead's social and functional theory of mind", American Sociological Review, 1946, 11:198-202.
- Turner, Ralph "Role-taking, role standpoint and reference group", American Journal of Sociology, 1956, 61:316-328.
- Turner, Ralph "Role-taking: process versus conformity", in A.M. Rose (ed.), Human Behavior and Social Processes, Houghton Mifflin, Boston, 1962.
- Weinhermer, S. "Egocentrism and social influence in children", Child Development, 1972, 43:567-578.
- Weinstein, E. "Development of interpersonal competence", in D.Goslin (ed.), Handbook of Socialization Theory and Research, Rand McNally, Chicago, 1969.
- West, Helen "Early peer group interaction and role-taking skills: an investigation of Israeli children", Child Development, 1974, 45:1118-1121.
- White, B. & Watts, J. Experience and Environment, Prentice-Hall, New Jersey, 1973.
- White, R. "Motivation reconsidered: the concept of competence", Psychological Review, 1959, 66:297-333.
- Winch, R.T. Identification and its Familial Determinants, Bobbs-Merrill, Indianapolis, 1962.
- Winter, Gibson Elements for a Social Ethic, McMillan Co., New York, 1966.
- Wood, J.R., Weinstein, E., & Parker, R. "Children's interpersonal tactics", Sociological Inquiry, 1967, 37:129-138.
- Wright, J. "Towards the assimilation of Piaget", Merrill-Palmer Quarterly, 1963, 9:277-285.
- Wylie, R. The Self Concept, U. of Nebraska Press, Lincoln, 1961.