A PERSON'S CONCEPT OF PERSON:

A DEVELOPMENTAL MODEL

OF SELF

Susan Trenholme Gardner

An

Interdisciplinary

Thesis

in

The Faculty

of

Arts and Science

Presented in Partial Fulfilment of the Requirements

for the degree of Doctor of Philosophy at

Concordia University, Montreal, Canada

January, 1981

Susan Trenholme Gardner, 1981

ABSTRACT

A PERSON'S CONCEPT OF PERSON: A DEVELOPMENTAL MODEL OF SELF

Susan Trenholme Gardner, Ph.D. Concordia University, 1981

The major claim of this thesis is that the actions of persons can not be understood, predicted or explained, without reference to their concepts of persons. It is argued that the emergence of this "selfinclusive" concept brings with it the property of self-consciousness (described as the ability to imagine oneself from the viewpoint of another) and the capacity to form social organizations of a "nonstimulus-bound" type. Following from this thesis that the essence of persons lies in their capacity to imagine the viewpoint of another, is the thesis that the essence of the development of persons lies in their increasing capacity to imagine an increasing number of viewpoints at one and the same time. This increase in social perspective-taking capacity, in turn, is accompanied by an increase in the behavioral influence of these "internal" representations of self relative to "external" cues and an increase in an individual's capacity to adjust his behavior with respect to ever more complex social units. It is argued further that, since the structure of a person's concept of person determines its content, in so far as this concept develops, its content evolves in a predictable order. It is argued that a person's concept of person -- also referred to as a "social concept" -- is equivalent to what is elsewhere referred to as "the ego."

In the first three chapters of this thesis, the major postulates of this Concept of Person Theory receive logical support by way of argument and reference to theorists in the fields of Philosophy, Psychology and Sociology. The fourth chapter offers empirical support in the form of a report of a correlation study carried out by the author. The tools used in this study were a questionnaire, a sentence completion test and a statistical technique known as "multidimensional scaling." The results indicated: (i) that the content of a person's concept of person evolves in the order predicted -- namely from a self-protective attitude, through conformity, to genuine moral thought; (ii) that the consequences of social concept development are as predicted -- that external orientation, social isolation and anomie decrease with development, while sense of wellbeing increases; and (iii) that social concept development can be considered equivalent to what is elsewhere referred to as ego development. In light of the post hoc hypothesis that stress spuriously decreases an individual's perspective-taking capacity as measured by multidimensional scaling, the positive but low association between perspective-taking capacity, as measured by multidimensional scaling, and social concept development, as measured by the questionnaire; remains equivocal.

The thesis concludes with an examination of general implications of the theory. In particular, the final chapter explores the nature of interpersonal interdependence from a transcendental, developmental,

metaphysical, existential, therapeutic, and metatheoretical point of view.

FOR MY HUSBAND

ACKNOWLEDGEMENTS

I would like to express my gratitude, in particular, to my three advisers, Dr. Jack Ornstein, Dr. Jane Stewart and Dr. Joseph Smucker, for their constant support, guidance and enthusiasm in helping to sustain the momentum of & difficult interdisciplinary project and to Dr. John Christian who encouraged me to test out my ideas through empirical research. I would like to thank Dr. John Sigal who made the facilities of the Research Department of the Institute of Community and Family Psychiatry, Jewish General Hospital, so readily available My appreciation to Joan Clayton, Julia Grunberg, Manon Perreault, Sharon Clark and Georgia Tailleur, who assisted in collecting the data. A special note of gratitude goes to Irit Sterner for. her sunny disposition and absolute dependability in assisting with the computer work. My thanks to Ronald Davidson who read and offered suggestions on the first draft and to Patricia Trenholme, whose enthusiastic reactions and sensitive editorial suggestions on the final draft sustained my spirits through to the end. thanks to Dorothy Scott who typed the final flawless manuscript: Last, but not least, I would like to thank my husband for his constant encouragement and support during the entire year when this thesis was being written, but most of all, for making the prospect of completing it such a happy one.

TABLE OF CONTENTS

•	•	• `	· ··.	٠.,	Page
ACKNOWLI	EDGEMENTS				iv
LIST OF	TABLES	· · · · · · · · · · · · · · · · · · ·		· · · <i>></i>	vii
LIST OF	FIGURES	e	· page and a second second	• • •	ix
Chapter		• . •	, ,		- •
I.	A PERSON'S CONCEPT OF	PERSON: AN IN	TRODUCTION		1
īī.	THE EMERGENCE OF A PER	SON'S CONCEPT	OF PERSON	,	11 ,
	Concept Definition Object Concepts Social Concepts Development of the a) The Object Se b) The Social Se	1f	٠		نہ
	The Role of Language a) Rules b) Language Types c) The Dialetic			•	,
III.	THE CONTINUING DEVELOPMENT PERSON	MENT OF A PERS	ON'S CONCE	PT OF	53
	Quantitative Expans: a) Differentiation b) Conceptual Evo	on Prodding Co	nceptual E	volution	
•	The Theory Ego/Social Concept l The Developmental S a) The Emergence	tages of a Per of a Concept	of Person `		erson
	b) The Development Organization c) The Leap Toward i - moral in	rd Uniqueness	d	cial	
	11 - autonom	my and uniquen	e8 8	~	a h

	-	rage.
V. A STUDY	: :	103
Methodological Considerations	,	•
a) The Sample		
b) Measurement Tools		
Method		
a) Subjects		
b) Procedure		•
i - questionnaire		
` ii - sentence completion test		
iii - multidimensional scaling		
c) Method of Analysis		
i - questionnaire		
ii - sentence completion test		
iii - multidimensional scaling		
Results		
Discussion		`
. Summary ,		
V. INTERPERSONAL INTERDEPENDENCE: A CONCLUSION		180.
A Transcendental Point of View		
A Developmental Point of View		
A Metaphysical Point of View		•
An Existential Point of View		
A Therapeutic Point of View		
A Metatheoretical Point of View	•	
a) Psychology/Sociology		
b) Psychology/Psychology		
c) Philosophy/Psychology/Psychology		
BIBLIOGRAPHY		204
APPENDIX I		233
APPENDIX II		244
APPENDIX III		247

LIST OF TABLES

TABLE		Page
1.	Cross Tabulation of Age/and Gender for Non-Patient and Patient Samples	. 121
2.	Scoring for STAGE (Level of Social Concept Development)	130
3.	Means and Standard Deviations for All Questionnaire Variables	136
4.	Means on Questionnaire Variables for Non-Patients and Patients	137
5.	Correlations Between LIE and ALL Variables	146
6.	Correlations Between Age and ALL Variables for the Total Sample, and for the Non-Patient and Patient Sub-Samples	147
7.	Correlation Table for Social Concept Variables	149
. 8.	Correlations Between Social Concept Levels and EXTERN, SOCIS, ANOMIE, and WELLBE	150
9.	Factor Analysis of Questionnaire Variables (Type PA-1, Quartimax Rotation)	152
10.	Correlations Between STAGE and EXTERN, SOCIS, ANOMIE, and WELLBE	155
11.	Correlations Between LOEV and SELPRO and HIGH for the Total Sample, and the Non-Patient and Patient' Sub-Samples	157
12.	Correlations Between LOEV and EXTERN, SOCIS, ANOMIE, and WELLBE	158
13.	Factor Analysis of LOEV Scores and All Questionnaire Scores, Including STAGE (Type PA-1, Quartimax	159

ABLE		Page
		• • •
14.	Correlations Between Dimensions and Unbiased Error and All Previously Mentioned Variables	162
15.	Factor Analysis of All Variables (Type PA-1,	163

LIST OF FIGURES

Figure		Page
1.	Behavior Modification within the s-s Model	21
2.	A Social Concept	38
3.	A Child's Preoperational View	. 57
4.	The Transitional View	59.
5.	A Concrete Operational View	60
₫. ့	Two Set of Candies	_, 60
7.	A Two-Dimensional Concept of Person	64
8.	A Three-Dimensional Concept of Person	75
9.	A Four-Dimensional Concept of Person	88
10.	A Five-Dimensional Concept of Person	98
11.	Distribution of STAGE Scores	139
12:	Distribution of LOEV Scores	141
13.	Distribution of Dimensional Scores	143
14.	Quartimax Rotated Solution (Type A-1) of Question- naire Variables (factor one versus factor three)	, 153
15.	Quartimak Rotated Solution (Type PA-1) of Social Concept Questionnaire Items (factor one versus factor two)	159
16. J.	Quartimax Rotated Solution (Type PA-1) of Question- naire Variables and LOEV Sentence Completion Test (factor one versus factor two)	160
17.	Quartimax Rotated Solution (Type PA-1) of All Variables (factor one versus factor four)	164

CHAPTER' I

A PERSON'S CONCEPT OF PERSON:

AN INTRODUCTION

In light of its apparent infinite complexity and diversity, one wonders whether it will ever be possible to really make sense of human action. Certainly many theorists have offered a variety of insights into this complex problem. This treatise attempts to offer yet another. It will be argued that since most human action is carried out either in direct interaction with, or in anticipation of, the actions of other persons, one can only make sense of human action if one takes into account the sort of entity a person conceives persons, in general, to be. More specifically, it will be argued that a vital ingredient to the possibility of understanding, predicting, and explaining human action, at least in terms of general principles, will be the understanding of a person's concept of person.

To make the claim that one must understand the content of a person's concept of person in order to understand a person's actions and reactions toward persons, may, to, some, seem obvious; just as

other thing in order to understand that person's actions and reactions toward that thing. To many, however, the development and behavioral efficacy of a person's concept of person, whether their own or that of others, is not at all obvious. This oversight, it seems to me, is a by-product of our common practice of utilizing proper names with reference to persons which tends to mask the fact that aside from perceiving persons as individual entities, we also perceive them as members of a class -- namely the class of persons. Due to their common membership in this class, persons share common characteristics which elicit common modes of action and reaction from both self and others.

In this treatise, it will be argued that a person's concept of person is similar in many respects to any other concept. For this reason, there is much to be learned about the development and behavioral consequences of a person's concept of person from the examination of the development and behavioral consequences of However, it will also be argued that there are other concepts. important ways in which a person's concept of persons differs from The most obvious of these, which is reflected all other concepts. in the purposefully redundant phrase "a person's concept of person," lies in the fact that such a concept is self-inclusive. inclusive, I mean that a person considers himself to be a member of For that reason, a person's concept of the class of persons.

himself as a person, i.e., his <u>self-concept</u>, can be seen as a direct derivative of his overall concept of person.

To some, the preceding reference to a person's self-inclusive concept of person may appear to be an obtuse way of referring to the more simple notion of a person's self-concept. Although there is a sense in which this is true, such an immediate and direct reference to the self-concept, masks a number of important issues. for instance, the importance of knowing the descriptive content of a person's concept of person. What I mean by descriptive content, either of a person's concept of person or derivative self-concept, is the same: namely those characteristics that a person takes to be common to persons in general, including himself, by virtue of the fact that he perceives all persons to be members of the same class. It is this descriptive content to which I give primary explicative This emphasis is in contrast to that given by many theorists to the subjective evaluative aspect of the self-concept; to the way in which a person evaluates himself as a particular individual -- whether a person thinks of him or herself as stupid, intelligent, ugly, beautiful, or any other self-appraisal. من Although a lot of interesting data has emerged from research devoted to this topic (cf, Rosenberg, 1979), it is my suspicion that this approach, if not entirely similar to the proverbial "blind man approach" of examining diverse parts of the same elephant, is at least misleading. As Foot points out in her article "Goodness and Choice" (1969), it

is difficult to understand how a person evaluates anything at all, unless one first understands what sort of entity that person conceives the entity in question to be. Hudson makes a similar point in his book Modern Moral Philosophy (1970) when he says that it is always legitimate to ask one's opponent in an ethical debate "What is man?" and to raise the further question of whether or not one's opponent's anthropology is compatible with his ethics.

This is not all that can be said in defense of the particular phraseology employed here. To the extent that "concept" can be defined as that which "isolates that which is <u>common</u> to diverse and heterogeneous items" (Simmel, 1950, emphasis mine), the term "<u>self-concept</u>," since it refers only to one item, is a misnomer. Rather than saying that a person has a self-concept, a more accurate description would be to say that a person perceives himself and others as particular instances of, or concrete instantiations of, the overall class of persons, and it is of this overall class of persons, that a person has a concept.

The third, more general, defense of the present phraseology rests with the fact that a reference to a person's concept of person explains how the property of self-consciousness emerges. It does so in the following way. A concept of person differs from a concept of object in that, through it, a person is conceived of as a perceiver. For that reason, any individual who develops a concept of person,

recognizes that he himself (i.e., the first individual) is an object of perception. It will be argued that this awareness of self from the viewpoint of another perceiver is equivalent to the phenomenon commonly referred to as "self-consciousness." Since this awareness of self from the viewpoint of others brings with it the possibility of adjusting one's behavior with respect to those viewpoints, it will be further argued that a major behavioral consequence of the emergence of a person's concept of person, and its corresponding self-consciousness, is the development of social organizations of a "non-stimulus-bound" type. This thesis is summed up in the following postulate:

Postulate I: A prime distinguishing feature of persons is their capacity to develop concepts of persons. With the emergence of these concepts, persons develop the capacity to perceive themselves from the imagined viewpoints of others. These "imagined viewpoints," which are organized and elaborated internally, influence behavior in a way that can be distinguished from the more immediate effect of external cues. It is because persons have the capacity to imagine themselves from the viewpoint of others, that they are able to form social organizations of the "non-stimulus-bound" type.

The case for Postulate I is presented in CHAPTER II. In order to clarify the evolutionary position of persons, it will be argued that, while human beings and perhaps the Great Ape, may be unique in terms of their ability to form concepts of other conceivers (referred to also as social concepts), they are not unique in terms of their ability to form concepts per se. It will be argued that animals have the capacity to form concepts of objects. The advantage of this broad perspective on concept formation is that the products of the

development of social concepts -- such as self-consciousness and intentionality -- are seen as natural consequences of evolutionary change.

Having argued in CHAPTER II that the essence of persons lies in their capacity to imagine the viewpoint of another, it will be argued in CHAPTER III that the essence of the development of persons lies in their increasing capacity to imagine an increasing number of viewpoints at one and the same time. It will correspondingly be argued that the consequence of such development lies in the increase in the behavioral weight of these multiple representations of self relative to external cues, and an increase in the capacity on the part of the individual to integrate into ever more complex social units. This developmental thesis can be summed up as follows:

Postulate II: A person's concept of person has the potential to develop throughout an individual's life time as a function of his or her increasing capacity to imagine him or herself from the viewpoint of multiple social others. This increase in social perspective-taking capacity is paralleled by an increase in the behavioral influence of these "internal" representations of self relative to "external" cues and an increase in an individual's capacity to adjust his behavior with respect to ever more complex social units.

Parallel to the argument that a person's concept of person develops as a function of an increase in structural complexity, it will be further argued that structure determines content. For that reason, insofar as a person's concept of person develops, its content evolves in a predictable order. This thesis concerning the content

of a person's concept of person is summed up in the following postulate.

Postulate III: The general characteristics or properties that persons impute to persons in general is determined by the number of viewpoints that an individual is able to consider at any one time. The content of a person's concept of person, therefore, evolves as a function of his or her increasing capacity to take up the viewpoint of multiple social others.

Throughout CHAPTER III, the strong parallels between the development of a person's concept of person and what is elsewhere referred to as "ego development" (e.g., Loevinger, 1976) will be noted. It will be argued that the advantage of the present model is that unlike others, it is virtually immune to the charge of cultural bias. That is, since it holds that the content of a person's concept of person is a function of his or her social perspective-taking capacity, the logic of this developmental model is straightforwardly grounded on the assumption of numerical succession.

A theory that speaks of concepts can itself be seen as a genus of the species of which it speaks. If this is the case, then Kant's famous dictum with regard to concept application, applies with equal force to theory application. Kant's "concept dictum" that "thoughts without content are empty, intuition without concepts are blind" (1929, A51/B75) can therefore be translated -- with regard to theory application -- as follows: "theoretical argument unsupported by empirical test is empty, empirical data that lacks the backing of

sound logical argument is blind."

CHAPTER IV presents a report on a research project, carried out by the author, that was designed to empirically assess the hypotheses:

- a) that the content of a person's concept of person evolves with (social/cognitive) development (Postulate III);
- b) that the behavioral consequences of a person s concept of person evolve with development (Postulate II);
- c) that what is referred to here as "the development of a person's concept of person" is equivalent to what others (Loevinger, 1976) refer to as "ego development" (Chapter III);
- d) that the evolution of a person's concept of person is associated with cognitive differentiation that is assumed to underlie an individual's perspective-taking capacity (Postulate III).

CHAPTER V focuses on what will have been the major message and main interconnecting thread throughout this treatise; namely that persons are interdependent. In particular, the nature of this interpersonal interdependence will be explored from a transcendental, developmental, metaphysical, existential, therapeutic, and metatheoretical point of view.

In summary, the major claim of this treatise is that the actions of persons can only be understood and explained through a reference to their concepts of persons. Support for this claim will begin

with the general argument that such a reference is necessary to explain the emergence of self-consciousness and its general behavioral consequences. It will then move to the more specific argument that such a reference is necessary to explain the form of an individual's actions, as well as the degree to which those actions are free from the behavioral determining force of the external object environment. Empirical evidence will be offered in support of this latter thesis. The treatise will conclude with a brief examination of the general implications of the Concept of Person Theory being presented here.

References

- Foot, P. "Goodness and Choice," in W.D. Hudson (ed.), <u>The Is-Ought</u>
 Question. London: Macmillan and Co. Ltd., 1969.
- Hudson, W.D. Modern Moral Philosophy. Garden City, New York: nachar Books, 1970.
- Kant, I. Critique of Pure Reason. Translated by N. Kemp Smith.

 London: Macmillan and Co. Ltd.; 1929.
- Loevinger, J. Ego Development. San Francisco: Jossey-Bass, 1976.
- Rosenberg, M. Conceiving the Self. New York: Basic Books Inc., Pub., 1979.
- Simmel, G. "The Stranger," in K. Wolff (ed.), The Sociology of George Simmel. New York: The Free Press, 1950, pp. 402-408.

CHAPTER IT

THE EMERGENCE OF A PERSON'S CONCEPT OF PERSON

Concept Definition

Since the concern of this treatise is the development of a person's concept of person, I shall begin with an examination of the term "concept." Initially, the focus will be restricted to the examination of object concepts. A major function or value of such concepts lies in the fact that they allow a conceiver to adjust his or her behavior with respect to the contact properties of objects, solely on the perception of distal cues that predict those properties. Thus, it is because of a conceiver's concept of "lamp" that on the mere perception of a lamp-like object, a conceiver's behavior will be guided by the assumption that if one went up to it and turned it on, it would light up the room. Similarly, it is because of a conceiver's concepts of stove or fire, that on the mere perception of a stove or fire, a conceiver's behavior will be guided by the assumption that upon actual contact, he would be burned. An accurate definition of the term "concept" therefore, can be formulated as follows:

Concepts of objects denote a combination of distal properties, and contact or functional properties combined in such a way that the former predict the latter.

Conceptualized behavior therefore, can be described as

Behavior that is consistently adjusted to the contact or functional properties of an object solely on the basis of the perception of distal cues that predict those properties.

There are two things of note about the above operational definition of the term "concept." These are: (a) it provides a broad view on the process of conceptualization; and (b) it carries the implication that the process of conceptualization is an association process.

The above definition of the term "concept" is an "operational" one because it states, in behavioral terms, the criteria according to which one can impute particular concepts to particular individuals.

Specifically, the above definition entails the following: any individual can be said to have a concept of an object insofar as the distal perception of that object consistently elicits from that individual, behavior that is relevant to the prediction of the contact properties of that object. Since animals as well as humans can predict the contact properties of an object on the basis of their distal perception, according to the above definition, animals as well as

humans can be said to have the capacity to form concepts.

This broad view on concept formation is in contrast to the more limited view of the traditional linguistic model, which holds that it is only through language that concepts are formed. According to this latter view, the capacity to conceptualize is a capacity that is therefore unique to man (with the possible exceptions of a few Great Apes). Since there are a number of theorists who, like the ethical philosopher, may assume that they have much to lose with the loss of those characteristics that are presumed distinctive of man, further justification for the adoption of a broad view on concept formation is required.

From the philosophical realm, support for a broad view on concept formation comes from a number of prominent thinkers who, , though they appear to have had the linguistic model in mind, have described concept structure and function in terms virtually identical to those that I have used here. In his book Mind and the World Order: Outline of a Theory of Knowledge (1956), Lewis makes the claim that one never reacts to an object as a "momentary given." He says that a concept of an object always denoted something more complex than simply an identifiable "sense quale" (e.g., that the concept "bee," for example, denotes something more than simply a fuzzy, black and yellow, flying object). What a concept denotes is a "temporal spread" — "a sequence of actual and possible experiences." One's

reaction to an object therefore, is a reaction to that predicted spread. Husserl (1969), arguing along the same lines, says that the "noema," or agricept, determines our various expectations of objects, which if they are not fulfilled, explode the noema. What Husserl means by this is that if an object is found not to have the contact or functional properties that are definitional of its class, it is not, by definition, that kind of object (e.g.; if a fire does not burn, it is not fire -or at least not fire in the "normal" sense of that term). makes a similar point when he says (1929) that all objects must be conceived under the concept "gause" -- which can be taken to mean that all objects, insofar as they are perceived as "real objects," must partake of predictable causal sequences (e.g., if water does not feel wet, it is a mirage). Kant emphasizes that objects that are not so conceived, i.e., reality that is not so conceptualized, is a reality we can never know. While Kant makes his case only with respect to human conceivers, I would argue that this holds true of any conceiver, animal or human.

The position for which Lewis, Husserl, and Kant argue is not without its critics. Ironically however, an examination of the kind of charges typically leveled against their combined position, can be translated to serve as further support for the view of concept formation presented here. I have in mind the particular charges of "idealism" and "solipsism." Their position is labelled "idealistic" because, in terms of a being's reactions, it gives priority to the

"ideal" mind over the empirical world. It is labelled "solipsistic" because, in arguing that a conceiver's reactions are a function of his own concepts, it argues, in a sense, that a conceiver reacts to "himself" rather than reacting to the external environment. These charges, at least to the extent that they are outlined here, are correct. However, they do not carry the derogatory impact that their proponents would intend. While there is no question that conceptualization, conceived in operational terms, can be said to move a conceiver "out of touch with reality," the fact that it does so, explains its very raison d'être. Let me elaborate further.

According to the broad definition of the term "concept," a conceiver makes assumptions about the contact properties of an object (and adjusts his behavior accordingly) merely on the basis of perceiving associated distal cues. Given this definition, conceptualization can be described as a process that transfers a conceiver's contact with reality from one that is direct (i.e., one of physical contact) to one that is indirect (i.e., one of distal perception). In this sense, conceptualization can be said to Literally move a conceiver out of touch with the contact properties of objects and in so doing, presumably increases the survival quotient of that being. Thus, for a being to act in an "idealistic" or "solipsistic" fashion, as a conceiver necessarily does insofar as he reacts in accordance with his concepts, is simply for that being to act in accordance with his knowledge of the environment. It is to act intelligently; it

is to, act in an adaptive, self-benefiting fashion.

The recognition that conceptualization is a capacity whose emergence and continuing development has survival value, fosters a particular and important perspective on the place of man in phylogenetic development. In particular, it renders the emergence of man's capacity for self-consciousness, intelligible. in the following way. It will be argued later, that the capacity to form concepts of other conceivers (i.e., social concepts) is indicative of a being's awareness of him or herself from the viewpoint. of other conceivers; that the capacity to form social concepts is indicative of the presence of self-consciousness. Thus, to the extent'. that the capacity to form object concepts is indicative of awareness of those objects, i.e., is indicative of mere consciousness, and to the extent that the capacity to form social concepts is seen as simply the next evolutionary step beyond the general animate capacity to form object concepts, so the capacity for self-consciousness can be seen as simply the next evolutionary step beyond the capacity for mere An operational perspective on the phenomenon of consciousness. conceptualization therefore, allows one to see that, while a fully developed social concept renders adult human action different in kind from that of both animals and infants, it is not that different -- at least not that different in the sense that it necessitates a qualitative break in either phylogenetic or ontogenetic development.

As final justification for adopting a broad perspective on the process of conceptualization, it should be pointed out that, aside from its theoretical advantages, it is one that appears to be consonant with "reality." In her article "Concept, Word, and Sentence: Interrelations in Acquisition and Development" (1974), Nelson, for example, presents data from recent studies that indicate that young children do not learn concepts through their encounters with language, but rather through their encounters with the physical and social world. Nelson argues therefore, that the basic question with regard to language acquisition is not how the child forms concepts to fit words, but rather how the child is able to match words to concepts.

The second thing of note about the above operational definition of the term "concept" is that it carries the implication that concept acquisition is an association process. Object concepts were defined as denoting a "combination of distal properties and contact or functional properties combined in such a way that the former predict the latter." Given this definition, it follows that if an individual begins to assume that because two stimuli (i.e., the distal and proximal properties of an object) have been associated in the past, they will always be so associated in the future, that individual can be said to have acquired a concept of that object.

Having argued that conceptualization is an associative capacity

common to animals as well as humans, I shall now move to a more detailed examination of this capacity as seen through the eyes of contemporary learning theorists. In other words, I shall first describe the development of object concepts before attempting to describe the development of social concepts.

Object Concepts

The most influential version of Behaviorism to date -- the one whose theoretical father was Thorndike and whose most outspoken contemporary proponent is Skinner -- is one referred to as Instrumental Learning or s-r theory. S-r theory states that "reinforcement" or "reward" strengthens, or facilitates, the neurophysiological pathways between stimulus and response such that, on future occasions, the perception of the same stimulus elicits the same response.

Irrespective of its popularity, this model has flaw. Precisely because the s-r model assumes, as it must, a concrete, i.e., physiological connection between s and r, the model entails that all learned responses be identical to the original in the strict sense of the word, i.e., movement for movement. In the bar-pressing paradigm, for example, it assumes that food strengthens the connection in the rat's brain between the perception of the bar and the pressing of that bar with say, the rat's right paw, so that on all future occasions, the sight of that bar will consistently elicit the pressing of that

bar with the rat's right paw. Such, however, does not hold up in experimental experience. Although the rat will indeed press a bar given a suitable reinforcement schedule, this is true only under a general act description. Within the general act description, the rat will show a wide variety of movements, such as pressing the bar at one time with its right paw, at one time with its left, at one time with its snout, and so on. Because the response-reinforcement model is incapable of dealing with this "motor equivalence and flexibility (or 'intelligence') in behaviour, . . . the sway that the response-reinforcement framework (Spencer, Thorndike, Hull, Skinner) 'has held on the behavioural sciences for nearly a hundred years is finally ending" (Bindra, 1978, p.41). However, since it remains an inarguable fact that animals do indeed acquire a great many behavioral routines which are describable under general act descriptions, the demand for an appropriate explanation remains.

In response to this dilemma, a number of psychologists (in particular, see Bindra, 1972, 1974, 1976, 1978) have begun to look with renewed interest at the classical model of Pavlovian conditioning. Very much like the classical Empiricist model, the Pavlovian, or s-s model argues that stimuli come to be associated in memory due to their actual association, or conjunction in experience, so that when one stimulus is perceived, its associated stimulus or stimuli are expected to follow. A learned stimulus association therefore is a learned expectation. It is through such stimulus association

المستعمرية ووالما والمالية

that Pavlov explained the "conditioned" salivation of his dog to the sound of a bell, or to the click of a metronome. It is through such stimulus association that the eighteenth century Empiricist philosopher Hume explained the development of the concept of "cause," i.e., that we expect a flame to follow the striking of a match since these two perceptual events have been associated in the past.

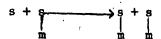
There is no question that stimulus association, or the classical s-s model, explains a good deal about knowledge acquisition both in animals and man. However, in and of itself, it is not sufficient to provide a complete explanation of animate behavior. In fact, in its bare bones, the classical association model can be accused of leaving the learning individual in a state of suspended animation -- a state that Watson described as one of "perpetual expectation." The problem is, that while the model explains how one stimulus comes to be associated with another stimulus (namely by being perceived together on past occasions), it does not explain, or does not explicitly explain, how this stimulus association in turn comes to affect response. There is a problem here of how change in perception gets filtered down to change in behavior; there is a problem here of

Modern s-s theorists argue that this problem of introducing response into their perceptual model of learning can be overcome.

One way of doing so is through an appeal to what Ethologists refer to

how theoretical knowledge gets translated into practical knowledge.

as "sign stimuli." Through extensive investigation, Ethologists have found that, for all species*, there is a set of stimuli that naturally elicit, i.e., without learning, certain species-typical responses. All young chicks peck at round dots; all human infants react with a startle reflex to loud noises; all young goslings run from hawk-like figures swooping toward them from specific angles, and so on (Schneirla, 1965). With the introduction of these natural, or innate stimulus-response links, the new s-s theorists argue that one important behavioral effect of stimulus association is the transfer of a behavioral motivational component. From a strictly motivational point of view therefore, stimulus association can be seen as a form of response generalization (see Figure 1). Using the acronym



Key: s - stimulus

m - motivational component

Figure 1. Behavior modification within the s-s model.

^{*} Modern associationists differ from their classical counterparts not so much in kind, as in degree. With the introduction of sign stimuli, modern associationists can argue, that all learned responses ultimately can be traced back to a natural stimulus-response link.

"pexgo" (presently excited gnostic organization) to refer to the momentary central representation that underlies the perception of a stimulus, Bindra (1978) describes this motivational transfer in the following way:

According to the incentive-motivation hypothesis, . . . a pexgo of a particular stimulus generates the pexgo of the hedonic stimulus and thereby generates the same motivation (central motive state) as is normally generated by the hedonic stimulus itself; this central motive state, in combination with the detailed sensory-spatial features of the situation, then determines what response will emerge. Thus . . . according to the incentive-motivation view, the (unspecified) response that is produced is a fresh construction dependent on the motivational state and the pexgo generated by the prevailing stimulus. (p.42)

A point that Bindra is attempting to emphasize in the above quote is that <u>only</u> the motivational component of a response is transferred in the association process; not the form of a response. This is important, because it is only on the basis of the assumption that "the topography of any response . . . is determined by the nature of the motivational state and the momentary spatio-temporal distribution of (response) eliciting stimuli" (Bindra, 1978, p.41), that modern s-s theory is able to deal with the problem of response flexibility in a way that s-r theory can not. It need only be assumed that the sum total of all external and internal factors (i.e., those biological variables that influence stimulus salience, e.g., hunger and food, Wise, 1974) will never be exactly identical from one learned response situation to another, for it to follow that one learned response will

never be exactly identical to another. In other words, it is implicit in the new s-s model that one learned response can <u>only</u> be similar to another in terms of a general act description.

Given that contemporary associationists owe the viability of their rejuvenated theory to the assumption that the "second s" of their s-s formula has a response component already built into it, one wonders about the wisdom of not modifying the original s-s formula so as to reflect this inclusion. I shall suggest just such a modification here. I shall argue that the advantages of adopting such a modification are:

(a) it makes explicit what is already implicit in modern associationist writing; (b) it more clearly reflects that the learning process is one of concept acquisition; and (c) the resulting formula can serve as a core around which more complex formulae, representative of more complex concepts, can be built.

The modification that I would suggest is the following. In contrast to the classical association formula that carries the implication that behavior modification is a function of a learned association between a stimulus and a stimulus (s-s), and in contrast to the instrumental formula that holds that behavior modification is a function of a learned association between a stimulus and a response (s-r), I would propose the formula s-sr, that carries the implication that behavior modification is a function of a learned association between a stimulus and a stimulus of a response.

The replacement of the second s in the s-s formula with sr reflects in a way that the old formula does not, the modern associationist assumption that a stimulus-response link is embedded in the second s, or unconditioned stimulus, of the formula. However, it goes further. It suggests' just exactly of what this link consists. It suggests that the link between a stimulus and a response just is a stimulus of a It suggests in the "food-eating" situation, for example, that the way in which the stimulus of food elicits the response of eating, is that the stimulus of food evokes the stimulus of the response of eating, and that it is this stimulus of this response, that elicits the response of eating. In the bar-pressing paradigm, the s-sr formula argues that the rat does not press the bar because the stimulus of the bar(s) evokes the associated stimulus of the food(s) which in turn elicits the response, but rather, that the stimulus of the bar(s) evokes the whole system of stimuli associated with the whole response of eating the food (sr), and that it is this stimulus of this response. that elicits the response from the rat. In other words, the s-sr formula argues that upon the perception of a particular stimulusobject(s), an animate being projects onto that object an image of its own act in relation to that object (sr), and it is this image of this act that elicits that act from the animate being in question.*

^{*} Anyone who participates in a sport, will recognize the veracity of this formula. One knows instantaneously, for example, whether one has, or has not hit a good shot, by how closely the body image matches the projected ideal. Indeed, this is how a number of instructors initiate the novice; by manoeuvering him into making one or more correct responses, on the assumption that this "feel" will, on future occasions, elicit those responses. In his book Learning Theory (1975), Bolles similarly suggests that such a proprioceptive feedback mechanism may well play an important role in modern associationist theory (p. 209).

The second advantage of adopting the s-sr formula, is that it clearly reflects that in leawning about the objects in its environment, an animate being learns to react to those objects on the basis of Conceptualized behavior was earlier defined as learned concepts. "behavior that is consistently adjusted to the contact or functional properties of an object solely on the basis of the perception of distal cues that predict those properties." Thus, if we take the symbol "sr" to refer to a stimulus of a potential response made to the imagined contact properties of an object, and the symbol "s" to refer to its associated distal properties, what formula could reflect concept formation better than the formula s-sr? To say that a distal property predicts a contact property, just is to say that a stimulus (s) predicts a stimulus of a response (sr) to the contact property of that object.

The third advantage of adopting the s-sr formula is that it can serve, in a way that the s-s formula can not, as a core around which more complex formulae, representative of more complex concepts, can be built. Specifically, I am referring to the construction of formulae that will be representative of a conceiver's concept of other conceivers (i.e., social concepts) as distinct from object concepts. This latter advantage will not become evident until such formulae have been constructed. Particulars aside, however, the following point nonetheless remains. If we are serious in our commitment to the evolutionary assumption that a continuum exists

between the mind of the most simple animate being and the mind of the most sophisticated human adult, then whatever the formulae that are finally adopted to represent the structure of those minds, they ought to reflect such a continuum.

Social Concepts

In this section, I shall argue that the nature of conceivers is such, that in order for conceivers to develop concepts of one another, a concept of a different order of complexity than an object concept, is required. From a theoretical viewpoint, this difference can be described as a difference in the degree of complexity of context that each concept takes into account with respect to predicting behavior.

I argued earlier that conceptualized behavior is intelligent or adaptive in that it allows a conceiver to make assumptions about the functional, or contact, or behavioral properties of objects. Concepts thereby short-circuit the need to rediscover upon each encounter, which properties are characteristic of which entities. It is important to note at this time, that in making such a case, I was assuming an important qualification; namely that such a claim is true only under conditions of environmental stability. It is only adaptive for a being to make assumptions about the functional properties of objects, so long as those properties remain reasonably static. If this were not the case, if, for example, fire burned at one time; and not at

another, if a certain food nourished at one time and not at another, one's assumptions about the functional properties of these entities would, more often than not, turn out to be incorrect. Kant argued that if this were ever to happen — if the instability of one's environment were such that one could not organize it under concepts—it would be a situation about which we could never know, since knowledge just is the application of concepts. Kant's point, while undoubtedly true, is a theoretical one. The actual reality of such a hypothetical situation would be that a conceptualizing being would not last long in such an environment because his behavior, on the whole, could never be prepared or planned.

To recognize the importance of this qualification, is to recognize the fundamental peculiarity inherent in the suggestion that conceivers of sufficient cognitive complexity, have the capacity to form concepts of one another. According to the above account, for a conceiver to develop a concept of another conceiver, that first conceiver must assume that the behavioral properties of the second are reasonably static. But the behavioral properties of conceivers are not static. By definition, they change in accord with changes in a conceiver's conceptual system. But if this is true — if the behavioral properties of conceivers are in flux relative to their conceptual systems — surely the practice of assuming that the behavioral properties of conceivers will remain static — which a concept seems to require that we do — becomes highly questionable. And if we assume that human

beings occupy one end of a continuum of beings ranked according to their facility to conceptualize, i.e., according to their ability to learn, can we not go further and presume that the validity and/or utility of utilizing a concept in an attempt to understand and relate to such beings, may very well diminish to the zero point?

It would appear that precisely and ironically because persons have a tremendous capacity to learn, i.e., because persons have a highly facile conceptual ability that has the potential to keep their behavioral properties in flux, that the very development of a concept of person, if not an outright contradiction, is at least detrimental to a being's survival quotient. It would appear that the nature of persons is such that it is inappropriate to have a concept of person at all. It would appear that the most "intelligent" or "adaptive" approach for a person to útilize in the interpersonal situation is to perceive the other as if he were unique — to behave toward the other "as he is in himself" (Kant; 1967).

But this cannot be right. Concept application, at least in the sense that we are discussing it here, is a product of learning; it is not something over which a conceiver has control. A conceiver can not decide of his own volition when, and when not, to utilize a concept. Besides, it is just not true that persons do not make assumptions about each other. Indeed, if we did not, if we humans always had to deal with one another as unique entities, we, as a species, would never

have survived as long as we have. It <u>must</u> be the case that persons are able to make a great many assumptions about each other, and assumptions which are correct; it must be the case that persons have been able to develop a highly adaptive concept of person. The question is, how?

The answer lies in the evolution of a new kind of concept. It is a concept that takes into account the very essence of conceivers that we have just now been discussing. This essence lies in the capacity of conceivers to perceive distal cues (i.e., receive signals) and to adjust their behavior accordingly. By definition, therefore, a conceiver is a perceiver. Thus, to the extent that a conceiver recognizes that the behavior of another conceiver changes systematically relative to changes in the situational arrangement of spatiotemporal cues that are evident in that other's environment, he will recognize that other as a perceiver and his concept of that other will take that perceptual gapacity into account.

Another way of putting this, is to say that a conceiver's concepts of objects and a conceiver's concepts of other conceivers differ with respect to the kind of context that is taken into account when attempting to predict the behavioral properties of the entity in question.

Earlier I defined a concept as denoting a combination of distal properties and contact or functional properties combined in such a way that the former predict the latter. The "ceteris parabus" clause

that was not specifically mentioned at that time, was, that such a definition is accurate only in so far as context is taken into Since the functional properties of objects change with context (e.g., liquid water becomes solid in the context of cold), accurate prediction of the functional properties of objects must be based on the perception of objects relative to context. Lewis (1956) makes the same point in the following way. He says that written into every (object) concept, there is a whole series of "if-then" clauses: if water is exposed to temperatures below 32 degrees Fahrenheit, then it will freeze; . if paper is exposed to flame, then it will ignite; if a rock is hit by a larger moving object, then it will move. social concept also has a series of "if-then" clauses built into it. However, these "if-then" clauses are different in kind. built into a social concept that not only will a conceiver move if exposed to a direct hit by a large moving object; a conceiver will also move if he or she perceives the possibility of being hit by a In contextual terms, therefore, we can say that large moving object. a social concept differs from an object concept in that it dictates that for accurate prediction, one must take into account, not only the actual context of a conceiver, but as well, the way that a conceiver himself perceives the context.

Development of the Self

In exploring the evolutionary impetus behind the development of

a social concept, the difference between an object concept and a social concept was explained in theoretical terms. Let us now look at the difference between an object concept and a social concept with regard to their effect on behavior. We shall see that this difference is a function of a difference between "the selves" that emerge in correspondence to each of these concepts.

a) The Object Self

When an infant learns that some objects will fit into his mouth and that others will not, that some objects can be moved, that others can be taken apart, the infant not only learns about the objects in question, he also gains a sense of his own body in terms of both "feel" and capacity. This is true of all animate beings. In gaining knowledge of objects, conceivers also gain knowledge of themselves as objects; the properties of objects are always relative to the properties of the self as object. This is not to say that conceivers develop two different kinds of awareness. It is to say, rather, that this awareness has two focal points; i.e., an awareness of objects vis a vis the self, and an awareness of self vis a vis objects. Awareness of objects and awareness of self emerge together with the emergence of concepts of objects; they are flip sides of the same learning coin.

Piaget refers to this development of the awareness of self in juxtaposition to the awareness of objects as "decentration"; and while

Piaget speaks specifically about human infants in this regard, there is no reason to suppose that the same process does not occur in higher-order animals. Ginsberg and Opper (1969) sum up Piaget's notion of decentration is follows:

. . . the infant . . . does not have a mature object concept. A thing ceases to exist when it passes outside his immediate perception. Furthermore, for the infant the world is merely a series of unstable and unconnected "pictures." Neither self nor external environment exist as autonomous entities. In the course of development the infant advances from this "adualistic" or undifferentiated state to one of greater separation of self and environment. He decenters from the In the case of the object concept, for example, the infant now conceives of things existing independently. Objects now are centers of forces and have properties which do not depend on his will. This greater understanding of the external world is at the same time an increased comprehension of the self. The realization of the separateness of things necessarily involves the simultaneous apprehension of the existence of self. In other words, the person who believes that his wishes influence the movements of things, does not understand either self or things; the person who believes that the two are separate has a greater understanding of both. (p. 68)

The dictum that a sense of self develops in proportion to the development of a conceiver's object concepts, will be disturbing to many — particularly to those who would wish to use the notion of "self" as the prime index of "humanness." As disturbing as it may be, however, the suggestion that any beings who form concepts of objects, have an awareness of self, seems to me irrefutable. What else can we possibly mean by the ability to perceive objects, other than the ability to discriminate between self and objects? The important point, however,

is that the awareness of self that develops in correspondence to an awareness of objects, is extremely primitive; it has no behavioral effect outside of, or separate from, the behavioral influences of a being's concepts of the objects which populate his environment. One of the major claims of this developmental theory of self, is that it is not only a fact, but an important fact, that awareness of self is not an all-or-nothing phenomenon, but rather a matter of degree.

(cf. Parfit's argument to the effect that personal identity, although it is in its logic an all-or-nothing phenomenon, is, in its nature, a matter of degree; 1971a, 1971b.)

The argument that an awareness of self develops in juxtaposition to an individual's awareness of objects is one that forms part of the central core of Kant's transcendental deduction (1929). Specifically, Kant argues that in order to perceive the multiple representations of an object as the same object, those representations must be combined in one consciousness, i.e., "it must be possible for the 'I think' to accompany all my representations" (B131). If this were not the case, if, for example, a different "I think" accompanied each representation, a being would not be aware either of a unitary self, or of objects, since there would be no distinguishing feature to separate the awareness of "I" from the awareness of objects. It is only through the synthesis of different representations under one concept that a being can become aware of both a unitary "I" vis a vis an object, and vice versa. For Kant, since awareness requires a contrast, awareness of

the self, and awareness of objects, of necessity emerge together.

Thus, for Kant, like Piaget, a conceiver of objects was necessarily an individual who developed an awareness of self.

For reasons other than purely logical ones, Kant persistently maintained that animals, other than humans, were not the sort of creature capable of developing concepts of objects, and hence not the sort of creature capable of developing an awareness of self. Kant thus locked himself into the awkward position of having to maintain that, animals, therefore, could not be aware of objects either.

In the Second Critique, which he labeled the Critique of Practical.

Reason (1956), Kant went on to what he considered the critical followup to his first investigation. Having "transcendentally deduced"

that conceptualizing beings must have an awareness of self, Kant now

attempted to determine specifically in what way this "self" made a

practical difference in human action. Kant argued (1967) that this

self must make a practical difference, since if this were not the

case, then all of us would be incorrect, in a way that Kant thought

inconceivable, not only in assuming responsibility for our own actions,

but as well, in holding others accountable for theirs.

It is not to Kant's discredit that he was unable to solve the problem that he posed for himself. The problem that he posed for himself is insoluble. Kant could hot provide a plausible account of

how the self makes a practical difference because the self to which Kant was referring, i.e., the self that develops solely in correspondence to the development of object concepts, is a self that makes no practical difference outside of, or separate from, the effect of those corresponding concepts. While the development of the "object self" indeed signals a change in environmental control -- namely, from one of direct contact to one of indirect or perceptual contact -- it in no way signals a decrease in environmental control. This latter development must await the emergence of the "social self."

b) The Social Self

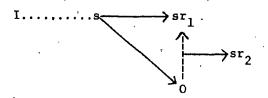
It was argued earlier that when conceivers with sufficient cognitive complexity are confronted with entities whose behavior changes systematically in accord with perceptual changes in the environment, they come to conceive of those entities as conceiver-perceivers. This argument, while accurate in its logic, is academic in the sense that it paints a picture of conceivers carrying out conceptual judgments in a pseudo-scientific, or non-participant fashion. In actual reality, conceivers come to form concepts of objects and/or conceivers through interaction. As a conceiver comes to recognize that another is a conceiver-perceiver therefore, he also comes to recognize that he himself is an object of perception from the point of view of that other perceiver-conceiver.

This new awareness of other (as perceiver) and self (as object of perception) is accompanied by a new form of interaction between other It is a form of interaction that can be described as communicative or intentional. Intentional interaction can be distinguished from Stimulus-bound interaction in the following way. Intentional interaction requires both a signal sender and a (real or imagined) signal receiver. It requires that the signal sender send out signals with a view to, or in the hope of, affecting, controlling, or shaping the attitude and/or behavior of the signal receiver. It requires that the signal sender have a hypothesis about the sort of effect his signals will have on the signal receiver. From the point of view of the signal sender alone, therefore, intentional interaction can be characterized as requiring: (a) that a signal sender recognize that another is a signal-receiver whose behavior changes systematically with perceived signals, i.e., that a signal sender recognize that another is a perceiver-conceiver; (b) that a signal sender recognize that his own behavior, verbal or otherwise, has the potential to serve as a signal, i.e., that a signal sender recognize that he (the first individual) is an object of perception; and (c) that a signal sender recognize that he has the potential to control the behavior of the signal receiver through control of the signals that he emits, i.e., that a signal sender recognize that he has the potential to control the behavior of the other through control of his own behavior. conditions can be summed up as follows: intentional interaction requires that a signal sender develop a social concept.

Having argued that a condition of intentional interaction is that an individual control his own behavior with a view to controlling the behavior of another, the question that now arises, is how an individual gains such control over his own behavior -- control that hitherto has been the sole property of external stimuli. The answer is best illustrated by way of example.

Let us take a situation in which a child is confronted with a batch of newly-baked cookies. The perception of these cookies (s) evokes in the child an image of that child eating those cookies (sr_1) , which in turn elicits an approach response from that child. suppose that the stimulus of the cookies also evokes the stimulus of mother (0) perceiving the child eating the cookies, which in turn evokes the stimulus of the child attempting to avoid angry mother (sr₂). What is happening here is that the same object is sending out contradictory signals; the same object is evoking both a behavioreliciting stimulus of approach, and a behavior-eliciting stimulus of avoidance. And this is not simply the same as the pairing of positive and negative "reinforcements" within the external environment -- though admittedly the behavioral consequences in this particular simple instance may be identical. What is happening here is that the child himself as perceived by his mother is included in the behavioreliciting projection that is evoked by the external stimulus, and it is this image of himself reacting to the perception of another (sr_2) . that competes with the image of himself reacting to the object (sr_1)

(see Figure 2).



Key:

I - Individual
O - Other
s - Stimulus
sr₁ - Stimulus of response to object
sr₂ - Stimulus of response to other
..... - Mere consciousness

Self-consciousness

Figure 2. A social concept

With regard to the behavioral consequences that develop as a result of the emergence of a social concept, therefore, one can see that there is a sense in which it is misleading to say that, through such development, an individual gains control over his own behavior. In fact, insofar as the above theoretical formulation is correct, the term "self-control" becomes a misnomer. The above formulation argues that, just as awareness of self is always through the eyes of another, so control of one's own behavior is always from the viewpoint of another. An accurate description of the behavioral consequences of the development of social concepts, therefore, would be to say that through them.

persons acquire the capacity to adjust their actions with respect to the viewpoints and potential reactions of each other, rather than simply with respect to the external environment. It is in this sense that it is argued that the prime distinguishing consequence of the emergence of social concepts is the development of social organizations of a "non-stimulus-bound" type. A "non-stimulus-bound" organization can be defined as one in which individuals adjust their behavior with respect to the potential and predicted responses of one other, rather than merely being a result of the behavioral-molding forces of the external object environment.

Theoretical support for the claim that social interaction is a necessary condition for the emergence of self-consciousness, comes from the social psychologies of Cooley and Mead. More will be said about the writings of Cooley and Mead in later chapters. However, it is of interest to note at this point that Cooley (1964) says an individual can only develop an idea of self -- which he refers to as a "looking-glass" self (p. 184) -- through imagining him or herself from the point of view of another; and Mead (1934) claims that it is only "by taking the attitudes of [the other] toward himself, that [the individual] becomes conscious of himself as an object or individual, and thus develops a self or personality" (p. 218).

The most uncluttered empirical evidence available to support the thesis that self-consciousness emerges only as a result of inter-

conceiver interaction, comes from the field of comparative psychology, and ironically from a study done on Great Apes. In a recent experiment, Gallup (1977) subjected a number of wildborn chimpanzees to periods of full-length mirror exposure for 10 days. Within 3 days, the rate of other-directed responses (e.g., threatening) dropped dramatically, while the rate of self-directed responses (e.g. grooming parts of the body visually inaccessible without the aid of the mirror) rose equally dramatically. Gallup argues that this reversal from other-directed to self-directed behavior, indicates that the chimps recognized the mirror reflection as their own. He goes on to suggest that such self-recognition is indicative of a pre-existent self-concept, i.e., that "a mirror simply represents a means of mapping what the chimpanzee already knows" (p. 335).

After the 10 day mirror exposure, the chimps were anesthetized, and the upper portion of an eyebrow ridge and the top half of the opposite ear were painted with a bright red, odourless, non-irritating, alcohol-soluable dye. Following recovery, and without a mirror, the number of mark-directed responses made by the experimental animals was very limited. This was also true of controls, i.e., chimps subjected to the same treatment, but only thereafter exposed to a mirror. In contrast, the mark-directed responses of the experimental chimps increased by a factor of over 25 times in the presence of a mirror, indicating that the experimental chimps indeed recognized that the face in the mirror was their own.

In a subsequent experiment, Gallup subjected a number of isolatereared chimps to the same procedure. He found that, unlike normals,
isolate-reared chimps failed to show any sign of self-recognition
during the entire 10 day exposure. Two of these isolate-reared
chimps were then given 3 months of remedial social experience by
housing them together in the same cage. Both showed signs of selfrecognition, in contrast to a third, who was kept in isolation and
who showed no sign of self-recognition. Gallup argues that these
findings support the Cooley/Mead model of self-concept emergence;
i.e., that a self-concept, or self-consciousness, is an interpersonal
phenomenon, and as such, can only emerge with social interaction.

Aside from the Great Ape, a number of other species, including several different kinds of monkeys, have been tested in similar self-recognition studies. None but the Great Ape have shown any evidence of self-recognition. In an attempt to account for this apparent psychological gap between Great Apes and other primates, Gallup notes two further ways in which Great Apes differ from other primates: Great Apes engage in co-operative hunting which is terminated in co-operative sharing and Great Apes have been found capable of mastering various forms of non-vocal language (Gardner et al., 1969; Premack et al., 1972). These comparative differences lend support to the general thesis formulated above, that emergence of self-consciousness is accompanied by the capacity for social co-operation and intentional, i.e., communicative, interaction.

To the extent that this interconceiver interaction theory of selfconsciousness development is correct, the critical role played by the s-sr core in the social concept formula becomes evident. image of the self is already embedded in the sr of the s-sr object concept formula, there is no difficulty in depicting the image of another perceiving the self in the social concept formula. classical s-s formula had been retained, the resulting social concept formula could only depict a situation in which conceivers perceived other conceivers, perceiving objects. In other words, using the s-s formula as a core, there is no way to show that the major behavioral consequence of the development of social concepts is that persons are now able to adjust their actions/with respect to an image of others perceiving those actions. It is only with an s-sr core, that the resulting social concept formula can represent the emergent capacity of persons to image the potential reactions of others to their own potential responses. It is only with such a core that the social concept formula can represent the capacity of persons to form social organizations of the non-stimulus-bound type.

The Role of Language

Thus far I have spoken about conceptual activity and about intentional interaction. I have not yet said anything about the specific "conceptual" "intentional" activity of language. Given its obvious importance in all our lives, this discussion would be incomplete

if I did not attempt to explore the role that language might be presumed to play in the development of selves. Since language is a rule-bound activity, I shall begin my discussion with that topic.

a) Rules

Peters (1959) argues that intentional human action can be distinguished from the caused movement of animals, by the fact that it conforms to a rule.

To make explicit the implication of my thesis for psychological theories: If the question is "Why did Jones walk across the road?", a <u>sufficient</u> explanation can only be given in terms of the rule-following purposite model — if this is a case of an action rather than something happening to him. (p. 15, emphasis Peters')

In any discussion of action in this post-Wittgensteinian era, it is always pertinent to make a reference to the notion of rule-following behavior. However, in Peters' enthusiasm to separate the men from the beasts, he misses the point of why it is, that rule-following behavior is important.

There is no question that the bulk of human activity can be aptly characterized as actions conforming to rules. However -- and this is an important however -- animal behavior also conforms to rules. The rat, for example, can learn the rule that upon seeing a white card he

must turn right and upon seeing a black one he must turn left; and the pigeon can learn that green means go and red means stop. On closer examination, one realizes that any sort of learned behavior modification presents us with an example of rule-conforming behavior. This fact is reflected in the very problems associated with act-description. It is precisely because we can never specify an action exhaustively in terms of movements of the body, that act descriptions must always be couched in terms of a general rule. An act description is a statement of a rule, and since the employment of an act description is necessary for the characterization of any unit of learned behavior, human or animal, to claim that a bit of behavior is learned is, ipso facto, to claim that it conforms to a rule.

So the question arises as to why the notion of rule-following a la Wittgenstein is thought by many philosophers to be such an exciting new perspective through which to approach the problems associated with human action. The answer is, I think, Wittgenstein's notion of "mistake." Wittgenstein demonstrated that because of the problems embedded within our notion of the "same," one can only demonstrate the presence, or the instantiation of a rule (which dictates that one must go on in the same way), if one can show in that situation what it would be, to make a mistake. Presumably, this position can be used as a springboard to separate animals from human beings, by making the claim that since animals cannot know when they have made a mistake, they cannot correctly be said to be following a rule. However, if one adopts such a position,

one is immediately faced with the question of how one is supposed to independently identify an individual's awareness that he has made a mistake if not by his attempt to rectify that mistake -- which is precisely the criterion of any learning whatsoever, again, animal or human. As well, even if a human being is aware that his behavior is conforming to a rule in a way that an animal is not, that human may not only be unable to articulate that rule, but as well, be unable even to recognize, let alone articulate the mistakes that he makes.

(The above is a common occurrence among language users.)

The objections to the general position formulated above show us that for the philosophy of action, the important behavioral distinction is not between rule-conforming (generally mischaracterized as rule-following) and non-rule-conforming behavior, but rather between rule-bound and rule-following behavior. While the notion of mistake is necessary to make the former distinction, the notion of exception is necessary to make the latter distinction. I would claim that it is only if an individual can make an exception to a rule, that he can strictly be said to be following a rule, rather than simply bound by it.

The burden of the problem now switches to the necessity of characterizing the criteriological markings of making an exception to a rule. I would propose the following: an exception can only be made to one rule via reference to another rule. To make an exception to

rule A is to decide in that instance, that the instantiation of rule B is, for whatever reasons, more appropriate than the continued compliance with rule A. This rule transfer is precisely what is involved in the process of explanation or justification, i.e., the giving of reasons; e.g., "I jumped up from the dinner table and ran out (breaking an etiquette rule) because I was quite sure I heard someone calling for help (the instantiation of a moral rule)." Of course, an exception need not be considered justified in order to count as an exception; it need only be considered justifiable — in terms of some other generally understood rule of behavior.

Since justification or explanation would seem to require language, it follows that language is a necessary prerequisite for the possibility of making an exception to a rule, and hence that language is a necessary prerequisite for the possibility of rule-following behavior as such. In fact, this exception-making ability may be the prime unique characteristic of language-users. In other words, the thesis indicates that the important function of language is not that it allows for structured activity, but rather that it shows how activity is structured; namely by indicating the rule under which any bit of activity is to be subsumed.

In summary, the general position that I am arguing for here is that in the analysis of behavior, no interesting distinctions can be made via reference to rule-conforming behavior as such, since rule conforming

behavior is a mark of any learned behavior, animal or human. I have argued further that reference to the notion of mistake does not increase the viability of such an approach. However I have gone on to show that the general philosophical thesis that the notion of a rule must play a fundamental part in the explanation of human action can still be salvaged, by emphasizing the distinction between rule—bound and rule—following behavior. The criteriological mark of rule—following behavior lies with the possibility of making an exception to a rule. Since an exception must be justifiable in order to count as an exception as opposed to a mistake, the ability to make an exception is tied to the two-pronged ability of language—use and reference to publicly understood rules.

b) Language Types

In the preceding section, I suggested that language was a necessary tool to mark the distinction between rule-bound and rule-following behavior. Here I would like to make the suggestion that the rule-bound/rule-following distinction can be utilized to demarcate different language-types. There has been much dispute, for instance, as to whether or not it is correct to say of some animals -- and potentially of computers -- that they possess and/or have the ability to utilize a language. Since there is no question that communication and a number of other language-type phenomena transpire in the animal/computer realms, it seems to me simply narrow-minded to flatly deny

the occurrence of language-use in such situations. However one can go on to correctly point out that the language used in these instances is a language of a <u>rule-bound</u> type, i.e., one which does not admit of exceptions. Animals are naturally programmed to act in such-and-such a communicative way in relation to such-and-such environmental stimuli, with the only possibility of rule-jumping being some sort of biological mistake. Computers too are programmed through an algorithm or meta-language which sets out <u>a priori</u> and in a completely determined fashion, how a set of rules is to be employed. Such formalism does not indicate, as many would suggest, that computers do not have a language but rather that their language is of a rule-bound type.

In contrast to rule-bound languages which do not admit of exceptions, rule-following languages are such that exceptions are virtually the rule. An example of exceptional use of language is the metaphor, e.g., "an abyss of grief," "a fiery temper." As Waismann (1959) has pointed out, it is because of the "open texturedness" of our concepts, that our language remains an open and growing semantic system; it is the possibility of making exceptions in rule-following language that is the source of its proliferative nature, which is itself a striking characteristic which distinguishes rule-following from rule-bound languages. Waismann says of exceptional uses: "This is one of the means by which a language grows. A speaker may, on the spur of the moment, place a word in a new collection, thus giving rise to a new meaning — a process over which there is little control."

The ramifications of recognizing this distinction between rule-bound language and rule-following language are too numerous to examine here. However I would mention in passing, and as a "for instance," that in the debate as to whether the communicative import of language lies with meaning per se or in the intention of the communicator, the answer would depend upon whether one were referring to rule-bound languages which of necessity emphasize the former, or rule-following languages which emphasize the latter.

c) The Dialectic

The last two sections in combination show the dialectical nature of the canopy which covers rule-bound behavior, rule-following behavior, and rule-bound language, and rule-following language. Since the law made the claim that language is a necessary prerequisite for any rule-following behavior, including rule-following language, it would appear than in order to get the dialectic started, the child, for example, must first employ rule-bound language in order to open the way for his transition from his initial rule-bound behavior to his rule-following behavior, including rule-following language. All of this argues for a much more flexible view of language than is traditionally held. It certainly indicates that when theorists such as George Herbert Mead (1934) utilize rule-conforming behavior as a premise in a transcendental argument for the proof of self-consciousness, one need be very explicit as to which type of rule-conforming behavior

one is referring. And if Mead's arguments for self-consciousness are valid (which it seems to me they are), and if the transition from rule-bound behavior and language, to rule-following behavior and language, is a gradual process, then these provide yet further grounds for making the claim that the emergence of self-consciousness, or sense of self, is also a gradual process.

References

Bindra, D. "A Unified Account of Classical Conditioning and Operant Training," in A.H. Black and W.F. Prokasy (eds.), Classical Conditioning II: Current Research and Theory. New York: Appleton-Crofts, 1972, pp. 453-481. "A Motivational View of Learning, Performance, and Behavior Modification, "Psychological Review, (1974), vol. 81, pp. 199-213. A Theory of Intelligent Behaviour. New York: John Wiley and Sons, 1976. "How Adaptive Behaviour is Produced: A Perceptual-Motivational Alternative to Response-Reinforcement," The Behavioural and Brain Sciences, (1978), vol. 1, pp. 41-91. Bolles, R.C. Learning Theory. New York: 'Holt Rinehart and Winston, 1975. Cooley, C.H. Human Nature and the Social Order. New York: Schocken -Books, 1964. Gallup, G.C. "Self-Recognition in Primates: A Comparative Approach to the Bidirectional Properties of Consciousness," American Psychologist, (May, 1977), vol. 32, pp. 329-338. Gardner, R.A. and Gardner, F. "Teaching Sign Language to a Chimpanzee, Science, (1969), vol. 165, pp. 664-672. Ginsberg, H. and Opper, S. Piaget's Theory of Intellectual Development: An Introduction. Englewood Cliffs: Prentice-Hall, Inc., Husserl, E. Formal and Transcendental Logic. Translated by D. Cairns. The Hague: Martinus Nijhoff, 1969. Kant, I. Critique of Pure Reason. Translated by N. Kemp Smith. London: Macmillan and Co., Ltd., 1929. Critique of Practical Reason. Translated by L.W. Beck. New York: Bobbs-Merril Co. Inc., 1956. The Groundwork of the Metaphysics of Morals. Translated by H.H. Patton. London: Harper and Row Pub., 1967.

- Lewis, C.I. Mind and the World Order. New York: Dover Pub., 1956.
- Mead, G.H. "Self," in G.H. Mead, <u>On Social Psychology</u>. A. Strauss (ed.). Chicago: University of Chicago Press, 1934.
- Nelson, K. "Concept, Word, and Sentence: Interrelations in Acquisition and Development," Psychological Review, (1974), vol. 81, no. 4, pp. 267-285.
- Parfit, D. "On the Importance of Self Identity," <u>Journal of Philosophy</u>, (1971), vol. <u>68</u>, pp. 683-690. (a)
 - "Personal Identity," Philosophical Review, (1971), vol. 80, pp. 1-27. (b)
 - Peters, R.S. The Concept of Motivation. London: Routledge and Kegan Paul Ltd., 1958.
- Premack, A.J., and Premack, D. "Teaching Language to an Ape," Scientific American, 1972, vol. 227, pp. 92-99.
- Schneirla, T.C. "Aspects of Stimulation and Organization in Approach/ Withdrawal Processes Underlying Vertebrate Behavior Development," Advances in the Study of Behavior, (1965) vol. 1, pp. 1-74.
- Waismann, F. "Language Strata," in A. Flew (ed.), Logic and Language.
 Oxford: Basil Blackwell, 1959, pp. 11-31.
- Wise, R.A. "Lateral Hypothalamic Electrical Stimulation: Does it Make Animals Hungry?," <u>Brain Research</u>, (1974), vol. <u>67</u>, pp. 187-209.
- Wittgenstein, L. <u>Tractatus Logico-Philosophicus</u>. Translated by D.F. Pears and B.F. McGuinness. London: Routledge and Kegan Paul Ltd., 1961.

CHAPTER III

THE CONTINUING DEVELOPMENT OF A PERSON'S CONCEPT OF PERSON

In Chapter II, it was argued that the essence of persons lies in their capacity to imagine the viewpoint of another. In this chapter, it will be argued that the essence of the development of persons lies in their increasing capacity to imagine an ever greater number of viewpoints at one and the same time. It will be argued that this increase in social perspective-taking ability results in a predictable change in the content of a person's concept of person. Specifically, it will be argued that the social attitude of individuals with a limited capacity to imagine the viewpoint of another is one that can be characterized as "self-protective" -- from the point of view of these individuals, "every man is out for himself." Individuals with a moderately developed capacity to imagine the viewpoint of others, tend to develop a "conformist" social attitude; and individuals with a highly developed capacity to imagine multiple viewpoints tend to engage in genuine moral thought.

Using terms borrowed from Parsons and White (1964), the two primary,

processes of social concept development -- namely an increase in social perspective-taking capacity accompanied by a change in the content of a person's concept of person -- will be referred to as processes of "quantitative expansion" and "qualitative upgrading" respectively.

Quantitative Expansion and Qualitative Upgrading

The notion of quantitative expansion within the social concept model, refers to an increase in the number of viewpoints that an individual is able to entertain at any one time. This claim, that social concept development proceeds by way of quantitative expansion, is similar to the Piagetian (1967) thesis that development is characterized by a progressive move away from "egocentrism," What the present model suggests however, is that this move away from egocentrism is not so much away from taking up one's own viewpoint, as it is toward taking up the viewpoint of multiple social others; that development, in others words, can be aptly characterized as a proliferation of the imagined audience that one carries around in one's head.

Object-relations* theorists also speak of an internal audience, although their focus tends to center on the quality of the internal audience (i.e., whether one's internalized audience is perceived as good or bad) rather than on quantity. Guntrip (1969) describes recent

^{*} In psychoanalytic terms, "objects" refer to "persons."

developments in object-relations theory in the following way:

Karen Horney (1945) says: "Neuroses are generated by disturbances in human relationships." But Horney thinks only in terms of relations to external objects at the conscious level. Bad external relations in infancy lead to the development of a less obvious danger, an attempt to withdraw and carry on living in an inner mental world, a repressed world of internalized psychic, bad objects, and "bad object situations." What is new in all this is the theory of internal objects as developed in more elaborate form by Melanie Klein (1932) and Fairbairn (1952), and the fact that Fairbairn makes object-relations, not instinctive impulses, the primary and important thing. It is the object that is the real goal of the libidinal drive. We seek persons not pleasures. Impulses are not psychic entities but reactions of an ego to objects. (p. 20-21)

Guntrip goes on to point out that there are many differences amongst object-relations theorists with regard to their view on the specific dynamics of this introjection process. Bion (1962) for example, draws a sharp distinction between the two processes of memory and internalization; and both Bion and Fairbairn argue, in contrast to Klein, that only bad objects are internalized (in the sense of being retained as "undigested" foreign objects) while good objects are simply remembered. Guntrip himself speaks of the splitting of internalized good and bad objects. In light of the complexities and ambiguities of these various controversies, it is important to keep in mind that, within this more global theory, reference to the viewpoint of another is necessarily imprecise.

The notion of "qualitative upgrading" within the concept of person model, can be taken to refer to two things. It can refer, on the one

hand, to an increase in the generality of the social rules that an individual presumes operative in any one instance. Thus, individuals, who have the capacity to consider at most, the viewpoint of only one other at any one time, tend to follow social rules that are personspecific (i.e., rules that are relative to the viewpoint of only one other). Individuals who have the capacity to consider at least two other viewpoints tend to follow social rules that are relative to a system (i.e., a system of viewpoints). Individuals who have the capacity to consider more than two other viewpoints have the potential to operate with reference to a universal or moral law (i.e., in principle, with reference to the viewpoints of infinite others).

On the other hand, the notion of "qualitative upgrading" can be taken to refer specifically to the level of abstraction of a person's concept of person. Obviously, these two notions of level of generality of behavioral rules that are generated by a concept and the level of abstraction of that concept, are not unrelated. However, there are advantages of looking at the notion of "qualitative upgrading" from both points of view. By referring to qualitative upgrading in terms of an increase in generality of behavioral rules, it becomes possible to demonstrate how social concept development affects behavior. By referring to it in terms of an increasing abstraction of a concept, we create an analogue with the development of other concepts, and thereby can gain insights accordingly. I have in mind here an analogue between the development of the self and the development of quantity concepts as

demonstrated in Piaget's "conservation" experiments (Ginsberg and Opper, 1969). These experiments show that quantity concepts develop by way of the dual process of cognitive differentiation (quantitative expansion) and conceptual evolution (qualitative upgrading).

a) Differentiation Prodding Conceptual Evolution

A child, aged four or younger, is presented with two identical beakers (A and B) (Figure 3), each containing the same amount of liquid and is asked whether these two glasses have the same amount of liquid or whether they do not. The child will correctly respond that A and B contain the same amount because the level of liquid comes up to the same place on both glasses. The child is then presented with a third beaker (C) which is shorter but wider than the first two, and into which the liquid of either A or B (say B) is poured. The child is now asked whether B and C contain the same amount of liquid. At this level of development, a stage which Piaget calls "preoperational," the child will persistently claim that beaker B has more liquid because it is taller.

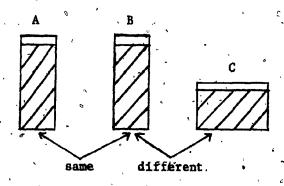


Figure 3. A child's preoperational view.

The cognitive explanation which lies behind the child's response is that, at this level of development, the child is relatively cognitively undifferentiated. The child is only able to perceive one dimension at a time; in this case height. In order for the child to have been able to perceive that beaker B and beaker C had contained the same amount of liquid (i.e., that while beaker B was taller, beaker C was wider), he would have had to been able to perceive both the dimensions of height Ginsberg and Opper (1969) put it this way: and width at the same time. "in all these problems [i.e.; all of Piaget's conservative experiments], the preoperational child deploys his attention in overly limited ways. . He focuses on one dimension of a situation, fails to make use of another, equally relevant dimension, and therefore cannot appreciate the relations between the two" (p. 167). Ginsberg and Opper point out that this cognitive tendency to focus on only a limited amount of the information "centration" -- is similar available -- a tendency which Piaget calls to Piaget's earlier notion of "juxtaposition" which is described as a tendency to think in terms of the parts of a situation at the expense of perceiving those parts in relation to a more integrated whole (p. 167).

Just before the child is able to give the "correct" answer in the experimental situation described above, he goes through a period of oscillation and confusion. Presented with this problem, he will first say that the taller glass has more because it is taller; but then, that can't be right, the second glass is wider, therefore it must have more; but, just a minute, if the first glass is taller, surely it must

have more; and so on (Ginsberg and Opper, 1969, p. 174) (see Figure 4).

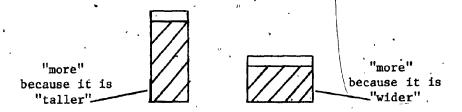


Figure 4. The transitional view.

The confusion in which the child finds himself immersed, is a function of the fact that he has developed a second dimension, which is as yet "unintegrated" by conceptual evolution. Perceived through one dimension, i.e., height, the first glass has more liquid; perceived through the other dimension, i.e., width, the second glass has more liquid. But if both glasses have "more," there can be no right answer. The contradiction appears insoluble, and such is the experiential result when perceptual differentiation proceeds unaccompanied by conceptual integration.

The child eventually finds a way out of this contradiction through the emergence of the higher-level concept of "volume" (at approximately age seven). With the acquisition of this "synthesizing" concept, the child now realizes that judgments of quantity can not be estimated strictly with relation to either height or width, but rather to both height and width taken together; i.e., judgments of quantity are

relative to "volume." Utilizing his newly acquired concept of "volume," the child at this stage of development -- one which Piaget calls "concrete operational" -- will now claim that obviously the two glasses contain the same amount of liquid -- who could possibly think otherwise? (see Figure 5).

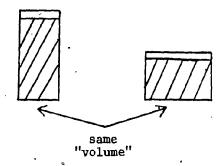


Figure 5. A concrete operational view.

b) Conceptual Evolution Outsteps Differentiation

The reverse of the above phenomenon, namely "apparent" conceptual development unaccompanied by adequate differentiation, (i.e., association learning unaccompanied by structural change), can also be demonstrated through one of Piaget's conservation experiments. In this case, a preoperational child is shown two sets of candies, with one set having its members spaced further apart than the other (see Figure 6).

Set I Set II

Figure 6. Two sets of candles.

The child is then asked how many candies are in each set, and he responds with the correct answer; namely five. On the surface it appears that the child has acquired and can utilize the concept of number. if the child is now asked which set has more candies, he will respond: "set II." For the preoperational child, "more" in this example is It will not be until the child has that which occupies more space. "differentiated" into the concrete operational stage (again at approximately age seven), 'that he will fully understand that the notion of quantity is intricately tied up with the concept of "number," and hence be able to perceive that both sets are -- in terms of quantity -In other words, it will not be until the child has the same. "differentiated" into the concrete operational stage that his percept of number will match up with his concept of number.

The Theory

Similar to the Piagetian model of conservation, to the Kuhnian (1970) model of progressive paradigm shifts, and to the Hegelian dialectical developmental theory of "thesis-antithesis-synthesis" (Taylor, 1975), the theory of social concept development that I shall argue for here is the following:

a person's concept of person develops through an encounter with a series of contradictions; these contradictions result from an individual's increasing interpersonal experiences, as well as the maturation of cognitive structures that render it progressively more difficult to

ignore apparently incompatible evidence; these contradictions must be persistent and systematic so as to point to the inadequacy of the concept rather than the inadequacy of the conceiver; concept development progresses toward ever more abstract levels such that each succeeding concept embraces hitherto disparate variables; this increase in abstraction results in an increase in an individual's ability to engage in smooth functioning interactions with ever greater numbers of others; and therefore, the superiority of each succeeding concept is recognized once it is embraced.

Ego/Social Concept Equivalence

The thesis that the developmental path of persons, or selves, assumes an invariant order through a series of stages, each of which is characterized by a core attitude, is not a novel one. The parallel between Loevinger's theory of ego development (1976) and the theory presented here on social concept development will be noted throughout. Similar theories of sequential development can also be found in the writings of Erikson (1980), Rogers (1961), and Kohlberg (1968, 1969) among others. To what purpose then, is the articulation of yet another model? The answer has already been alluded to. A major aim of the present project is to provide evidence, both in terms of logic and empirical data, for the objective validity of such a path, i.e., that all persons, irrespective of cultural milieu — in so far as they develop at all — develop in the order outlined.

The difficulty of establishing the objective validity of a developmental sequence has not gone unnoticed either by the develop-

mental theorists themselves, or by their critics. While longitudinal studies (Kohlberg, 1968), cross-cultural studies (Turiel et al., 1974), and cross-sectional studies (Loevinger and Wessler, 1970) have been highly suggestive, they can not circumvent the charge that such findings may be more reflective of common socialization processes — either of the investigators or their subjects — than it is of the intrinsic nature of the self or ego. Agusto Blasi recognizes this difficulty when he writes in the third chapter of Loevinger's book (1976) that while empirical data are both important and interesting, ultimately a developmental model of persons can only be validated by first attempting to take into account the very "essence" of persons (p. 53).

This is precisely what I am attempting to do here. That is, having argued (CHAPTER II) that the essence of persons lies in their capacity to take up the viewpoint of another, it follows directly from this model that the essential characteristic of the development of persons is an increasing capacity to take up the viewpoint of multiple social others. Further, since this increasing number of perspectives requires the integrating force of ever more abstract social rules, and since the evolution of rules can be presumed to follow a path toward ever increasing abstraction, the objective validity of the developmental path of persons about to be outlined is further substantiated.

The parallels between what is referred to here as social concept

development and what is referred to elsewhere as ego development (Loevinger, 1976) are striking — so striking in fact that they suggest a virtual equation. If this is the case, then the present model challenges traditional psychoanalytic theory with a new way of looking at what is referred to as the "ego." The model suggests, that is, that the ego, rather than being, as typically characterized, a rational process that is required to overcome the irrational urges of the id, is a social-learning process that is required to overcome the rational, albeit externally oriented mode of interaction that is basic to animate nature. The equation also presents a similar challenge to the Kantian model of the self (1929, 1956, 1967). In the following, a new way of looking at the superego will also be suggested.

The discussion of the development of a person's concept of person will center around what is hypothesized to be the three fundamental leaps of milestones:

- a) the emergence of a concept of person;
- b) the development of the notion of a social organization;
- c) the leap toward uniqueness.

The Developmental Stages of a Person's Concept of Person

a) The Emergence of a Concept of Person

For the healthy infant, who is well loved and well cared for, the first few months of existence consist of continuing interactions with an almost entirely good object (sic), namely mother. As the infant continues to mature however, his world changes; mother begins to expect more from her child." She begins to teach her child what, to her, are In western culture, the growing the basic rules of social interaction. child must learn that one eats one's food with utensils; that one deposits one's feces in the toilet; that one wears clothes in public, With the initiation into this rule-following process, socialization begins, and with it the child's expulsion from utopia. One can imagine the shock of the child when he experiences for the first time, mother's annoyance or negative affect -- which is a prerequisite for the child being able to learn any rules whatsoever. Suddenly, good mommy has turned into bad mommy and, like Piaget's one-dimensional child who, when given the two beaker situation described above, could only perceive either height or width but not both, once mommy has turned The temper tantrums of the "terrible twos" bad, she has turned all bad. are a reasonable reaction to what, from the child's point of view, is an intolerable situation.

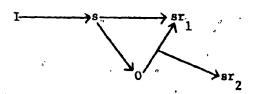
The child is a resilient being, and thus soon learns to cope with his good/bad split world, largely as a rat would learn to cope in an experimental environment in which some responses are associated with positive reinforcement while others are associated with negative reinforcement. With yet further maturation however, the child moves

closer and closer to a crisis point. As cognitive efficiency increases, it becomes progressively more difficult for the child to keep the image of good mommy (object) and bad mommy (object) apart. The difficulty is that, in theory at least, the full recognition that good mommy and bad mommy are the same mommy, ought to render the child immobile; just as the pairing of positive and negative reinforcement at the same source renders a rat immobile. On the one hand, the image of bad mommy begins to lose its facility to elicit anger from the child due to its close . association with the appetitive image of good mommy: in the child's mind, to destroy one, would be to destroy the other (Guntrip, 1969). On the other hand, the child becomes reluctant to approach good mommy -the good mommy who has so recently been bad. With an increase in cognitive efficiency that enables the child to hold the two dimensions of good and bad together, therefore, the child moves into a transition period virtually identical to the one described previously in Piaget's conservation experiment. One beaker is taller but less wide; the other beaker is wider, but less tall. Mommy is good, but she is bad; mommy is bad but she is good. Such is the source of the ambivalent behavior of the period that Mahler et al. (1975) refer to as "rapprochement" (at approximately 24 months), and which Kaplan describes so poignantly in her book Oneness and Separateness: From Infant to Individual (1978).

A solution to this contradictory situation becomes evident to the child as he begins to realize that there is a regular pattern to mommy's

contradictory behavior. What he realizes is that whether mommy is good or bad is very much dependent upon the sort of behavior that he happens to be engaged in at the time. If this is the case, then the child now realizes that his mother is subject to "second-order" control, i.e., mother's behavior can be controlled by following her rules. In other words, what the child realizes is that he can control mother's behavior through controlling his own. The question is: how? How does a child come to gain control over his own behavior — control that has hitherto been the sole property of external object stimuli?

The answer lies in the child's newly developing cognitive capacities. The child is now able to imagine, at one and the same time, not only the image of his own impending acts, but also, the image of mother (and others) perceiving and reacting to those acts. systematic association, situations that evoke a behavior-eliciting image of the child reacting to the various objects in his environment (sr,) also evoke an image of the child reacting to various significant others in the same situation (sr) (see Figure 7). It is this second image (sr₂) of the child reacting to significant others (0), that in turn either inhibits or facilitates the first image (sr) of the child reacting to the various objects within his environment. second image, that induces the child to adjust his behavior relative to the image of various significant others (aside from the adjustments that he will be prone to make with respect to the external stimuli of the strictly object environment).



Key: .

L - Individual
O - Other
s - Stimulus
sr - Stimulus of response to object
sr - Stimulus of response to other

Figure 7. A two-dimensional concept of person.

A less technical way of describing the above would be to say that the child is learning to follow rules by imaginatively putting himself in the place of the other and perceiving his own responses from that vantage point. Mead (1934) refers to this period in child development as the "play period." He says:

... Playing with an imaginary companion is only a peculiarly interesting phase of ordinary play. Play in this sense, especially the stage that precedes the organized games, is a play at something. 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. . . . In the play period, the child utilizes his own response to these stimuli [i.e., the imaginary role of others] which he makes use of in building a self. . . He plays that he is, for instance, offering himself something, and he buys it; he gives a letter to himself and he takes it away; he addresses himself as a parent or as a teacher; he arrests himself as a policeman. . . . He takes this group of responses and organizes them into a certain whole. Such is the simplest form of being another to one's self. (pp. 214-215)

Parsons (1964) argues that this process of taking up the role of another is equivalent to what psychoanalytic theorists refer to as the process of "identification." Contrary to the traditional psychoanalytic view however, Parsons argues that identification is not necessarily a process of becoming like another. He says, for instance, of the pre-oedipal period, that when a child comes to identify with his mother, he does so only in the sense that he learns a role that is complementary to hers -- not necessarily the same as hers. cally he says that ". . . mother and child come to constitute a collectivity in a strict sociological sense . . . but this does not mean that the two members of the collectivity are alike, in the sense that they play identical roles; on the contrary, their roles are sharply differentiated, as are the norms which define the respective expectations" (p. 91). Parsons thus redefines the Freudian notion of "identification" as a "process by which a person comes to be inducted into membership in a collectivity through learning to play a role complementary to those other members in accord with the pattern of values governing the collectivity" (p. 91).

But look at what has happened here. The child's conception of another with whom he takes up a complementary role, is of a being possessed of both appetitive and aversive properties, albeit properties that vary systematically relative to the perception of the child's own behavior. His concept of "social other" therefore, has transcended the natural appetitive/aversive classificatory split that is inherent

to the general laws of learning theory, and which is basic to the perception of objects.

Support for the thesis that the transcendence of the natural classificatory split is the primary and primitive step away from interacting in a strictly "object world," toward interacting in a "social" one, is borrowed from the psychoanalytic claim that "splitting" (i.e., the apprehension of one's world as divided exclusively between good and bad), though typical of the infant, is transcended with maturity. Splitting is also considered to be amongst the most primitive defense mechanisms (Kernberg, 1967).

The concept of "other" (person) that develops with second-order control, therefore, is one that is qualitatively distinct from the concept of "other" (object) that has, gone before. This is also true of the concept of self. Second-order control can not be said to initiate the development of the "concept" or "sense" of self, since, on the one hand, for the Kantian reasons already expounded upon (p. 33), the concept of self is required as a contrast for the perception of objects (without the "self," there is no "other"); and on the other hand, a concept of self is a prerequisite for halting an otherwise infinite regress within the social mode — the initial unit necessary to hold together the opposing sides of the aforementioned split of the "social other" (i.e., it is the same me to which mommy is both good and bad). However, second-order control provides the impetus for the further

development of the self. With the notion of second-order control, an individual begins to understand that how others treat him is no longer strictly a function of what he is, but what he does (cf. Macmurray, 1957). He is no longer simply an object with stable appetitive or aversive properties; he is rather, an actor who can become an appetitive or aversive stimulus depending upon his own behavior.

This is not to imply that the notion of actor is co-extensive with the notion of agency. Though the child (or cognitively immature adult) may understand that how others treat him is a consequence of his own actions, he may nonetheless feel <u>on</u>ly minimal control over what he does When such situations arise, such an individual may still attempt to control the behavior of others by attempting to manipulate their perception of what he does. He may attempt to cover up and excuse behavior that he knows others consider unacceptable; he may externalize blame when caught; and so on. Such manipulatory behavior is highly characteristic of individuals who Loevinger (1976) describes as "Self Protective, a level of functioning that she claims is amongst the lower rungs on the scale of ego development. She describes the self-protective individual as one who is manipulative, exploitive, and opportunistic; whose major concern is that of control; who fears being caught and who This behavior contrasts with that of the tends to externalize blame. individual at the lower "Impulsive" stage of ego development, who is sai to dichotomize the world into good and bad, and who exhibits thank dependence; presumably through lack of any sense of control.

The first step out of the "object world" and into a "social" one, therefore, is a function of an interactive control process of a second-order nature which initiates the development of a primitive concept of person. Essentially, to learn the difference between an object and a person is to learn that the latter, in contrast to the former, is a being possessed of contradictory properties which vary systematically in accord with the perception of the acts of another; who can both exhibit and be subject to second-order control; and whose nature, since it is that of "action" rather than that of "being," is a fluid one.

b) The Development of the Notion of a Social Organization

At the most primitive level of social development, a child has the capacity to take up, at most, the viewpoint of only one other at any one time. The social rules that this child follows are "person-specific"; they are specific to the perspective of the individual that the child happens to be imagining at any one time.

With continuing maturation however, the child begins to move toward yet another crisis point. As cognitive efficiency increases, it become increasingly difficult for the child to keep the images of different significant others apart. In western cultures, the most "significant" of these significant others, will be the child's mother and father. Thus, the difficulty which this child faces (a difficulty

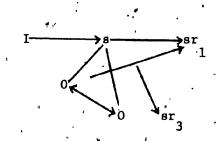
that, it is argued, lies at the core of what psychoanalytic theorists refer to as the "oedipal complex") is that while the child wants to please and be close to both his parents, he does not see how he can do this at one and the same time (cf. the perceived height/width contradiction of the transition period in the conservation experiments already described). This growing contradiction is illustrated in the following parable.

Let us say that in the very earliest stages of life, the child recognizes that mommy wants him to learn how to play ball with her, i.e., that mommy wants him to be a good child relative to her. He learns later on that daddy also wants him to learn how to play ball with him, i.e., that daddy wants him to be a good child relative to daddy. long as the child plays ball with each of his parents one at a time, Difficulties begin to arise Nowever, when the there is no problem. child begins to imagine the perspective of both of his parents at one Now the child recognizes that when he plays ball and the same time. is a good child relative to mother), he is not with mother (i.e., playing ball with father (i.e., he is not being a good child relative to On the other hand, when he is playing ball with father, he is It is a "no win" situation similar to not playing ball with mother. the height/width contradiction in the conservation experiment described previously, and the good/bad contradiction of the "pre-oedipal" stage. It is a dilemma that renders the child reluctant to approach and/or stay in tune with mother for fear of offending father, and reluctant to

approach and/or stay in tune with father for fear of offending mother.

It is a dilemma that renders the child's behavior highly ambivalent with respect to both his parents.

A solution to this second contradictory situation becomes evident to the child when he begins to realize that his mother's and father's demands and expectations can be seen to form a system (see Figure 8). If mother's rules and father's rules are consistent and compatible, the child begins to realize that it is not the case that mother wants him to Nor is it the case that father wants him to play play ball with her. ball with him. The truth of the matter is that they both want him to simply learn how to play ball. In other words, they both want their child to become an active and contributing member to the family unit as With this recognition, the child now moves from the unhappy situation in which he could apparently do no right, to the happier situation in which he can now apparently do very little wrong. the child now recognizes that in playing ball with either parent, there is a sense in which he plays ball with both; in fulfilling the wishes and expectations of one parent, he fulfills the wishes and expectations With this recognition (which occurs at approximately age six or seven) the child transcends the oedipal crisis and is now ready to move into the comfortable years of middle childhood -- what Freudians refer to as the latent period.



Key:

I - Individual

0 - Other

s - Stimulus

sr, - Stimulus of response to object

 $\operatorname{sr}_{2}^{1}$ - Stimulus of response to a system of others

Figure 8. A three-dimensional concept of person.

Mead. (1934) describes the above period as one in which the child moves from what he refers to as the "play" stage, to what he refers to as the "game" stage. Mead argues that the difference between the primitive play stage and the more advanced game stage, is that in the former the child must learn to take up the role of multiple others one at a time, while in the latter the child must learn to take up the role of multiple others at one and the same time. Specifically, he says:

The fundamental difference between the play and game is that in the latter the child must have the attitudes of all the others involved in that game. The attitudes of the other players which the participant assumes organize into a sort of unit, and it is that organization which controls the response of the individual. The illustration used was of a person playing baseball. Each one of his own acts is determined by his assumption of the action of the others who ata

playing the game. What he does is controlled by his being everyone else on the team, at least insofar as those attitudes affect his own particular response. We get then an "other" which is an organization of the attitudes of those involved in the same process.

The organized community or social group which gives to the individual his unity of self can be called "the generalized other." The attitude of the generalized other is the attitude of the whole community*. Thus, for example, in the case of such a social group as a ball team, the team is the generalized other insofar as it enters — as an organized process of social activity — into the experience of anyone of the individual members. (p. 218)

In a similar vein, Parsons (1964) argues that while the identification process that takes place during the oedipal period is more complex than that which took place during the pre-oedipal period, it nonetheless maintains the same basic form. In the oedipal period, a child is initiated into the family constellation as a whole, rather than simply remaining a member of various unintegrated social dyads, such as child-mother dyad, the child-father dyad, the child-sibling dyad, and so on. Thus, Parsons says of the resolution of the Oedipal complex that:

What Freud refers to as the parental functions [in the oedipal period] may be interpreted to mean a function of the family as a system, and moreover to include the function of both parents as the leadership coalition of the family. Seen in these terms, the family is an object with which the child identifies, and through this identi-

^{*} Mead does not mean here <u>literally</u> the whole community. He means rather, the whole of the game-playing collectivity that is being referred to at any one time.

fication he becomes a full-fledged member of that family; he and its other members come to constitute a collectivity which, if not new, is at least, through his altered status and the adjustments made by other members, a changed one.

The superego then, is primarily the <a href="https://hispattern.com/hispattern.co

As has already been alluded to, not all family units are identical in structure, particularly if looked at from a cross-cultural perspective. It is with this point in mind that Gerth and Mills (1953) argue that, while Freud ought to be credited with the recognition of the importance of the internalization of the family constellation by the character structure of its youngest member, his greatest short-coming was that he understood this to be the internalization of a particular type of kinship system — namely the occidental family. "Freud, as a sociological thinker, was [thus] handicapped by Freud, as a medical man" (p. 151). Gerth and Mills argue that "in the absence of the patriarchal family one can not very readily expect the Oedipus complex [as Freud described it] to develop in the child's character, much less exert an influence upon the later adult" (p. 151).

In summary, the specific picture of the oedipal period being presented here is one in which increasing cognitive maturation brings with it a growing contradiction between person-specific rules. In optimal circumstances, this contradiction is resolved with the recognition on the part of the child, that these person-specific rules or viewpoints interlock to form a system. Persons are thus no longer seen as isolated individuals, each with his or her own idiosyncratic viewpoint. Persons are now seen as belonging to a larger social system. Thus, the child who successfully transcends the oedipal complex (or a version thereof) no longer attempts to adjust his behavior solely with respect to the isolated viewpoints of individual others — real or imaginary. He now attempts to adjust his behavior relative to the role that he is expected to play within the larger social system.

Since it is only the rules of any given social system that keep the otherwise disparate social dyads together, it is hardly surprising that an obsession with rule maintenance is the core characteristic of individuals at this stage of development. After all, it is only through such rule maintenance that any person can hope to influence the behavior of any other person through the control of his own behavior. Indeed, this is the very definition of second-order control: that individuals act and react according to a predetermined set of rules so that any given behavior, on the part of any individual, will always elicit a certain behavior on the part of any other individual.

Loevinger (1976) labels this stage "Conformist" and claims that the major concern of such individuals is with superficial appearance, social acceptance, and conformity to external rules. As well, and unsurprisingly, these individuals employ stereotypes in their perception of, and reactions to, other individuals — stereotyping being a natural offshoot of the agreement between people to judge one another according to a set of agreed-upon rules.

This latter characteristic however, points to a basic instability that is inherent to all conformist systems. In such systems, individuals, qua individuals, do not really relate to one another at all. same way that an individual's concept of object dictates that he relate to his own cognitive categories rather than to individual specific objects, so his conformist concept of person dictates that he relate to other persons only as embodiments of rules rather than reacting to them as specific individuals. While the conformist has moved a considerable distance from his original "object" mode of relating to the world, the fundamental solipsistic quality of his perception has remained basically unchanged. It is this fact that leads to the next contradiction in social development; namely that the very rules that are a prerequisite for co-operation and hence necessary for the possibility of individuals retaining a measure of control within a social situation, themselves rob those individuals, qua individuals, of that control. real sense, in a conformist society, it is the rules which individuals embody, and not the individuals themselves, that exert second-order

control over the behavior of other individuals. Since you are reacting to the rules that I embody, I, or anyone else in a like position, is radically substitutable. It is not I who matters here, but only I insofar as I embody a set of rules. Or put another way, it only ever makes a difference what I do, not that I am doing it. And since rules not only define what any act is to mean, but as well, whether any act has meaning at all, if my actions are to continue to make any sense whatever, it must be the case that I continue to follow rules — those rules that, by definition, mask my uniqueness.

Thus, although in a conformist society there is a sense in which the individual retains some measure of second-order control through the possibility of choosing which rules to follow of a predetermined set, because of the fact of the individual's radical substitutivity, and because an individual can not choose but to follow at least a subset of those rules, there is also a sense in which the very system that affords a measure of control to individuals in their interactions with one another, also precludes it. Such is the paradox of this stage of social development.

The first step away from the "object" mode of apprehending the world was to move from the basic category of "I am" to that of "I do"; from an emphasis on the individual as object to an emphasis on action. The problem now is how to move away from this emphasis on action and move back toward the individual only this time as subject not object;

of how to move from the category of "I do" to that of "I do."

c) The Leap Toward Uniqueness

It was noted earlier that the way that a conformist individual acquired his set of general rules was by way of his varying interactions with persons who, from his point of view, appeared to have different sets of person-specific rules. It was through the emergence of a more abstract set of rules that these varying demands and expectations of different others were accommodated. Let us now suppose that, aside from encountering individuals like himself, a conformist also encounters individuals who conform to a different and incompatible set of abstract rules. What would be the result of such an encounter?

If such an interaction were highly threatening, each of the individuals would perceive the other's set of rules as person-specific and would act accordingly; namely in a self-protective fashion.

However, let us suppose, by contrast, that such interactions took. place in a non-threatening environment, with the extreme being, for example, a conformist's encounter with another culture through the literary medium. With frequent such encounters, our conformist would realize that since all these sets of rules can not all be "right," and since he has no third set from which to adjudicate between any two, it follows that all rule-systems are arbitrary. It is just a matter of "cultural chance" which set of social rules an individual happens to

follow, and which, therefore, he naturally, but fallaciously assumes to be the only right way to behave. The conformist's own behavior thus begins to appear not only culturally relative, but as well, literally "superficial" in the sense that it is more reflective of the society in which an individual happens to be brought up, rather than the "inner" nature of the individual himself.

In his books The Presentation of Self in Everyday Life (1959) and Behavior in Public Places (1963) (among others), Goffman presents just such a critique of conforming behavior. He says in Presentation of Self that:

In this report the performed self was seen as some kind of image, usually creditable, which the individual on stage and in character effectively attempts to induce others to hold in regard to him. While this image is entertained concerning the individual, so that a self is imputed to him, this self itself does not derive from its possessor, but from the whole scene of his action, being generated by that attribute of local events which renders them interpretable by witnesses. A correctly staged and performed scene leads the audience to impute a self to a performed character, but this imputation this self -- is a product of a scene that comes off, and is not a cause of it. The self, then as a performed character, is not an organic thing that has a specific location, whose fundamental fate is to be born, to mature, and to die; it is a dramatic effect arising diffusely from a scene that is presented, and the characteristic issue, the crucial concern, is whether it will be credited or discredited. (pp.-252-253)

In support of his thesis, Goffman offers many specific portrayals. of conforming behavior, or what he refers to as the "public self."

What is disturbing about these caricatures is the extent to which they seem accurate. If we all follow pre-arranged situational behavioral sets, even to the extent of properly positioned eye-gazing, a serious question is raised as to how any of our acts can truly be said to be genuine — a true product of our own volition — and thus reflective of our own unique nature. Since there are only a limited number of social fronts (and Goffman does seem right on this assertion), but apparently an infinite number of ways in which an individual can act, it follows that individuals must mold their behavior according to pre-farranged role-sets. But isn't this just to show that most acts are reflective of a false social self, rather than a genuine individualistic one? Laing presents a similar* position in his books Self and Others (1961) and The Divided Self (1965).

Goffman's basic argument is that conforming behavior — at least in its extreme form — is false behavior. It is hardly surprising therefore, that he goes on to claim that situational improprieties, i.e., non-conforming behavior, can be interpreted as an expression of the individual's "real" or "genuine" attitude toward the situation in which he finds himself. However, both Goffman and Laing carry this idea to the extreme when they imply that the psychotic, precisely because he

^{*} The degree to which Laing's and Goffman's beliefs parallel one another is interestingly marked by the fact that they both use the same "Sartrean" quote (1956, p. 59) when attempting to characterize the degree to which much of what is considered "normal" behavior is really elaborate pretence. (Goffman, 1959, p. 76; Laing, 1961, p. 44)

refuses to conform to any social proprieties whatsoever, communicates his ultimate disgust and contempt for the falsity of social life. Goffman (1963) says of an individual in a psychiatric hospital:

It seems that the patient sometimes feels that life on the ward is so disgusting, so unjust, and so inhuman that the only self-respecting response is to treat ward life as if it were contemptibly beyond reality and beyond seriousness. . . . Thereby the patient demonstrates at least to himself, that his true self is not to be judged by its current setting and has not been subjugated or contaminated by it. . . In short, the patient may pointedly act crazy in the hospital to make it clear to all decent people that he is obviously sane. . . The aim, then, of some of these bizarre acts is, no doubt, to demonstrate some kind of distance and isolation from the setting, and behind this, alienation from the establishment. (p. 225)

He also states:

While proclamations of alienation and gestures of situational contempt are certainly means by which the individual places some unapproved distance between himself and the establishment, there is still the paradoxical fact that these acts may be symptomatic of a deep concern about the establishment. . . . The individual, in other words, is bothering to do something about his situational obligations, even though he is intentionally doing what is felt to be wrong. . . There is a sense, then, in which those who actively dispute the proprieties governing a gathering show the gathering (and hence the encompassing establishment) more respect than do those who give no attention to it at all. (p. 226)

Goffman (1963) says of the conformists who practice the "involvement didiom" (p. 234), that they:

. . are likely to sense that their rules for participating in gatherings are crucial for society's well-being -- that these rules are natural, inviolable, and fundamentally right. [Thus] these persons will need some means of defending themselves against the doubts that are cast on these rules by persons who break them. . . . One way of correcting situational offenses is to look upon the offender as someone who is unnatural, who is not quite a human being, for then the offense becomes a reflection on him and not on what he has offended. . . . Current psychiatric diagnosis and treatment. . . offer this way out. Whatever psychiatry does, then, for the offender -- and this varies greatly -- it functions. additionally to protect the sanctity of the social occasion and the sentiments of the participants. This is an important service. We need to think that situational offenders are sick; sometimes, of course, it may be demonstrable that they really are sick, but even this demonstrability may not be the reason for our thinking them so. (pp. 234-235)

With respect to the categorizing or pigeon-holing effect of social rules, Laing (1961) argues that there is a sense in which "all groups operate by means of phantasy" (p. 39). He says that all of us, therefore, are prone to an "alienation effect" (p. 38), i.e., that "we are all prone to being drawn, into social phantasy systems with loss of one's 'own' identity in the process. . " (p. 38). Laing goes on to say that "a person in an alienated false position within a social phantasy system, who begins partially to apperceive his position may give 'psychotic' expression to his partial apperception of the actual phantasy state of affairs. . " (p. 39). That is, "madness may be sought as a way out" (p. 53).

This idealized picture that Goffman and Laing paint of the psychotic is, I would argue, misconceived. For behavior to communicate

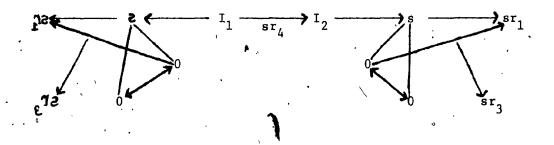
the kind of intentional comment that Goffman and Laing impute to the psychotic, it must take on the form of common action patterns, or How else is another to understand the message? social fronts. This is no more, nor no less a comment than to say that if my speech is to be understood by my fellow man, I must use words that carry common meanings. Precisely because the psychotic does not employ common social action patterns, his actions can not communicate meaning in the intentional sense. One might try to argue that the psychotic commits mental suicide and in that manner, delivers his ultimate state-This does not work either. Since his behavior lacks coherence, we are unable to attribute to him any kind of purpose. Although Wittgenstein was speaking of another problem, the last statement of the Tractatus (1961) shines some wisdom on this paradox: "What we can not speak about [either through common words or common action patterns] we must pass over in silence."

This "psychotic paradox" epitomizes the contradiction faced by the individual as he makes his first step into the post-conformist stage. On the one hand, rule-bound behavior appears to be intrinsically false, and hence detrimental to the possibility of genuine communication and interaction. On the other hand, rule-bound behavior appears to be a prerequisite for meaning, and hence for the possibility of persons interacting at all.

🛩 As a temporary solution to this paradox, the individual develops a

new attitude toward rule maintenance. He begins to realize that there is a third option to the hitherto dichotic choice between "conservatism" and "chaos." That third option is "flexibility." This flexibility stems from the recognition that if rules are indeed both arbitrary and necessary, rules can be necessary only in the sense that <u>some</u> set of rules is necessary to achieve some set of ends. However, if rules are a means to an end, and not an end in themselves, then allowing exceptions to rules in light of the ends to which they point, will, in many circumstances, be as important as the maintenance of the rules themselves. It is in this sense that individuals in this post-conformist stage can be characterized as "flexible."

Loevinger (1976) refers to persons who have reached this postconformist stage of ego development as "Conscientious." She describes
them as individuals who have a deep concern for human intentions as
opposed to mere concrete forms of behavior, who recognize the necessity
of critical self-evaluation, and who understand the over-riding value of
communication between persons. (See Figure 9.)



Key:

I, - Individual

0 - Other

S - Stimulus

 SR_1 - Stimulus

SR₃ - Stimulus of response to system of others

 \mathbf{I}_2 - An individual who responds to a different system of others than \mathbf{I}_1

 $SR_4 - I_1$ communicating with I_2

NOTE: The three dimensional formula for I is written in mirror form so as to indicate that I has to "turn his back" on his own rules in order to be able to hear I2.

Figure 9. A four-dimensional concept of person.

While flexibility serves as an interim solution to the "psychotic paradox," it can not serve as the final solution. Flexibility with regard to ajudication between rule sets and making exceptions to rules, assumes common ends. But suppose interacting conscientious individuals do not even share common ends? If this is the case, then the only way

to judge the relative adequacy of the two competing rule systems is to appeal to et a third rule-set that one takes to be, in some sense, "objective" or "absolute." But this is to assume that there is at least one set of rules that can duck the epithet of "arbitrary" -- a property that the conscientious individual has only so recently learned to be inherent to all rule-systems. Thus, the problem that the conscientious individual now faces is that, while he understands that all rules are arbitrary, he nonetheless is unable to shake the conviction that there must be some objective standard by which to judge the relative adequacy of competing rule systems. Without such a standard, there can be no distinction between "right" and "wrong," or "good" and "bad" (cf. Winch, 1958; Jarvie, 1970; Giddens, 1976); there can be no such thing as "truth" (Lakatos and Musgrave, 1970).

How can two communicating, conscientious persons, at one and the same time, disregard the authoritative viewpoint of their competing rule-systems, while avoiding making an appeal to yet a third, and even more authoritative viewpoint? This is the paradox inherent to the conscientious stage of development, which is summarized by Gadamer (1970) in the following fashion:

The unavoidable consequence to which all this leads is that the basically emancipatory consciousness must have in mind the dissolution of all authority, all obedience. This means that unconsciously the ultimate guiding image of emancipatory reflection in the social sciences must be an anarchistic utopia. Such an image, however, seems to me to reflect a hermeneutically false consciousness, the

antidote for which can only be more hermeneutical reflection.

What can be the answer to this final and most difficult of paradoxes? What is it, if anything, that persons who adhere to different rule-systems can be said to have in common?

In answer to this question, Winch (1958) argues that persons have "biological universals" (Giddens, 1976, p. 50) such as birth, death, and Winch argues that since these universals "pose disease, in common. exigencies that have to be adapted to or coped with by any form of social organization" (Giddens, 1976, p. 50), they therefore serve as a common ground through which persons can understand one another across cultures. The difficulty with Winch's suggestion is that, biological universals are not unique to man. Since animals also must cope with the exigencies that arise from biological universals, a reference to these universals can presumably be of no greater help in understanding the "culture of men" than in understanding the "culture of beasts." But this side-steps Winch's purpose. What Winch is attempting to do here is to find a way to avoid full-blown cultural relativity. For this he needs to delimit an element that is common to all human action qua human action -- not qua animate behavior. What he needs, therefore, is a reference to a phenómenon that persons have "exclusively in common"; what he needs is a reference to "persons' concepts of persons."

To recognize that all persons have concepts of persons in common, is to recognize that all persons develop through the same process; namely the social developmental process that has just been outlined. It is therefore to recognize that one can understand the structure of another's social attitude (viz. self-protection, conformity, or whatever) by estimating the level to which that person's concept of person has evolved. The recognition that all persons have concepts of persons in common however, also brings with it a fundamental change in one's attitude toward persons. Specifically, it brings with it (i) the possibility of genuine moral reasoning, and (ii) the recognition of one's own and others' potential autonomy and uniqueness.

i - moral reasoning

The prototypical form of moral reasoning is "universalization" (Kant, 1956, 1967; Hare, 1952, 1963). "Universalization" refers to a process whereby one imaginatively puts oneself in the place of every person who might be affected by one's act, in order to determine whether, given one's reflective equilibrium (Rawls, 1971), one would still will that that act be carried out. The recognition that all persons have concepts of persons in common is conducive to this kind of moral reasoning in two ways: (a) it brings with it the recognition that the refusal to universalize, jeopardizes one's essence as a person; and (b) it brings with it the corresponding recognition that universalization contributes to one's own freedom. I shall deal with these two points

in turn.

, ۵,

It has been argued that the "essence" of persons lies in their capacity to take up the viewpoint of another. It follows, therefore, that the denial of the viewpoint of another is the denial of one's essence as a person. Cooley (1964) puts it this way:

4

Egotism is then not something additional to ordinary human nature, as the common way of speaking suggests, but rather a lack. The egoist is not more than a man, but less than a man; and as regards personal power, he is as a rule weaker for his egotism. (p. 218)

Cooley goes on to say:

The "ethical self" is not less a self for being ethical, but if anything more a self, because it is a fuller, more highly organized expression of personality. (p. 218)

The argument for freedom takes the form of the following syllogism:

- i All persons, through their respective concepts of person, have the capacity to participate in the development and maintenance of social organizations of the "non-stimulus-bound" type.
- ii It is only through the participation in such social organizations that persons have the capacity to free their actions from the behavioral-determining forces of the external environment (pp. 38-39, this thesis).

ERGO

All persons through their capacity to participate in such social

organizations, have the potential to contribute to the freedom of all other persons.

The corollary of this syllogism is as follows: to deny the viewpoint of another is to preclude the possibility of that other contributing
to one's own freedom. Silber, in his introductory remarks to Kant's

Religion Within the Limits of Reason Alone (1960) makes the same point in
the following way:

Freedom is of such a nature that not to obey the moral law [conceived as a universal law] involves the loss of one's freedom. And since freedom is the base of individuality [i.e., personhood], the individual who loses his own freedom, loses his own self, (p. cxxx)

To argue that persons manifest their essence and actualize their freedom by taking up the viewpoint of others, is not to say that persons necessarily act in accord with the viewpoint of others. In the realm of personal development, altruism is not the opposite of egoism (Cooley, 1964, p. 220). One does not cease to consider one's own point of view because one is engaged in moral reasoning. One simply recognizes that one's own point of view is one amongst many. Gauthier (1963) puts it this way:

. . . respect [for persons] is simply a willingness to consider the wants of the other as providing reasons for acting, and hence a willingness to accept the practical judgments of the other, in so far as they are based on the consideration of all wants [i.e., in so far as they are made with respect to the co-operative enterprise].

Nothing less constitutes full recognition of the autonomy of another; nothing more is compatible with the maintenance of one's own autonomy. (p. 119)

The individual who reaches this stage of development thus recognizes that it is not so much the rule of conduct that one follows that is important as it is the process by which one comes to formulate the rule. In philosophical circles this process is referred to as the "universalization process" (Kant, 1956, 1967; Hare, 1952, 1963; Rawls, 1971); the attitude that is generative of it, is referred to as "respect for persons" (Downie and Telfer, 1969; Peters, 1966; Harris, 1968).

ii - autonomy and uniqueness

The recognition that all persons employ concepts of persons has the effect of freeing an individual from those very concepts. If I am aware that an individual's perception of me is a function of his own cognitive categories, his judgment of me becomes vacuous. Since others have never really perceived me, I am free from their labels. And from my own point of view, my perception of others will be newborn. First of all, my whole framework of understanding others gets called into question with the realization that my own veil of cognitive categories has hitherto prevented actual perception of them. How can I have learned from what I have never perceived? Secondly, since I now realize that others are capable of progressing through the very developmental process of which I have just now become aware, I will come to perceive others as

processes, possessed of the potential for ever changing fluid characteristics, rather than entities whose essence is a function of a stable though contradictory set of fixed properties.

On the basis of clinical experience, Rogers (1961) describes the individual who strives to discover and become himself, as "content to be a process rather than a product" . . . as a person who accepts him or herself as "a stream of becoming, not a finished product" . . . "a fluid process, not a fixed and static entity; a flowing river of change, not a block of solid material; a continually changing constellation of potentialities, not a fixed quantity of traits." (p. 122)

Thus, to progress to the level of "Autonomy" -- the fifth stage of Loevinger's ego development scale -- is to free oneself from the categorization of others, and to free others from one's own tendency to categorize. It is in this sense that one can be said to perceive oneself and others as potentially unique.

This attitude toward persons — this perception of persons as possessed of the potential to progress through an ordered series of developmental social stages — is an attitude which is indeed appropriately labelled "respect" — both for oneself and others.

Admirable though this quality may be however, it is not yet a sufficient condition for the actualization of one's full potential as a person.

Although an autonomous being may perceive others as potentially unique,

and although he remains non-judgmental toward them, insofar as the behavior of those at lower levels remains a function of predictable cognitive categories, practically his perception and behavior toward them will be non-unique. Further, insofar as an autonomous being interacts with individuals only at lower levels of the social developmental scale, his freedom from his judgment of others and their judgment of him, is invisible to others. His freedom thus remains a self-propelling wheel, unable to actually engage any of the working mechanisms of the interpersonal relationship itself.

It is only when an autonomous being interacts with other autonomous beings that autonomy becomes manifest. It is only through relationships between autonomous beings that their newly unveiled respective potentials for uniqueness can be recognized and hence mutually shared and explored. Though Loevinger claims that the major concern of individuals at the highest "Integrated" level is that of "identity," we must presume that she means this in a very fluid sense. An autonomous individual, in relationship with another autonomous individual, will realize that neither the other nor the self can ever be fully captured in any general classificatory framework. Becoming acquainted with the identity of the other as well as with the identity of self, therefore, is a never-ending endeavour.

Thus it is submitted that this mutual recognition of uniqueness is a condition which is both necessary and sufficient for the possibility

of "interpersonal interactions" in the literal sense of the word. It is only through the mutual recognition of uniqueness, that persons can finally see beyond the confines of their "humanizing" but necessarily "categorizing" concept of person, so that they can truly perceive and appreciate one another as each is in himself. (See Figure 10.)

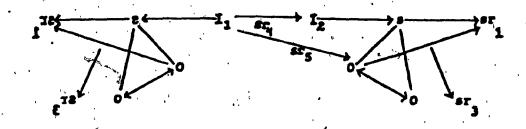
In the third to the last paragraph of the <u>Tractatus</u> (1961), Wittgenstein says of his work:

My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them -- as steps -- to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

He must transcend these propositions, and then he will see the world aright.

It would seem that this is an insight that is true also of the development of a person's concept of person: having reached the highest stage of development, a person -- so to speak -- throws his concept of person away.

Thus, as it turns out, the actualization of the best of man's potential resides neither in the category of "I do," nor in the category of "I do," but rather in one which might be appropriately labelled "we do." This is the "I-Thou" relationship of Buber (1958) — what he labels the category of the "in between," the "meeting of persons," the "emergence of love."



Key:

I, - Individual

0 - Other

S - Stimulus

SR₁ - Stimulus of response to object

SR - Stimulus of response to system of others

I - An individual who responds to a different system
of others than I
1

 $SR_4 - I_1$ communicating with I_2

SR - I₁ looking past I₂ to the social learning process through which he has developed.

Figure 10. A five-dimensional concept of person.

References

- Bion, W.R. Learning From Experience. London: Heimemann, 1962.
- Buber, M. I and Thou. New York: Charles Scribner's sons, 1958.
- Cooley, C.H. <u>Human Nature and the Social Order</u>. New York: Schocken Books, 1964.
- Downie, R.S., and Telfer, E. Respect for Persons. London: George Allen and Unwin, 1969.
- Erikson, E.H. <u>Identity and the Life Cycle</u>. New York: W.W. Norton and Co., 1980.
- Fairbairn, W.R.D. An Object Relations Theory of Personality. New York: Basic Books, 1952.
- Gadamer, H.G. "On the Solution and Function of Hermeneutical Reflection," <u>Continuum</u>, (1970), vol. <u>8</u>, pp. 76-95.
- Gauthier, D. <u>Practical Reasoning</u>. London: Oxford University Press, 1963.
- Gerth, H., and Mill, C.W. Character and Social Structure. New York:
 Harcourt, Brace and World, Inc., 1953.
- Giddens, A. New Rules of Sociological Method: A Positive Critique of Interpretive Sociologies. London: Hutchinson and Co. Ltd., 1976.
- Ginsberg, H., and Opper, S. Piaget's Theory of Intellectual Development:

 An Introduction. Englewood Cliffs: Prentice-Hall, Inc.,

 1969.
- Goffman, E. The Presentation of Self in Everyday Life. New York:
 Doubleday Anchor Books, 1959.
 - Behavior in Public Places: Notes on the Social Organization of Gatherings. New York: Macmillan, The Free Press edition, 1963.
- Guntrip, H. Schizoid Phenomena, Object Relations and the Self. New York: International Universities Press, Inc., 1969.
- Hare, R.M. The Language of Morals. Oxford: The Clarendon Press,

- Hare, R.M. Freedom and Reason. Oxford: The Claredon Press, 1963
- Harris, E.E. "Respect for Persons," in R.T.D. George (ed.), Ethics and Society. London: Macmillan Pub. Co., 1968.
- Horney, K. Our Inner Conflicts: A Constructive Theory of Neurosis.

 New York: Norton, 1945.
- Jarvie, I.C. "Understanding and Explanation in Sociology and Social Anthorpology," in I. Borger and F. Cioffi (eds.),

 Explanations in the Behavioral Sciences Confrontation.

 Cambridge: Cambridge University Press, 1970.
- Kant, I. Critique of Pure Reason. Translated by N. Kemp-Smith. London: Macmillan and Co. Ltd., 1929.
 - . Critique of Practical Reason. Translated by L.W. Beck.
 New York: Bobbs-Merrill Co. Inc., 1956.
- Religion Within the Limits of Reason Alone. Translated by T.M. Greene and H.H. Hudson. New York: Harper and Row, Pub., 1960.
- The Groundwork of the Metaphysics of Morals. Translated by H.J. Paton. New York: Harper and Row, Rub., 1967.
- Kaplan, L.J. Oneness and Separateness: From Infant to Individual.

 New York: Simon and Schuster, 1978.
- Klein, M. The Psychoanalysis of Children. London: Hogarth Press, 1932.
- Kernberg, O. "Borderline Personality Organization," <u>Journal of the American Psychoanalytic Association</u>, (1967), vol. 15 pp.
- Kohlberg, L. "Moral Development," in <u>International Encyclopedia of</u>
 the Social Sciences. London: Crowell, Collier and
 Macmillan Inc., 1968, pp. 489-494.
- Approach to Socialization," in D. Gaslin (ed.), Handbook of Socialization Theory and Research. New York: Rand-McNally, 1969.
- Kuhn, T.S. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press, 1970

- Laing, R.D. <u>Self and Others</u>. Harmondsworth: Penguin Books, Ltd., 1961.
- The Divided Self. Harmondsworth: Pentuin Books, Ltd., 1965.
- Lakatos, I., and Musgrave, A. (eds.) <u>Criticism and the Growth of Knowledge</u>. London: Cambridge University Press, 1970.
- Loevinger, J. Ego Development. San Francisco: Jossey-Bass Inc., Pub., 1976.
- Loevinger, J., and Wessler, R. Measuring Ego Development I: Construction and Use of a Sentence Completion Test. San Francisco:

 Jossey-Bass Inc., Pub., 1970.
- Macmurray, J. The Self as Agent. London: Faber and Faber Ltd., 1957.
- Mahler, M.S., Pine, F., and Bergman, A. <u>The Psychological Birth of the Human Infant: Symbiosis and Individuation</u>. London: Hutchinson and Co., Pub., Ltd., 1975.
- Mead, G.H. "Self," in G.H. Mead, On Social Psychology. A. Strauss (ed.).
 Chicago: University of Chicago Press, 1934.
- Parsons, T. "Social Structure and the Development of Personality:
 Freud's Contribution to the Integration of Psychology and
 Sociology," in T. Parsons, Social Structure and Personality..
 London: Collier-Macmillan Ltd., 1964.
- Parsons, T., and White, W. "The Link Between Character and Society," in T. Parsons, Social Structure and Personality. London: Collier-Macmillan Ltd., 1964.
- Peters, R.S. Ethics and Education. London: George Allen and Unwin Ltd., 1966.
- Piaget, J. "The Mental Development of the Child," in J. Piaget, Six
 Psychological Studies. New York: Random House Inc., 1967.
- Rawls, J. A Theory of Justice. Oxford: Clarendon Press, 1971.
- Rogers, S.R. On Becoming a Person: A Therapist's View of Psychotherapy.

 London: Constable and Co. Ltd., 1961.
- Sartre, J.P. Being and Nothingness. Translated by H.E. Barnes. New York: Philosophical Library, 1956.

- Strawson, P.F. "Persons," in P.F. Strawson, <u>Individuals</u>. London: Methuen and Co. Ltd., 1959.
- Taylor, C. Hegel. Cambridge: Cambridge University Press, 1975.
- Turiel, E., Kohlberg, L., and Edward, C. "Cross Cultural Study of Development of Moral Judgment," in L. Kohlberg and E. Turiel (eds.), Recent Research in Moral Development. New York: Holt, Rimehart and Winston, 1974.
- Winch, P. The Idea of a Social Science. London: Routledge and Kegan Paul Ltd., 1958.
- Wittgenstein, L. <u>Tractatus Logico-Philosophicus</u>. Translated by D.F. Pears and B.F. McGuinness. London: Routledge and Kegan Paul Ltd., 1961.

CHAPTER IV

A STUDY

In CHAPTER II it was argued: that the prime distinguishing feature of persons is their capacity to develop concepts of person; that with the emergence of these concepts, persons develop the capacity to perceive themselves from the imagined viewpoints of others; that these "imagined viewpoints" which are organized and elaborated internally, influence behavior in a way that can be distinguished from the more immediate effect of external cues; and that it is because persons have the capacity to imagine themselves from the viewpoint of others, that they are able to form social organizations of the "non-stimulus-bound" type (Postulate I).

In CHAPTER III it was argued that a person's concept of person — which can be considered equivalent to what is elsewhere referred to as the "ego" — is not an all-or-nothing phenomenon, but rather, a matter of degree. Specifically, it was argued that a person's concept of person has the capacity to develop throughout an individual's lifetime as a function of his or her increasing capacity to imagine him or

herself from the viewpoint of multiple social others; and that this increase in social perspective-taking capacity is paralleled by an increase in the behavioral influence of the "internal" representations of self relative to "external" cues and an increase in an individual's capacity to adjust his behavior with respect to ever more complex social units (Postulate II). It was also argued that as a function of this increasing capacity to take up the viewpoint of others, the content of a person's concept of person changes in a predictable order (Postulate III). Specifically, it was argued that a limited capacity to imagine others' viewpoints results in a social attitude, and style of behavior, that can be characterized as "self-protective;" a moderate capacity to imagine others' viewpoints results in a "conformist" social concept; and a highly developed capacity gives rise to the possibility of genuine moral thought.

In the course of developing these ideas, it occurred to me that their combined assumptions were such that they were empirically testable. The present Concept of Person Theory argues, for example, that a mature social concept is characterized by a capacity for genuine moral thought, and as well, by a capacity to integrate into complex social units. Thus, if measurement tools could be devised to quantify these different capacities, one should be able to test whether these capacities in fact coincide; or whether they do not.

This, in general, is the format of the present study. Paper and

pencil tests were administrated to a large number of persons, with the view to quantifying the various attitudes and capacities that the theory predicts either to coincide or to be antithetical to one another; and thence to determine whether the theory is, or is not accurate in its predictions.

The study, therefore, can be characterized as a correlational one. Its basic statistical tool is the Pearson product-moment correlation coefficient; symbolized by <u>r</u>. A "Pearson correlation coefficient is used to measure the strength of the relationship between two interval-level variables" (Nie et al., 1970, p. 278). An interval scale can be defined as "a measurement scale that, in addition to ordering scores, also establishes equal units on the scale so distances between any two scores are of a known magnitude" (Lemke et al., 1976, p. 273). When the fit between two variables is perfect, <u>r</u> takes on the value of +1.0 or -1.0 -- the negative sign indicating an inverse relationship.

The specific hypotheses to be tested were the following:

- a) that the content of a person's concept of person evolves with (social/cognitive) development (Postulate III);
- b) that the behavioral consequences of a person's concept of person evolve with development (Postulate II);
- c) that what is referred to here as "social concept development" is equivalent to what others (Loevinger, 1976) refer to as "ego

- development" (CHAPTER III);
- d) that the evolution of a person's concept of person is associated with cognitive differenciation that is assumed to underlie an individual's perspective-taking capacity (Postulate III).

From these four hypotheses follow the methodological concerns:

- a) to construct a sample in which developmental variance is maximized;

 and
- b) to construct appropriate measurement tools.

In what is to follow, these methodological considerations will be discussed in detail, as will the experimental procedures and results.

Methodological Considerations

a) The Sample

One method by which to empirically assess a developmental model is by way of a longitudinal study that attempts to "track" development in individuals over time. Such an approach is rarely feasible however, because of the number of years required to follow an individual through a life time (for an example of such a study, see White, 1966). As well, due to high attrition rates, sample sizes tend to be limited. There are therefore statistical difficulties in making inferences to the

general population.

An alternative is a cross-sectional study which examines groups of individuals at presumed varying levels of development. From a consideration of these groups, a model of a "representative" individual at each level of development is constructed, and from these representative models, a composite picture of the course of individual development is then inferred. This inference is not without its dangers either. The problem is that in group analysis, individual variation from the mean is treated as random variation. The possibility therefore remains open that the final, "distilled," or group picture of development, may be representative of no actual individual.

A major concern in a cross-sectional study -- of which the present is a type -- is the choice of a criterion for sample selection that will ensure sufficient variety in levels of development so that one's hypotheses about development can be assessed. One such criterion is age. It can be argued however, that while age is a good predictor of physiological development, it is substantially less powerful in predicting psychological development -- especially after early years (for a discussion of this point, see Loevinger, 1976, pp. 14-15). The most that one can say about age is that it is a necessary, but not sufficient, condition of development.

Another way of predicting varying levels of development is to do

so in terms of some theoretical position. Thus, it is a frequently held assumption that psychiatric disorders reflect a developmental arrest, or regression (cf. e.g., Guntrip, 1969; Arieti, 1974; Kernberg, 1976; Kohut, 1977; Mahler and Kaplan, 1977; etc.). If this is the case, then use of a composite sample of psychiatric and non-psychiatric subjects ought to provide sufficient variance so that one's developmental hypotheses can be tested. This was the option chosen for the present study. That is, in this project, maximization of developmental variance was attempted by constructing a sample of 98 psychiatric ' patients along with 111 non-psychiatric patients (for further details, see METHOD section). Such a sampling procedure has a number of advantages: it permits consideration of the optimal developmental thesis inherent in the present model; it permits consideration of the nonoptimal developmental thesis inherent in the psychiatric theoretical positions referred to above; and since patients have been defined by an external criterion (i.e., psychiatric dignosis) as functioning at a less than optimal level, it permits consideration of the criterion validity of the measurement tools employed.

b) Measurement Tools

A central problem in psychological measurement is the development, or selection, of appropriate quantification strategies. A quantification strategy is a "method for converting qualitative observation into quantitative differences" (Loevinger, 1976, p. 209). In this study,

given the hypotheses articulated above, quantitative strategies were required to measure:

- i social concept development;
- ii the hypothesized associated consequences of development;
- iii ego development; ' ;
- iv cognitive differentiation.

assessment. Their major advantage lies in their potential for precise quantification. However, they also have a major disadvantage, which is that the constructs that they are designed to assess may not be the sort that are relevant to the respondent outside the test situation. In his article "Ethnic Stereotypes" (1971), Brigham formulates just this criticism of the adjective check list in particular. Brigham cites a study done by Ehrlich and Rinehart (1965) who compared results from an adjective check list, to those from an open-ended procedure, in which subjects were allowed to answer spontaneously. They found that, in the check list situation, when subjects were asked to characterize certain ethnic groups, 9 to 18 traits were ticked off. In the open-ended situation however, 5 traits was generally the maximum generated.

An unstructured method of assessment, on the other hand, has strengths and weaknesses that mirror those of the structured test.

The major advantage of the unstructured test is that it allows a person to organize responses in a way that is natural to him, rather than

organizing them according to a structure imposed by the nature of the test. This very freedom, however, tends to be generative of idiosyncratic responses that are difficult to quantify. Thus, a commonly cited weakness of the unstructured method of assessment, is the "subjectivity and unreliability of scoring, [the] difficulty of learning how to score, and the relatively long time it takes to give and score these tests" (Loevinger, 1976, p. 222).

Given these psychometric considerations, it seemed reasonable to suppose, that if a structured and unstructured method of assessment were used together, they might complement one another. This would be particularly true in situations in which both were designed to measure the same, or related, hypothetical construct(s). Since similar measures sometimes produce similar response tendencies, a stronger case can be made for a causal association, if two different kinds of measures produce similar results, than if the same kind of measures produce the same results (Helmstadter, 1964, p. 141).

A common method used to assess ego development is a sentence completion test. A sentence completion test requires a subject to complete a number of "stems" (e.g., "If my mother . . . "; "Women are lucky because . . ."). In doing so, a subject purportedly projects his level of ego maturation — described by Loevinger (1976) as a "frame of reference" — in such a way that it can be assessed by trained raters. From their conceptualization of the ego and its path of

development, Loevinger and Wessler (1970) have devised a complex scoring system by which these sentence completion "protocols" can be marked.

In the present study, a sentence completion test was chosen as the method by which to assess ego development. Thus, as a complement to this unstructured method of assessment, a questionnaire was chosen as the means by which to estimate social concept development.

The present Concept of Person Theory argues that the core attitude of individuals at low, moderate, and advanced social concept development, are self-protection, conformity, and genuine moral thought. The social concept questionnaire, therefore, was designed to measure these three core attitudes, each independently of the other.

The questionnaire consisted of randomly interspersed statements.

These statements were of two sorts: (a) those taken from questionnaires utilized in other research (Robinson and Shaver, 1969); and (b) those constructed by the author to specifically reflect the theoretical considerations of the present model. Subjects were asked to indicate their degree of agreement or disagreement to each of these statements using a 9 point scale: 1 indicating strong agreement; 9 indicating strong disagreement. A 9 point scale was chosen for two reasons: its spread is wide enough to allow sufficient variation, without being so wide that individual units cease to have meaning; it mirrors the data gathering technique of MDS (see below), thus simplifying the instructions

that subjects were required to follow.

It will be remembered that Postulate II argues that an "increase in social perspective-taking capacity is paralleled by: an increase in the behavioral influence of . . 'internal' representations of self relative to 'external' cues and an increase in an individual's capacity to adjust his behavior with respect to ever more complex social units." In order to test Postulate II, a measure of external orientation, and a measure of social integration were needed.

The measure of external orientation was borrowed directly from Christian (1976) who designed a series of statements to determine the degree to which a respondent thinks his notion of who he is, and the feelings he has about himself, vary as a function of different situations (p. 13). Christian's reasoning was that, if one's self-definition varies considerably as a function of differing situations, this is probably a consequence of the fact that one relies primarily on external, rather than internal cues for one's self-definition (p. 12-13). These "external" statements were interspersed with the "social concept" statements.

It was theorized that an individual's degree of social integration is inversely related to his sense of "social isolation" and "anomie."

"Anomie" is a term coined by Durkheim (1951). It refers to an individual's sense of "valuelessness" (p. 256) and/or "normlessness"

(p. 253) when confronted with a society that offers such a proliferation of goals and means, that it appears to offer no guide to conduct whatsoever. From the anomic individual's point of view, such a society has reached a level of complexity (and/or confusion) that is beyond his grasp, and he thus lacks a sense of social integration.

An individual's sense of social isolation was presumed to straightferwardly reflect a lack of social integration. Both "social isolation" statements and "anomie" statements were interspersed with the "social concept" and "external" statements discussed above.

A question that frequently comes up in a discussion about development, is whether one is necessarily "better off" simply because one has developed. Is it the case, for instance, that development is necessarily accompanied by an increasing sense of well-being? light of the hypothesized utopian experiences of babyhood, and the joys of childhood, it would be rash to assume that development and wellbeing are causally linked in any one-one sense. On the other hand, given the above theory that argues that development is accompanied by a decreasing reliance on external cues (with regard to both conduct and self-definition), and an increasing capacity for social integration, one can at least assume that the probability of experiencing a general sense of well-being will increase with development. In order to assess this latter supposition, a set of "well-being" statements was included in the questionnaire.

It is sometimes argued that data collected from a questionnaire is more reflective of an individual's "willingness to disclose" -- or wish to produce "socially acceptable responses" -- than it is of the actual way that an individual thinks, or perceives his world. If this is the case, then it is important to have some way of gauging to what degree an individual's answers reflect his own viewpoint versus the one he considers socially acceptable (Helmstadter, 1964, p. 151). In order to assess this potential bias, 10 items from the MMPI (Hathawdy and McKinley, 1943) L (lie) Scale were interspersed throughout the above mentioned questionnaire.

The next methodological problem concerned the choice of an appropriate method by which to estimate an individual's level of cognitive differentiation. Christian (1976) has argued that multidimensional scaling (MDS) is a particularly suitable method for this purpose. The major advantage of MDS is that, while it permits subjects to organize information and respond freely, use of Ramsay's algorithm (1978) allows for precise quantification. MDS thus uses an unstructured method of data collection, while, at the same time overcoming the quantification difficulties usually inherent in unstructured tests.

The testing procedure used by Christian, and adopted here, can be summarized as follows. Subjects are asked to supply the names of 18 people whom they know, one of whom is the self. They are than asked to

judge how similar or different these stimulus-persons are, taken two at a time, and in all combinations. Judgments of similarity/dissimilarity are based on a 9 point scale: lindicating "very similar"; 9 indicating "very different."

On the assumption that dissimilarity and distance share important characteristics (e.g., symmetry, transitivity, etc.), MDS attempts to represent these subjective judgments of dissimilarity as distances between points in physical (Euclidian) space (Ramsay, 1978). Thus, if an individual's matrix is accurately represented, big dissimilarities ought to be associated with big distances, and small dissimilarities with small distances (Ramsay, 1978, p. 2).

There are a number of algorithms, other than Ramsay's, presently available by which to perform multidimensional scaling. All assume a relationship between the psychological concept of "dissimilarity" and the mathematical concept of "distance." The classical approach (Torgenson, 1952, 1958) assumes a one-to-one linear relationship between dissimilarity and distance -- a psychophysical assumption which has been found in the past to be unrealistically precise (Ramsay, 1978, p. 6). More recent non-metric algorithms (Shephard, 1962; Kruskal, 1964 a, b) assume only a correspondence in the rank-ordering of dissimilarity judgments and the distances between points in space. While this latter approach has wider applicability because of the lenience of its assumptions, it has the disadvantage of precluding the possibility of carrying

out important statistical tests — in particular, that of estimating dimensionality. As an alternative, Ramsay's algorithm (1977, 1978) can be seen as intermediate between metric and non-metric approaches. It assumes a mildly non-linear relationship between dissimilarity and distance — specifically, a lognormal relationship. In so doing, it takes into account the psychophysical phenomenon that error varies with degree of dissimilarity; i.e., that the greater the distance, the greater the error in estimation (Ramsay, 1978, p. 20-22). As well, this lognormal assumption permits statistical estimation of degree of dimensionality.

The purpose to which Ramsay's MULTISCALE MDS program (1978) was put in the present study, was not to estimate which criteria a person used in making his dissimilarity judgments, but rather how many.

How many criteria an individual used, was assumed to be proportional to the number of dimensions (k) that the program required to best represent his multiple dissimilarity judgments. This degree of dimensionality, in turn, was presumed to be reflective of an individual's level of cognitive differentiation.

Since differentiation was taken to be reflected in the number of dimensions required to best fit an individual's data, it was crucial to establish a criterion to determine when an optimal fit between dimensionality and data had been achieved. This was a problem of a trade-off between maximizing interpretability on the one hand, and minimizing

"badness of fit" or "stress" on the other (Christian, 1976, p. 21).

It was a trade-off because stress decreases with increasing dimensionality. It thus reaches a minimum at n-1 dimensions where the solution fits perfectly but is scarcely more interpretable than the raw data.

Resort to "scallops" (that point at which stress has been declining rapidly with increasing dimensions and only slowly thereafter) in the declining stress function was of little help for two reasons: (a) a large number of cases were scallop free; and (b) where scallops were evident, there was disagreement between raters as to their exact location.

Thus, as it turns out, a further advantage of using MULTISCALE (1978) is that Ramsay has established a precise criterion for estimating dimensionality. Through a number of Monte Carlo studies, Ramsay has shown that, for purposes of estimating dimensionality, twice the difference between two log likelihoods (log L) is, for large samples, approximately a chi square variable (Ramsay, 1978, p. 24). For small samples, it is approximately twice the chi square variable.

c) Formalized Hypotheses

In summary, the specific quantification strategies that were devised to test the aforementioned hypotheses were:

i - a questionnaire designed to assess: low (self-protective),
 moderate (conformity), and advanced (high moral thought)

THE PARTY OF THE PARTY OF

social concept development; degree of external orientation, social isolation, anomie, and sense of well-being; and tendency toward social aquiescence (or more bluntly, tendency to "lie");

- ii a sentence completion test for measuring ego development;
- iii a multidimensional scaling technique for assessing degree of cognitive differentiation, presumed to be directly related to a social perspective-taking capacity.

Given these specific quantification strategies, the above hypothese can be formalized as follows:

- 1. If a self-protective attitude is indicative of low social concept development and high moral thought indicative of advanced social concept development, and if social concept development proceeds by way of a progressive continuum, then persons receiving high scores on self-protection should receive low scores on high moral thought, and vice versa.
- 2a. If the consequences of social concept development are as predicted, there should be a positive association between an index of low social concept development (such as a self-protective attitude) and external orientation, social isolation, and anomie; and a negative association with sense of well-being. The reverse should be true of an index of mature social concept development (such as moral thought).

If these relationships are as predicted, they will serve as further evidence to support the claim that a person's concept of person evolves in the manner described; namely from self-protection, through conformity, to high moral thought.

- 2b. If the consequences of social concept development are as predicted there should be a negative association between an overall index of social concept development (if such is computable) and external orientation, social isolation, and anomie; and a positive association with sense of well-being.
- 3. If social concept development and ego development are equivalent, and if their respective assessment tools are adequate, there should be a positive relationship between social concept development as computed via the questionnaire and ego development as computed via the sentence completion test.
- 4. If social concept development is associated with degree of differentiation, and if differentiation is reflected in the number of dimensions required to best fit an individual's data, there should be a positive relationship between dimensionality as computed by MULTISCALE (1978) and level of social concept development as computed through the questionnaire.

It was suggested earlier that psychiatric disturbances can be viewed as a form of developmental arrest, or regression. This non-optimal developmental hypothesis will receive support to the extent that psychiatric patients as a group receive significantly lower scores than

non-patients on social concept and ego development, well-being and dimensionality, and significantly higher scores on external orientation, social isolation, and anomie. As well, since patients have been defined by an external criterion (i.e., psychiatric diagnosis) as functioning at less than optimal capacity, such an optimal/non-optimal split in scores will serve as evidence in support of the criterion validity of the quantative strategies employed in the present research project.

Method

a) Subjects

Two hundred and nine volunteers participated in the present study. The non-patient sample consisted of 111 persons. Non-patient subjects were recruited from high school and university classrooms, as well as through personal contact. Current psychiatric treatment was the only criterion for exclusion. The patient sample consisted of 98 persons, drawn from the psychiatric wards or psychiatric OPD's of three university teaching or affiliated hospitals. Any patient willing and able to complete the battery of tests was considered a suitable candidate.

Of the 111 non-patients, 10 were high school students; 6 were students at a junior college; 36 were university students; 56 were

actively employed either in socially recognized occupations or as homemakers; 3 were retired. Ages ranged from 16 to 69. The mean age was

31. With respect to gender, 48 of these subjects were male and 63 were
female. (For a cross tabulation of age and gender, see Table 1).

Of the 98 individuals in the patient sample, 42 were in-patients;

56 were out-patients. According to a simple forced choice evaluation

sheet, 39 were diagnosed by their attending psychologist or psychiatrist

as "psychotic"; 26 as "borderline"; 22 as "neurotic"; 6 as "personality

disorder"; and 5 as "other." Ages ranged from 15 to 64 with the mean

age being 27. Forty-eight of the patient sample were male and 50 were

female. (See Table 1.)

TABLE 1

CROSS TABULATION OF AGE AND GENDER
FOR NON-PATIENT AND PATIENT SAMPLES

	NON-PATIENT				PATIENT	
Age	М.	F	Total	Age	M	F Total
15-20	13	14	27	15-20	25	16. 41
21-30	19	17	36	21-30	13	13) 26
31-40	8	20	28	31-40	8	14 / 22
41-50	4	6	10	41-50	2	4 6
51-60	. 3	4.	7	51-60	0	2 2
61-70	1	. 2	3	61-70	0	1 1
Total	48	63	111	Total	48	50 98

b) Procedure

In order to assess the feasibility of administering tests -- in particular the multidimensional scaling -- to individuals suffering. from moderate to severe psychopathology, a pilot project consisting of 30 psychiatric in-patients was carried out. This was done during the time when the social concept questionnaire was still under construction. Since the data from the pilot subjects were included in the final results, 30 of the patient sample lack social concept scores.

All scalings were administered on a one-to-one basis. When feasible, sentence completions and questionnaires were done in the subject's own free time. All tests were completed within the period of a week.

i - questionnaire

The questionnaire consisted of 8 sets of randomly interspersed statements. The first set included a core drawn from Christie's (1969) test for Machiavellianism. It was designed to measure the somewhat banal (e.g., persons are either good or bad), and somewhat suspicious (e.g., a stranger is a person who can not be trusted) or "self-protective" attitude of an individual with a primitive concept of person. The second set included items drawn from Athanasiou's (1968) Balanced F scale and Adorno et al.'s (1950) California F scale

4

It was designed to measure the conformist attitude for Conservatism. of persons with moderately developed concepts of persons (e.g., it usually helps the child in later years if he is forced to conform to his parents'ideas), but who have not yet gained a keen appreciation of the importance of interpersonal communication and interdependence (e.g., it is important that people do not burden one another). third set of statements, which included items from Perloe's (1967) Social Value Questionnaire, was designed to measure the high moral thought that is hypothesized to be characteristic of persons with highly developed concepts of persons (e.g., acting to protect the rights and interests of other members of one's community is a major obligation for all persons). The set of "external" statements was borrowed directly from Christian (1976) (e.g., I feel very uncomfortable with people who don't make it clear how they feel about me). The "social isolation" statements included items from Dean's (1961) Scale of Alienation (e.g., sometimes I feel like a tiny speck alone in the middle of a large universe). The "anomie" statements included items from both Dean's (1961) Scale of Alienation, and Streuning and Richardson's (1965) Scale of Alienation via Rejection (e.g., there are so many ideas about what is right and wrong these days that it is hard to figure out how to live one's life). The seventh scale, was designed to measure sense of well-being. It included items from Gough's (1965) California Psychological Inventory and Rosenberg's (1965) Self-Esteem Scale (e.g., I usually feel life is worthwhile). The eighth set was composed of 10 items drawn from the MMPI (Hathaway and McKinley, 1943)

L (lie) Scale (e.g., I get angry sometimes).

Subjects were presented with 201 statements in all and asked to indicate their degree of agreement or disagreement on a 9 point scale; 1 indicating strong agreement; 9 indicating strong disagreement.

Specifically, the instructions were as follows:

Please complete the following by placing the appropriate number from the scale after each statement on the separate answer There are no right or wrong answers, so please use the scale to indicate the degree to which you agree with each In other words if you strongly agree with a statement, indicate this by placing a 1 on the answer sheet; if you strongly disagree with a statement, use a 9. use the full range of the scale indicate your degree of For instance, if a statement agreement or disagreement. describes you much of the time, but not all the time, you might want to use a 2 or 3. If another statement describes you only a small part of the time, use a 7 or 8. Remember to use the separate answer sheet for your responses. have any questions at all about the use of the scale, please Use a 5 from the scale only when you are feel free to ask. completely undecided, otherwise try to use the full range of the scale.

Remember to use the separate answer sheet for your responses,

and don't place any marks on this questionnaire. If you have any questions at all about the use of the scale, feel free to

ii - sentence completion test

The sentence completion test consisted of 26 stems from Loevinger and Wessler (1970), and 10 from Aronoff (1971) (see Appendix II).

Instructions written at the top of the sentence completion test were as follows:

Below are several incomplete sentences. Please read and complete each one. If the suggested word occurs in the middle of the line, place it wherever you wish.

iii - multidimensional scaling

Subjects were presented with 18 descriptive categories, one at a time, and asked to give the name of a person whom they knew who best fit that description. Three of these categories were "mother," "father," and "self." The rest included such descriptions as "your closest friend of the same sex as yourself," "a person you know who for some reason appears to dislike you," and so on (see Appendix III). These descriptions were provided for no other reason than to ensure that every participant in the study considered an equally broad range

of people when generating their own list of stimulus-persons.

Once this list was completed, subjects were presented with names of these stimulus-persons, two at a time, and in all combinations, in a haphazard order. Their task was to judge how similar or different the individuals of any given pair were, using a 9 point scale.

Specifically, the instructions were as follows:

These descriptions have been provided for no other reason than to ensure that every participant in this study considers an equally broad range of persons when generating their own list of persons. I am now going to present you with the names of these persons, two at a time. is to decide how similar or how different these persons are by using the 9 point scale in front of you. 'If you think the two people whose names I give you are very similar, give me the number 1. If you think they are very different, give me the number 9. If they are as much the same as they are different, give me the number 5. If you think they are similar but not that similar, use the numbers 2, 3 or 4. If you think they are different but not that different, use the numbers 6, 7 or 8. Remember, there are no right or What matters is that you indicate what you wrong answers. feel, for whatever reasons, is the degree of similarity or dissimilarity between each pair of persons. Do you have

any questions?

After any points of confusion were clarified, subjects were given the example of comparing a Rolls Royce with a Cadillac, and a Rolls Royce with a Volkswagon. If their answers indicated that they had understood the instructions, the process of presenting them with the names of stimulus-persons, two at a time, was begun. This process continued until all $153 \frac{(n(n-1))}{2}$ combinations of 2 persons, presented in a haphazard order, had been assigned a similarity/dissimilarity rating.

- c) Method of Analysis
- i questionnaire

Where necessary, scales of individual items were transposed so that high scores on the final grouped statements, indicated the presence of the relevant characteristic (i.e., a high score on the group of social isolation statements indicated that an individual felt socially isolated). Total scores were computed for each of the 8 questionnaire variables: self-protection (SELPRO); conformity (CONFORM); high moral thought (HIGH); external orientation (EXTERN); social isolation (SOCIS); anomic (ANOMIE); well-being (WELLBE); and lie (LIE). Each statement was correlated (Pearson r) with the total score of the group to which it; belonged. These item-total correlations served as a guide in evaluating

the internal validity of each statement in the group. Only the 10 items receiving the highest correlation coefficients in each group were retained, with the exception of WELLBE, in which 20 items were retained. All retained statements correlated with the original and final parent group at a significance level of p < .001.

This procedure presented a problem in only one instance. In the case of conformity, the majority of questions from previously validated questionnaires were eliminated. For that reason, a second set of conformity questions was computed, using 6 statements from Anthanasiou's (1968) Balanced F-Scale as a core. Conformity, therefore, has two measures: CONFORM I (composed in the same manner as other questionnaire variables) and CONFORM II (composed with an F-Scale core). The correlation coefficient for CONFORM I and CONFORM II was .68°(p < .001).

The statements used in computing the final variable scores are listed in Appendix I under the appropriate headings. Each statement is followed in the first column by the correlation between that statement and the total score for the group to which it belongs. These item-total correlations are followed in column 2 by the mean score for that statement; in column 3 by its standard deviation; and in column 4 by its significance level.

An attempt to estimate overall level of social concept development was devised in the following way. Scores on SELPRO, CONFORM I and II,

and HIGH were first normalized through Z-score transformations. positive Z-score indicates that, in comparison to other subjects, an individual has a higher than average score on that group of statements. Overall social concept scores (STAGE) were then computed for each subject as a function of his different Z-scores on each of the social concept variables. Thus, if a subject had a positive Z-score on SELPRO, and a negative Z-score on all others, he was given the STAGE score "self-protection." If a subject had a positive Z-score on SELPRO and CONFORM I or II (considered equivalent for this procedure), and a negative Z-score on HIGH, he was given the STAGE score "self-protection/ conformity," and so on. Only subjects with one positive and two negative Z-scores, or two "adjoining" positive and one negative Z-score, had computable STAGE scores. Using this method, subjects could receive only one of five possible STAGE scares: SELPRO, SELPRO/CONFORM, CONFORM, CONFORM/HIGH, and HIGH. (See Table 2.)

TABLE 2

SCORING FOR STAGE (LEVEL OF SOCIAL CONCEPT DEVELOPMENT)

An Individual's Z				
Self-Protecti v e	Conformity	High Moral Thought	STAGE Score	
+ ·	-	-	SELPRO	
+ ,	+	-	SELPRO/CONFORM	
-	+		CONFORM	
-	.+	+	CONFORM/HIGH	
		+	нісн	

One hundred and forty one, or 77%, of the 178 subjects who completed the questionnaire, had computable STAGE scores. The 40 who had non-computable scores fell into three categories: those who had all negative Z-scores (19); those who had all positive Z-scores (17); and those who had split scores (i.e., positive Z-scores on SELPRO and HIGH, and negative Z-scores on CONFORM I and II). Four individuals fell into the latter category.

A number of reasons can be suggested to account for the noncomputable STAGE scores. Response bias is a possibility. On the other hand, none of these groups had high scores on the LIE scale. Most of the "all negative" subjects were non-patients who received higher than average scores on the ego development sentence completion test.

The "all negative" phenomenon, therefore, may indicate that the questionnaire fails to tap superior modes of conceptual functioning.

By contrast, most of the "all positive" subjects came from the patient sample which may indicate the presence of a regression; i.e., answering positively to high level questions that characterize an individual's optimal functioning, and answering positively to low level questions which characterize an individual's present mode of functioning.

ii - sentence completion test

Protocols from one third of the subjects (35 non-patients and 35 patients) were rated by two of Loevinger and Wessler's (1970) original raters. The inter-rater reliability coefficient was .84 (p < .001). The remaining protocols were scored by only one rater. Scores that subjects received on the sentence completion test will be referred to as "LOEV."

iii - multidimensional scaling

Ramsay's MULTISCALE (1978) provides two programs for analyzing the data of individual subjects: (a) MDS1 that analyzes the data in raw (form; and (b) MDS2 that computes a unique power coefficient for each individual, thus taking into account between-subject variation with

regard to use of the response scale. Reasons can be found in favour of using each of these programs. Certainly, there is an argument in favour of the need to correct for response bias. On the other hand, there is no a priori way of demonstrating that different uses of the response scale -- which MDS2 corrects for -- is indeed a consequence of response bias. It may instead, be the result of a different way of perceiving the world -- differences in perception being precisely the phenomenon under investigation.

Due to these competing claims, the dissimilarity judgments of all subjects were analyzed on both MDS1 and MDS2. These programs were executed on a CDC Cyber 172 computer system.

The interative procedure was stopped, and the log likelihood value retained, when the largest relative change in any co-ordinate value was 10^{-3} . For the majority of subjects, the "convergence criterion" was achieved in several hundred iterations.

With regard to determining dimensionality, the stopping rule employed required that $2(\log L_k - \log L_{k-1})$ be greater than twice the normal chi square criterion value for n-k degrees of freedom, in order for a k dimensional solution to be retained (Ramsay, 1978). Thus, if the log likelihood on a two-dimensional solution was 150, and the log likelihood on a three-dimensional solution was 200, since twice the difference of (log L_3 - log L_2) -- in this case 100 -- is greater than

twice the normal chi square criterion value for 18-3 degrees of freedom (61), the three-dimensional solution would be retained. This procedure was carried out on all subjects and on all dimensions, i.e., 2 versus 1, 3 versus 2, 4 versus 3, and so on.

Use of a short scale (say 3 numbers) transgresses a basic assumption built into both programs (i.e., that a subject's dissimilarity judgments fall along a normal curve). It also spuriously increases the number of dimensions required to best fit an individual's data. For that reason, subjects who used a limited portion of the scale were not considered for further analysis with respect to multidimensional scaling. Six from the non-patient sample and 13 from the patient sample were eliminated for this reason.

Using MDS1, dimensionality scores ranged from 2 to 5. Of these, 27.5% were two-dimensional; 46% were three-dimensional; 22.5% were four-dimensional; and 4% were five-dimensional. Using MDS2 dimensionality scores ranged from 1 to 3. Of these, 4% were one-dimensional; 85% were two-dimensional; and 11% were three-dimensional. This shrinkage of spread which occurs with MDS2, suggests that adjusting for "response bias" masks potential individual differences. Since the difference between individuals is the focus of the present study, only the dimensional scores obtained through analysis on MDS1 were used in further data analysis. In this study, scores received on MDS1 will be referred to as "DIM."

Results.

In Part I of this section, the dispersion of scores on each of the variables, and the differences between non-patients and patients will be presented first. This will be followed by a presentation of the correlations coefficients for each of the variables with LIE and age.

While Part I is not directly relevant to the assessment of the major hypotheses under study, it is important for a number of reasons.

In a correlation study, the examination of the dispersion of scores is pertinent because a correlation coefficient is an index of "the degree to which variation (or change) in one variable is related to variation (change) in another" (Nie et al., 1970). variation on one variable is limited, the correlative estimate of the relationship between it and any other variable is also limited (for an example of the difficulties that arise from insufficient variance, see Redmore et al., 1975). As has already been noted, an examination of the differences between non-patients and patients is particularly relevant in the present study, since an optimal/non-optimal split will serve as evidence for the criterion validity of the quantitative strate-Similarly, a low or negative correlation between LIE gies employed. and other variables will serve to support the claim that these indices are measuring what they purport to measure.

Since Psychosocial development is presumed to be a function of an

interactive effect between cognitive maturation and situational variables, one might expect to find a relationship between age and a number of developmental variables — at least for those individuals who have experienced optimal growth patterns. For individuals subjected to non-optimal growth situations, one would expect to find no such relationship. An examination of the differences between non-patients and patients in regard to the relationship between age and other developmental variables, therefore, is of interest in the present study.

In Part II, the interrelationships between variables as they pertain to the previously stated hypotheses, will be presented. The differences between non-patients and patients will be noted only when pertinent.

All correlations will be controlled* for age and LIE.

^{*} A positive Pearson correlation coefficient between, for example, SELPRO and EXTERN, can serve as evidence in support of the claim that individuals who are self-protective tend to be externally orientated. However, a critic might argue that such a straightforward correlation does not eliminate the possibility that an attitude of self-protection and degree of external orientation are only indirectly related to each other because they are both directly related to age. One can meet this objection through the use of a Partial Correlation. "In essence a partial correlation enables a researcher to remove the effect of the control variable from the relationship between the independent and dependent variables" (Nie et al., 1970, p. 302).

1

Each of the questionnaire variables consisted of 10 statements, with the exception of WELLBE which consisted of 20. The maximum score on each questionnaire variables, other than WELLBE, was 90; the maximum score on WELLBE was 180. The means and standard deviations for all questionnaire variables are presented in Table 3*.

TABLE 3

MEANS AND STANDARD DEVIATIONS FOR
ALL QUESTIONNAIRE VARIABLES

VARIABLE	MEAN (x)	STD. DEV. (SD)
SELPRO	37.4	14.2
CONFORM I	51.6	14.7
CONFORM II	44.1	11.5
нісн	63.6	12.8
EXTERN ·	51.3	16.9
socis	48.9	13.0
ANOMIE	43.3	15.3
WELLBE	122.3	33.4

^{*} The ns for the total sample in these cases ranged from 170-174. Further reference to the total sample, in regard to the individual questionnaire variables, will imply ns of approximately the same value.

As predicted, multiple t-tests showed patients to be functioning at a less mature level of social concept development than non-patients.

Patients had significantly higher scores on SELPRO and CONFORM I and II; and a significantly lower score on HIGH than non-patients. Correspondingly, patients had significantly higher scores on EXTERN, SOCIS, and ANOMIE, and a significantly lower score on WELLBE (see Table 4*). These differences were retained whether non-patients were compared to the entire patient sample, hospitalized patients alone, or non-hospitalized patients alone.

TABLE 4

MEANS ON QUESTIONNAIRE VARIABLES FOR NON-PATIENTS AND PATIENTS

	NON-PATIENTS		PATIENTS
	\overline{x} (SD)	sig.	\overline{x} (SD)
SELPRO	32.6 (11.7)	.001	45.0 (14.4)
CONFORM I	46.9 (12.3)	.001	59.6 (15.0)
	42.1 (11.1)	.01	47.7 (11.5)
HIGH	67.1 (10.3)	.001	58.0 (14.5)
EXTERN SOCIS	42.6 (13.3)	.001	58.7 (17.2)
	45.1 (11.3)	, .001	55.0 (13.5)
ANOMIE	38.3 (11.7)	.001	51.7 (16.7)
WELŁBE	138.1 (22.0)	.001	97.2 (33.6)

^{*} The ns for the non-patient sample ranged from 106-109; the ns for the patient sample ranged from 60-65. Further references to subsamples with regard to individual questionnaire variables, will imply ns of approximately the same value.

As described in the METHOD section, a social concept score (STAGE) was computed for each subject as a function of his or her different Z-scores on SELPRO, CONFORM I and II, and HIGH. The distributions of the resulting STAGE scores tended toward a bi-modal configuration. Forty-four per cent of the subjects who had computable STAGE scores, fell below conformity. Forty-four per cent fell above conformity. Only 12% received the actual score of conformity. Figure 11 shows that this bi-modal trend is a consequence of the difference in the distribution curves between the patient and hon-patient samples. A t-test showed that this difference between the mean STAGE score of the patient sample, that was located slightly below conformity, was significantly lower (p <.001) than the mean STAGE score of the non-patient sample that was located slightly above conformity*.

^{*} The n for the non-patient sample in this case was 91; for the patient sample 48. Further reference with regard to STAGE, will imply ms of approximately the same value.

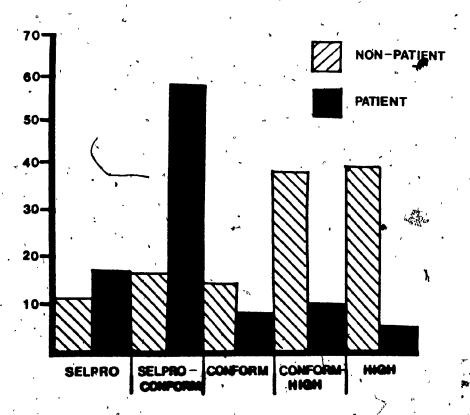
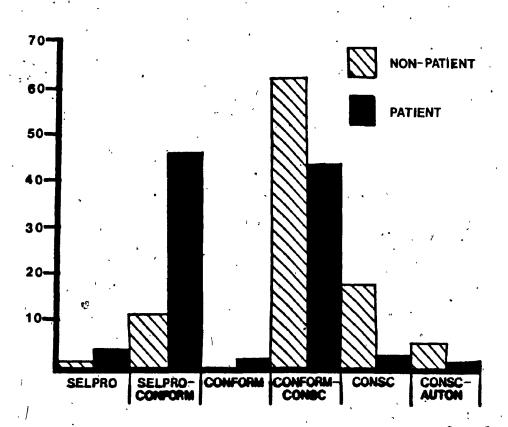


Figure 11. Distribution of STACE scores.

The distribution of scores on the sentence completion test (LOEV) showed an even more prominent bi-modal distribution than the STAGE scores. An examination of Figure 12 shows that this bi-modal distribution is a function of the fact that the majority of non-patients received post-conformist scores, while the patients scores were split between pre-conformity and post-conformity. A t-test showed that the difference between non-patient and patient scores on LOEV* was significant at a p <.001 level.

^{*} The n for non-patient sample in this case was 111; for the patient sample 98. Further reference with regard to LOEV will imply ns of approximately the same value.



Note: On the Loevinger-Wessler model (1970), tages are ordered as follows: impulsive; self-protection; conformity; conscientious; autonomy; integrated.

[•] Figure 12. Distribution of LOEV scores.

Using twice the normal chi square stopping rule, at n-k freedom, the MDS results showed a variation between subjects in terms of the number of dimensions required to best fit their dissimilarity judgments of self and others. The range extended from 2 to 5 dimensions. The dispersion of DIM scores for the nonpatient and patient samples* is shown in Figure 13. The differences between the non-patient and patient samples are: (a) there are a larger number of two-dimensional persons in the patient sample than in the non-patient sample (32 vs 20): (b) there are a larger number of three-, four-, and five-dimensional persons in the non-patient sample than in the patient sample (51 vs 27; 47 vs 15; and 7 vs 1). t-test showed that the difference between the mean dimensional scores was significant at the .001 level.

^{*} The n for the non-patient sample in this case was 105; for the patient sample 85. Further reference with regard to DIM, will imply ns of approximately the same value.

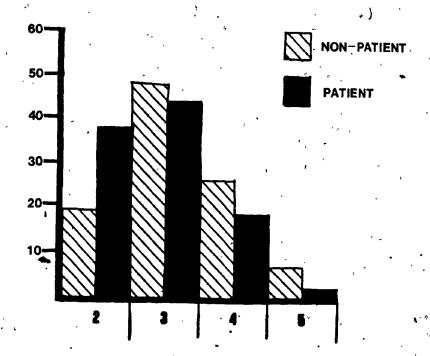


Figure 13. Distribution of dimensional scores.

Aside from the log likelihood of each dimensional solution, MULTI-SCALE prints out a number of summary statistics, one of which is an estimate of unbiased error (UERROR). Unbiased error differs from biased error in that it is purported to be corrected for degree of dimensionality. It is thus "more useful for interpretive purposes than a biased error estimate since it is not as seriously affected by . . . the number of dimensions used" (Ramsay, 1978, p. 26). Christian (1976) argues that the degree of unbiased error is an index of the degree of the precision and consistency with which an individual's judgment of self and other were made (p. 46).

As in Christian's research (1976), in this study, the unbiased error was strongly related to degree of dimensionality (r = -.77; p < .001). Given this high negative correlation, as well as the previously reported difference between non-patients and patients in terms of degree of dimensionality, it is hardly surprising that a t-test revealed that the non-patient mean UERROR score ($\overline{x} = .269$; $\overline{SD} = .078$) was significantly lower (p < .001) than the patient mean UERROR score ($\overline{x} = .336$; $\overline{SD} = .126$). Of greater interest however, is the fact that, even when degree of dimensionality was kept constant, non-patients continued to have significantly lower UERROR scores than patients. At the two-dimensional level, the mean unbiased error score for non-patients was .383 ($\overline{SD} = .051$); while for patients, it was .458 ($\overline{SD} = .112$); (p < .01). At the three-dimensional level, the mean unbiased score for non-patients was .273 ($\overline{SD} = .043$); while for patients, it was .292 ($\overline{SD} = .052$); (p < .05).

Non-patients and patients did not differ with regard to UERROR at the four-dimensional level; and there were insufficient patients at the five-dimensional level for comparison.

The mean score on LIE for the entire sample was 32.8 (SD = 10.8); for the non-patient sample 31.4 (SD = 8.9); and for the patient sample 34.5 (SD = 12.4). A t-test revealed that this difference was significant at the .05 level. Correlation coefficients computed for LIE and all other variables (Table 5). Only CONFORM I, CONFORM II, and DIM, correlated significantly with LIE.

TABLE 5

CORRELATIONS BETWEEN LIE AND ALL VARIABLES

	LIE
SELPRO	05
CONFORM I	.17**
CONFORM II	.12**
нісн	07
EXTERN	11
socis	09
ANOMIE	01
WELLBE	.04
STAGE	02
LOEV	.01
DIM	.12*
UERROR	- .04

^{**} n <.01

^{*} p <.05

Table 6 shows the relationships between age and all previously mentioned variables for the sample as a whole and the non-patient and patient samples taken separately. For the total sample, EXTERN, SOCIS, and ANOMIE correlate negatively with age; CONFORM I, II and LOEV correlate positively with age. There are few differences between non-patient and patient samples. Non-patients differed somewhat from patients in showing a low but significant correlation between well-being and age.

TABLE 6

CORRELATIONS BETWEEN AGE AND ALL VARIABLES FOR THE TOTAL SAMPLE, AND FOR THE NON-PATIENT AND PATIENT SUB-SAMPLES

		<u>6</u>	
VARIABLES	ENTIRE SAMPLE	NON-PATIENTS	PATIENTS ,
SELPRO	09	10	÷.01
CONFORM I	.24**	.28***	.31**
CONFORM II	.17**	.15	.24**
HIGH	.09	.02	.14
EXTERN	14*	14	- .11 ,
SOCIS	21**	-:21**	22*
ANOMIE	13*	15	07
WELTBE	.05	.16*	11
STAGE	.08	.01	.19
LOEV	.18**	.12	.08
DIM	01	· 14	.07
UERROR	01	.12	.01

^{***} p <.001

^{**} p <.01

^{*} n < .05

Hypotheses 1 argues that if a self-protective attitude is indicative of low social concept development and high moral thought is indicative of advanced social concept development, and if social concept development proceeds by way of a continuum, persons receiving high scores on self-protection should receive low scores on high moral thought; and vice versa. The strong negative correlation found between SELPRO and HIGH supports this hypothesis. Table 7 presents the inter-correlations between all social concept variables (i.e., SELPRO, CONFORM I and II, and HIGH). Their order and magnitude is such that SELPRO and HIGH can be seen to represent two extremes of a continuum, with CONFORM I and II falling in between. Starting from the bottom, SELPRO correlates relatively highly with CONFORM I (.50, p < .001); less highly with CONFORM II (.26, p < .001); and negatively with HIGH (-.50, p < .001). Starting from the top, HIGH has a moderate negative correlation with CONFORM II (-.24, p < .01) and CONFORM I (-.26, $p \le .01$), and a high negative correlation with SELPRO (-.50, p < .001).

TABLE 7 CORRELATION TABLE FOR SOCIAL CONCEPT VARIABLES

	· ·	SELPRO	CONFORM I	CONFORM II
		SEBI RO	oom our r	- CONTONE II
r	CONFORM I	.50***	-	•
	CONFORM II.	.26***	.66***	,
	нісн	· ~.50***	26***	24***

*** = p < .001

Hypothesis 2a argues that if the consequences of social concept development are as predicted, there should be a positive association between an index of low social concept development (such as a self-protective attitude) and the external measures of development such as external orientation, social isolation, and anomie; and a negative association with sense of well-being. Hypothesis 2a also predicts the reverse with regard to an index of high social concept development (such as high moral thought). The data support both parts of this hypothesis, as well as the implied hypothesized relationship of these external measures to an index of moderate social concept development, such as conformity.

Table 8 shows the correlations between the social concept variable of SELPRO, CONFORM I and II, and HIGH, and the external measures of EXTERN, SOCIS, ANOMIE, and WELLBE. On the assumption that external orientation decreases proportionately as a person's social concept level increases, the correlations are as one would expect: EXTERN correlates with SELPRO at +.52 (p <.001); with CONFORM I at +.31 (p <.001); with CONFORM II at +.14 (p <.05); with HIGH at -.32 (p <.001). Similarly, the correlations are as expected if social isolation decreases as a person's social concept level increases: SOCIS correlates with SELPRO as +.42 (p <.001); with CONFORM I at .07; with CONFORM II at -.02; and with HIGH at -.17 (p <.01). The same pattern holds for anomie. ANOMIE correlates with SELPRO at +.58 (p <.001); with CONFORM I at +.33 (p <.001); with CONFORM II at +.18 (p <.001); and HIGH at -.49 (p <.001). WELLBE shows the reverse pattern by correlating with SELPRO at -.51 (p <.001); with CONFORM I at -.33 (p <.001).

TABLE 8

CORRELATIONS BETWEEN SOCIAL CONCEPT LEVELS AND EXTERN, SOCIS, ANOMIE, AND WELLBE

	SELPRO	CONFORM I	CONFORM II	HIGH		
EXTERN	.52***	.31***	.14*	32***		
SOCIS	.42***	.07	02	17**		
ANOMIĘ	.58***	.33***	.18**	49***		
WELLBE	51***	33***	20**	,33***		

^{***} P < .001

^{**} p < .01

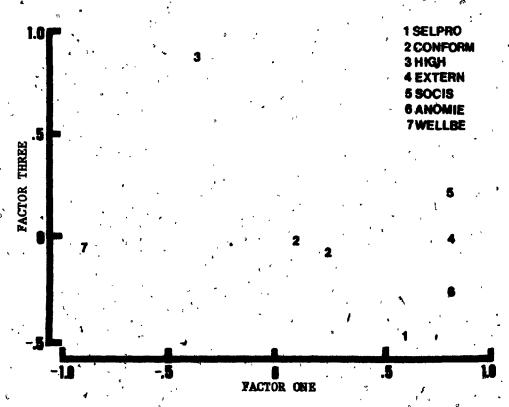
^{*} o < .05

A principal component (type PA-1, quartimax rotation) factor analysis of the correlations in Table 7 and 8 provides another means of studying the relationships between the previously mentioned variables. The size of the eigen values indicated that a three factor solution provided an adequate representation of the data. can be seen in Table 9, SELPRO, along with EXTERN, SOCIS, and ANOMIE loaded heavily on the first factor; CONFORM I and II loaded on the second factor; and HIGH on the third. It is of note that while WELLBE loaded negatively on the first factor, it did not load A factor analysis of the individual positively on any of the factors. social concept items also showed a clear three factor solution: SELPRO items loaded positively and HIGH items loaded negatively on the first factor; CONFORM I and II items loaded positively on the second factor; and HIGH items loaded positively on the third factor. 'When this factor analysis was redone to include WELLBE items, the WELLBE items loaded on a separate factor. The clustering of points representing the questionnaire variables, as well as the individual social concept items, can be found in Figures 14 and 15 respectively.

TABLE 9

FACTOR ANALYSIS OF QUESTIONNAIRE VARIABLES
(TYPE PA-1 QUARTIMAX ROTATION)

· 			
	FACTOR 1	FACTOR 2	FACTOR 3
SELPRO	<u>.63</u>	.30	44
CONFORM I	.23	<u>.90</u>	·06 ·
CONFORM II	.08	<u>.90</u>	04
. HIGH.	·31	09	<u>.90</u>
EXTERN	<u>.84</u> .	07	.05
SOCIS	84	18	.16
ANOMIE	.82	.11	-:29
WELLBE	<u>88</u>	14	02
	•	*	l



Pigure 14. Quartimax rotated solution (Type PA-1) of questionnaire variables (factor one versus factor three).

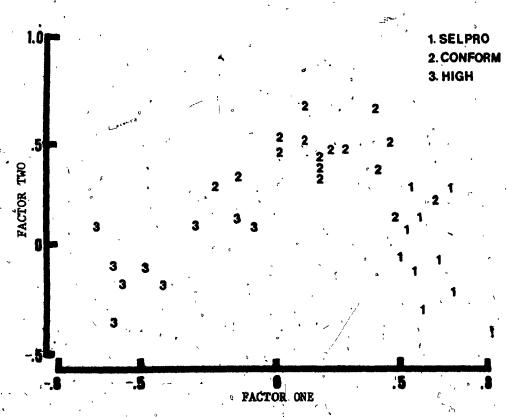


Figure 15. Quartimax rotated solution (Type PA-1) of social concept questionnaire items (factor one versus factor two).

Hypothesis 2b argues that if the consequences of social concept development are as predicted, there should be a negative association between an overall index of social concept development and degree of external orientation, social isolation, and anomie; and a positive association with sense of well-being. The correlations between STAGE and EXTERN, SOCIS, ANOMIE, and WELLBE support this hypothesis (see Table 10).

TABLE 10

CORRELATIONS BETWEEN STAGE AND EXTERN, SOCIS, ANOMIE, AND WELLBE

	EXTERN	SOCIS	ANÓMIE	WELLBE
STAGE	47***	40***	58***	, ,46***

*** p <.001

Hypothesis 3 argues that if social concept development and ego development are equivalent, and if their respective assessment tools are adequate, there should be a positive relationship between social concept development as computed via the questionnaire and ego development as computed via the sentence completion test. The correlation between LOEV and STAGE, which was .42 (p < .001), supports this hypothesis. However, since the variation of LOEV scores was severely limited, one can speculate that this coefficient may be spuriously low. An alternate method of assessing the relationship between ego development and social concept development was therefore devised.

The sample was divided into two groups: those who received pre-conformist LOEV scores and those who received post-conformist LOEV scores. A stepwise discriminative analysis was then carried out using all the questionnaire variables as potential discriminating variables. Results showed that SELPRO discriminated best between the pre- and post-conformist LOEV groups, followed by HIGH: 80% of the cases were correctly classified using weighted SELPRO (.82) and HIGH (-.34) scores. No other variables added significantly to the discriminating function once SELPRO and HIGH had been included.

The correlations between LOEV and SELPRO and HIGH for the total sample, and for the non-patient and patient samples taken separately are presented in Table 11. Of particular note is the fact, while both non-patients and patients show a negative correlation between LOEV and SELPRO, non-patients show a minimal positive correlation between LOEV and HIGH in contrast to the significant correlation for patients.

TABLE 11

CORRELATIONS BETWEEN LOEV AND SELPRO AND HIGH FOR THE TOTAL SAMPLE AND THE NON-PATIENT - AND PATIENT SUB-SAMPLES .

CORRELATIONS BETWEEN	TOTAL SAMPLE	NON-PATIENTS	PATIENTS
LOEV + SELPRO	<u>-</u> ,51***	~. 27 **	- 53***
LOEV + HIGH	.35***	.09	. 37**

*** p < .001

** p < .01

The correlation coefficients for LOEV and the external measures of social concept development (EXTERN, SOCIS, ANOMIE, and WELLBE) are presented in Table 12. They are similar to the parallel correlations for STAGE (Table 10). On the assumption that LOEV and STAGE are measuring the same phenomenon, these correlations serve as further evidence that the consequences of social concept development are as predicted by hypothesis 2: that external orientation, social isolation, and anomic decrease with social concept development, in contrast to well-being which increases with social concept development.

TABLE 12

CORRELATIONS BETWEEN LOEV AND EXTERN, SOCIS, ANOMIE, AND WELLBE

	;	EXTERN28***	SOCIS -, 23**	., ANOMIE 36***	WELLBE .31***
•		***]	2 < .001		
		** 1	.01	•	•

A factor analysis of LOEV scores and all questionnaire scores, including STAGE, provides another means of illustrating the relationship between these variables. The size of the eigen values indicated that a three factor solution provided an adequate representation of the data. As can be seen from Table 13, SELPRO, along with EXTERN, SOCIS, and ANOMIE loaded positively on the first factor, while WELLBE loaded negatively; LOEV and STAGE along with HIGH loaded positively on the second factor; and CONFORM I and II loaded on the third factor. Figure 16 presents a pictorial representation of the relationship between the points that represent these variables.

FACTOR ANALYSIS OF LOEV SCORES AND ALL QUESTIONNAIRE SCORES, INCLUDING STAGE SCORES (TYPE PA-1, QUARTIMAX ROTATION)

		FACTOR 1	FACTOR 2	FACTOR 3
SELPRO)	.50	,71	.16
CONFO	I MS	.02	15	_90
CONFO	M II	.15	23	.88
. HIGH,		23	.85	19
EXTER	1	<u>.79</u>	27	.07
socis		.84	11	18
ANOMI	3	<u>.74</u>	45	.11
WELLB	3	<u>85</u>	.22	16
STAGE		36	<u>.75</u>	23
TOEA		18	<u>.74</u>	.07

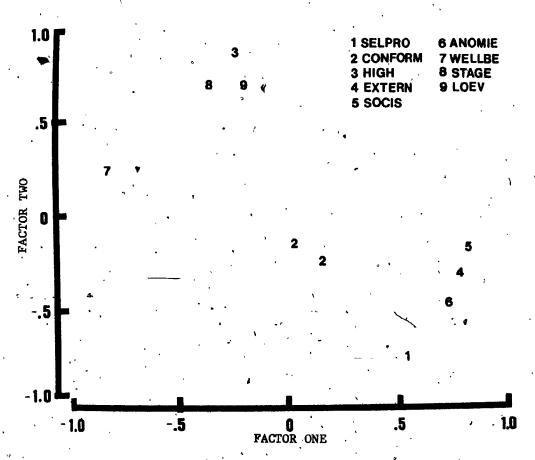


Figure 16. Quartimax rotated solution (Type PA-1) of questionnaire variables and LOEV sentence completion test (factor one versus factor two).

The fourth hypothesis predicts that if social concept development is associated with degree of differentiation, and if differentiation is reflected in the number of dimensions required to best fit an individual's data, there should be a positive relationship between dimensionality, as computed by MULTISCALE (Ramsay, 1978), and level of social concept development, as computed via the questionnaire. While the correlation between dimensionality and STAGE was positive ($\underline{r} = .26$; $\underline{p} < .01$; $\underline{n} = 103$), it was not impressively high; neither was the correlation between dimensionality and LOEV scores p < .01; N = 191).A forward stepwise multiple regression analysis revealed that, of these two measures, STAGE predicted dimensionality better, at a significance level of .007. Once STAGE had been included in the regression, LOEV added little to the overall prediction value.

Correlation coefficients were computed for dimensional scores and all questionnaire variables (see Table 14). They are all in the direction that one would expect if dimensionality increases with development; although again they are not impressively high.

As noted earlier, the correlation between dimensionality and unbiased error was -.77 (p <.001). Interestingly, the correlations between UERROR and all previously mentioned variables (Table 14) indicate that unbiased error is a more sensitive index of development than degree of dimensionality.

TABLE 14

CORRELATIONS BETWEEN DIMENSIONS AND UNBIASED ERROR
AND ALL PREVIOUSLY MENTIONED VARIABLES

	SELPRO	CONFORM I	CONFORM II	HIGH ¹	STAGE
DIM	28**	28**	15	.18	.26**
UERROR	.33***	.32***	.15	40***	32***
	EXTERN	SOCIS	ANOMIE	WELLBE	LOEV
MIŒ	26**	11	26**	.16	.18**
UERROR	.34***	.11.	.38***	19**	28***

*** <u>p</u> <.001

** p <.01

 $^{^1}$ Of note, in this case, is the difference between non-patients and patients. For non-patients the correlation between DIM and HIGH was -.01; for patients it was .21. For non-patients, the correlation between UERROR and HIGH was -.05; for patients it was -.45 (p < .01).

A final factor analysis was computed for all variables. The size of the eigen values indicated that a four factor solution provided an adequate representation of the data. As can be seen in Table 15, dimensionality (DIM) and unbiased error (UERROR) factored out independently of all other variables. This independent relationship is clearly illustrated in the clustering of points that represent each of the variables in Figure 17.

TABLE 15

FACTOR ANALYSIS OF ALL VARIABLES (TYPE PA-1 QUARTIMAX ROTATION)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
SELPRO	· <u>.55</u>	66	.16	.10
CONFORM I	001	15	· <u>.91</u>	.01
CONFORM II	.14	19 .	87	.16`
нісн	29	.84	19	Q8
EXTERN	.80	21	.04	.19
socis	.84	10	20	' 04
ANOMIE	<u>.76</u>	١38	.10	.16
WELLBE	<u>~.85</u>	.20	14	.01
STAGE	°39	<u>.72</u>	25	08
LÖEV .	 20	.74	.07	10
DIM	14	.07	09	<u>92</u> .
UERROR	.15	26	. 09	.88
	,		,	,

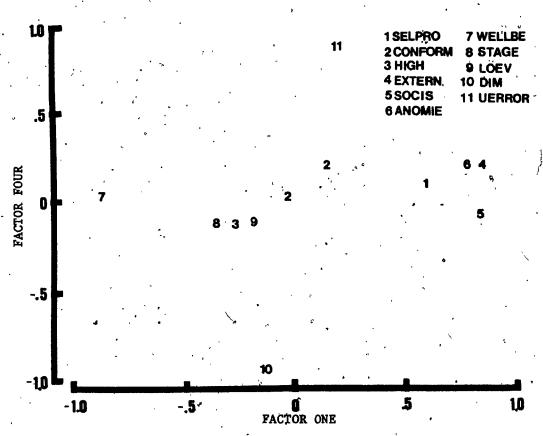


Figure 17. Quartimax rotated solution (Type PA-1) of all variables (factor one versus factor four).

Discussion,

I

The fact that patients consistently scored lower than non-patients on all indices that purport to measure some aspect of development lends support to the validity claims of the quantitative strategies employed in the present study. The low correlation of all variables to the LIE scale (with the exception of CONFORM I and II and DIM) do likewise. I shall elaborate on this latter point further.

In their discussion of the MMPI L(lie) scale, Good et al. (1961) emphasize that a high score can be interpreted in two ways. It can indicate the relative invalidity of a profile, i.e., that a subject has answered in the "fake good" (p. 15) direction, so that his score is higher (or lower) than it would have been, had he been frank. However, high lie scores can also be generated by persons who are honestly describing themselves as they see themselves. Good et al. describe such individuals as "overly conventional, socially conforming, and prosaic."

In the present study, an individual would have faked in the "fake good" direction if he had answered positively to the moral thought items, which were conspicuous by their length. Thus, if individuals who agreed to the ethical statements, had done so largely for social

TO STATE OF THE PARTY OF THE

show, there should have been a positive correlation between HIGH and LIE. For the same reason, if the higher scores received by nonpatients on the moral thought items, as well as on social conceptdevelopment as a whole (STAGE), were a function of their comparatively low "tendency to disclose," non-patients should have received correspondingly high scores on the LIE scale. Neither of these expectations were born out. The correlation between HIGH and LIE was -. 07; and patients had a higher mean LIE score than non-patients (p < .05). The fact that CONFORM I and II correlated significantly with LIE, indicates that, in this study, a high LIE score is more indicative of a conforming attitude, than it is of an invalid profile. The low but significant correlation between dimensionality and LIE (r = .12; p < .05; n = 206) is difficult to interpret since, of all quantitative strategies, MDS, on the surface, appears to be the most difficult to fake.

The multiple correlations carried out between age and all variables showed that, as predicted, a number were associated with age. Specifically, the data indicated that external orientation, social isolation, and anomic tend to decrease with age for all subjects. For non-patients alone sense of well-being tends to increase with age. No correlation was found between the overall index of social concept development (STAGE) and age. However, a strong correlation was found between conformity and age — which tends to support the popular assumption that today's "older" generation is more conservative than its youth. Patients and non-patients did not differ significantly with regard to age correlations.

In Part II, all correlations were "controlled" for both LIE and

11

Results indicated that, as predicted by Hypothesis 1, individuals who are self-protective are not the sort to engage in moral thought; and vice versa. The correlations between the three major social concept attitudes of self-protection, conformity, and high moral thought, support the general theory of social concept development — namely that these social attitudes emerge in that order.

Stronger evidence for the thesis that the social attitudes of self-protection, conformity, and high moral thought emerge in that order comes from: (a) the factor analysis of the individual items that purport to measure these three social attitudes; (b) the correlations between these social attitudes and the external measures of social concept development; and (c) the factor analysis of these three social attitudes, along with the external measures of social concept development.

In the factor analysis of the individual concept items, selfprotective items loaded positively and high moral thought items loaded
negatively, on the first factor. Conformity items loaded positively
on the second factor. High moral thought items loaded positively on

the third factor. A pictorial representation of factor one against factor two (Figure 15) clearly illustrates a continuum extending from the self-protective items, through the conformity items, to the items measuring high moral thought.

The correlation coefficients for the social concept variables and external orientation, social isolation, anomie, and sense of well-being are presented in Table 8. These correlations not only serve as further evidence for the thesis that social concept development proceeds in the manner stated (hypothesis 1); they also support the thesis that the consequences of development are as stated (hypothesis 2a).

Since there is a strong positive correlation between EXTERN and SELPRO, a moderately positive correlation between EXTERN and CONFORM I and II, and a negative correlation between EXTERN and HIGH, these combined correlations suggest that external orientation decreases with social concept development. Social isolation and anomie show similar patterns, thus suggesting that poor social integration is more characteristic of primitive social concept development, than of mature development.

The positive correlation between conformity and anomie is interesting to note. Conformity has at least two meanings. In its literal sense, it refers to the practice of accepting, or acquiescing to, the "accepted form" of any given group. It is also used to refer to a specific set of "traditional" or "conservative" social values. If these traditional values are the accepted form of the group to which

one is referring, these two meanings coalesce. The items in the present questionnaire were designed to measure conformity in just this combined sense. The data suggest however, that conservative values are not perceived as the accepted form of the society from which the present sample was drawn. The positive correlation between CONFORM I, II and ANOMIE indicate that conformists in the "conservative sense" experience a sense of alienation from present day society. The fact that 3 out of the 10 items in CONFORM I were concerned with the traditional role of women can be speculatively taken as an encouraging sign for the perceived entrenchment of the women's liberation movement.

The correlation pattern of WELLBE was the mirror image of that of Sense of well-being was highly negatively EXTERN, SOCIS, and ANOMIE. associated with a self-protective attitude; moderately negatively associated with conformity; and positively associated with high moral On the factor analysis of the questionnaire variables, WELLBE loaded negatively on the self-protective factor (Table 9). did not however, load positively on any of the factors. The quasiindependent relationship of well-being to social concept development was clearly illustrated in the pictorial representation of the factor analysis of all the questionnaire variables (Figure 14). when a factor analysis was carried out on the individual social concept items plus the individual well-being items, the well-being items held down their own factor. This finding supports the suggestion that, while social concept development is a necessary

condition for a sense of well-being in the adult population in today's sophisticated society, it is not a sufficient condition.

The relationships between STAGE and EXTERN, SOCIS, ANOMIE, and WELLBE (Table 10) support hypothesis 2b that predicted a negative association between an overall index of social concept development and external orientation, social isolation, and anomie; and a positive association with sense of well-being. Hypothesis 2b was further supported when sentence completion test scores (LOEV) were used as an overall index of development in lieu of STAGE (see Table 12).

The third hypothesis predicted a positive relationship between social concept development as computed via the questionnaire and ego development as computed via the sentence completion test. The correlation between these two measures was .42 (p < .001). Since the dispersion of LOEV was minimal, it was speculated that this coefficient was spuriously low. When the sample was divided into pre- and post-conformists, as measured by the LOEV test, a combination of SELPRO and HIGH correctly classified subjects in 80% of the cases. These findings indicate that, whatever the sentence completion test and questionnaire are measuring, they are measuring the same thing.

The relationship between ego development and social concept development was further allustrated through the separate correlation coefficient computed for the LOEV sentence completion test scores and

the two extreme social attitudes of self-protection and high moral thought (Table 11). It was noted at that time that, while both non-patients and patients showed a significant negative correlation between ego development and a self-protective attitude*, in contrast to patients, non-patients showed no significant correlation between ego development and high moral thought**. An explanation for this low correlation between ego development and moral thought in non-patients has already been alluded to.

It was noted in the METHOD section, that the majority of subjects who had non-computible STAGE scores because of consistent negative Z-scores on all social concept variables, were non-patients who received higher than average scores on the sentence completion test. It was suggested at the time that this "all negative phenomenon" may indicate that the questionnaire fails to tap superior modes of conceptual functioning. This suggestion not only receives support from the low correlation between HIGH and LOEV in the non-patient sample, but as well, from the low correlations between HIGH and DIM, and HIGH and UERROR -- again exclusively for non-patients. These

^{*} This is in contrast to Redman and Waldman (1975) who, using similar measures, found no relationship between ego development and a self- protective attitude.

^{**} This is in contrast to Sullivan et al. (1970) and Lambert (1972), both of whom found a significant correlation between ego development and moral thought in non-partiant samples. In both these studies, Kohlberg's (1968) interview tempolities was used to assess level of moral development.

findings substantiate the Kohlberg thesis (1968) that, since moral development is more clearly reflected in the process via which an individual comes to a decision about a moral dilemma, rather than the content of that decision, a questionnaire is not a suitable instrument for estimating moral development.

On the other hand, patients showed a significant correlation between high moral thought and ego development $(\underline{r} = .37, \underline{p} < .01)$; a moderate correlation between high moral thought and dimensionality $(\underline{r} = .21)$; and a significant negative correlation between high moral thought and UERROR $(\underline{r} = .45, \underline{p} < .01)$. These findings suggest that while the moral thought items may appear overly rigid to those of advanced social concept development, they nonetheless capture the essence of a higher social goal toward which those who are less developed, aspire.

The fourth hypothesis predicted that if social concept development is associated with degree of differentiation, and if differentiation is reflected in the number of dimensions required to best fit an individual's data, there should be a positive relationship between dimensionality, as computed by MULTISCALE (Ramsay, 1978) and level of social concept development as computed through the questionnaire. While the correlation between STAGE and DIM was in the direction supportive of this hypothesis (r = .26; p < .01; n = .103), it was not impressively high. The correlation between dimensionality and ego

development, as computed by the sentence completion test, was even less impressive (\underline{r} = .18; \underline{p} < .01; \underline{n} = 191). This is in contrast to Christian (1976) who found a high correlation between dimensionality and ego development (\underline{r} = .66; \underline{p} < .001; \underline{n} = 34) using identical measures. Christian also found a high correlation between dimensionality and external orientation (\underline{r} = .72; \underline{p} < .001), in contrast to the correlation of .26 (\underline{p} < .01) found here.

A possible explanation for these low correlations between dimensionality and other measures of development was suggested to me by one of the subjects participating in the present study. This was a happily married mother of two healthy grown-up children, who had just found out that her husband, of forty years, had cancer. When asked to participate in the present study, she queried her suitability as a candidate because, she said, she did not "feel herself." This woman's multidimensional scaling results revealed that, at the time of testing, she was functioning at a two-dimensional level. Since this low dimensionality score contrasted with the advanced social developmental level at which this individual appeared to be otherwise functioning, this led to the post-hoc hypothesis, that perspective-taking, as measured by multidimensional scaling, is sensitive to stress.

Statistical evidence from the present study that supports the suggestion that perspective-taking, as measured by MDS, is sensitive to stress, is the following:

- a) the factor analysis of all the variables used in the present study showed that dimensionality and its corresponding unbiased error varied independently of all other developmental variables (Table 15 and Figure 17);
- b) when dimensionality was controlled, non-patients continued to have significantly lower unbiased error scores than patients. This may indicate that those non-patients whose dimensional scores were spuriously low because of stress, nonetheless maintained their precision and constancy in making judgments about self and others which is more typical of a higher level of functioning. If dimensionality scores, as measured by MDS, are indeed more susceptible to stress than unbiased error scores, this would account for the fact that unbiased error was a more sensitive index of social concept/ego development than dimensionality.

Evidence not reported in the present study, but nonetheless supportive of the suggestion that perspective-taking, as measured by MDS, is sensitive to stress, is the following. In order to determine the feasibility of using MDS as an index of response to psychotherapy, an individual undergoing sychoanalysis and not participating in the present study, was asked to complete a multidimensional scaling, every two-to-three months over a period of three years. On the back of each scaling sheet, the life events currently being experienced were to be summarized. Dimensional scores were computed for this individual

at the end of the three year period. These scores ranged from 2 to 5; and while, on the whole there was a tendency toward ever increasing differentiation, a number of scores dropped dramatically in conjunction with perceived traumatic events.

Summary

The results of this study indicated:

- i that the content of a person's concept of person evolves in the order predicted -- namely from a self-protective attitude, through conformity, to genuine moral thought;
- ii that the consequences of social concept development are as predicted -- namely that external orientation, social isolation, and anomie decrease with development, while sense of well-being increases;
- iii that social concept development can be considered equivalent to what is elsewhere referred to as ego development.

While there was a mild association between perspective-taking capacity as measured by MDS, and social concept development as measured by the questionnaire, this result is equivocal, and will remain so, until further research has revealed the relationship between perspective-taking capacity as measured by MDS, and stress.

References

- Adorno, T.W., Frenkel-Brunswick, E., Levinson, D.J., and Sanford, R.N.
 California F-Scale (1950). In J.P. Robinson and P.R. Shaver,
 Measures of Social Psychological Attitudes. Ann Arbor: The
 Institute for Social Research, 1969, revised 1973, p. 308.
- Anthanasiou, R. Balances F-Scale (1968). In J.P. Robinson and P.R. Shaver, Measures of Social Psychological Attitudes. Ann Arbour: The Institute for Social Research, 1969, revised 1973, p. 342.
- Arieti, S. <u>Interpretation of Schizophrenia</u>. New York: Basic Books, Inc., 1974.
- Aronoff, J. A Test and Scoring Manual for the Measurement of Safety, Love and Belonging, and Esteen Needs. Manuscript, Michigan State University, Department of Psychology, 1971.
- Brigham, J.C. "Ethnic Stereotypes," <u>Psychological Bulletin</u>, (1971), pp. 15-38.
- Christian, J. Psychological Differentiation and Definition of the Self: A Multidimensional Scaling Approach. Unpublished Ph.D. dissertation, McGill University, Montreal, Canada, 1976.
- Christie, R. Machiavellianism (1969). In J.P. Robinson and P.R. Shaver, Measures of Social Psychological Attitudes. Ann Arbour: The Institute for Social Research, 1969, revised 1973, p. 590.
- Dean, D. Alienation Scale (1961). In J.P. Robinson and P.R. Shaver,

 Measures of Social Psychological Attitudes. Ann Arbour:

 The Institute for Social Research, 1969, revised 1973, p.

 275.
- Durkheim, E. Suicide. New York: The Free Press, 1951.
- Ehrlich, H.J., and Rinehart, J.W. "A Brief Report on the Methodology of Stereotype Research," Social Forces, (1969), vol. 43, pp. 564-575.
- Good, P.K., and Branter, J.P. A Practical Guide to the MMPI: An Introduction for Psychologists, Physicians, Social Workers, and Other Professionals. Minneapolis: University of Minnesota Press, 1961.

- Gough, H. California Psychological Inventory (1965). In J.P. Robinson and P.R. Shaver, Measures of Social Psychological Attitudes.

 Ann Arbour: The Institute for Social Research, 1969, revised 1973, p. 99.
- Guntrip, H. Schizoid Phenomenon, Object Relations and the Self. New York: International Universities Press, Inc., 1969.
- Hathaway, S.R., and McKinley, J.C. <u>Booklet for the Minnesota Multiphasic</u>

 <u>Personality Inventory</u>. New York: The Psychological Corporation,

 1943.
- Helmstadter, G.C. <u>Principles of Psychological Measurement</u>. New York: Meredith Pub. Co., 1964.
- Kernberg, O.F. Object Relations Theory and Clinical Psychoanalysis. New York: Jason Aronson, 1976,
- Kohlberg, L. "Moral Development," in <u>International Encyclopedia of the Social Sciences</u>, London: Crowell, Collier, and Macmillan Inc., 1968, pp. 489-494.
- Kohut, H. The Restoration of the Self. New York: International Universities Press, Inc., 1977.
- Kruskal, J.B. "Multidimensional Scaling by Optimizing Goodness of Fit to a Nonmetric Hypothesis," <u>Psychometrika</u>, (1964), vol. <u>29</u>, pp. 1-27. (a)
- "Nonmetric Multidimensional Scaling: A Numerical Method, 9 Psychometrika, (1964), vol. 29, pp. 115-129. (b)
- Lemke, E., and Wiersma, W. Principles of Psychological Measurement.
 Chicago: Rand McNally College Pub. Co., 1976.
- Lambert, H. "Comparison of Cognitive Developmental Theories of Ego and Moral Development," Proceedings of the 80th Convention of the American Psychological Association, (1972), vol. 7, pp. 115-116. (Summary)
- Loevinger, J. Ego Development. San Francisco: Jossey-Bass Inc., Pub., 1976.
- Loevinger, J., and Wessler, R. Measuring Ego Development I: Construction and Use of a Sentence Completion Test. San Francisco: Jossey-Bass Inc., Pub., 1970.

- Mahler, M.S., and Kaplan, L. "Developmental Aspects in the Assessment of Narcissistic and So-Called Borderline Personalities," in P. Horticollis (ed.), Borderline Personality Disorder: the Concept, the Syndrome, the Patient. New York: International Universities Press, Inc., 1977.
- Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Bent, D.H.

 SPSS: Statistical Package for the Social Sciences. New York

 McGraw-Hill, Inc., 1970.
- Perloe, S. Social Values Questionnaire (1967). In J.P. Robinson and P.R. Shaver, <u>Measures of Social Psychological Attitudes</u>. Ann Arbour: The Institute for Social Research, 1969, revised 1973, p. 576.
- Ramsay, J.O. "Maximum Likelihood Estimation in Multidimensional Scaling," Psychometrika, (1977), vol. 42, pp. 241-266.
 - Multiscale: Four Programs for Multidimensional Scaling by the Method of Maximum Likelihood. Chicago: National Education Resources, Inc., 1978.
- Redmore, C., and Waldman, K. Reliability of a Sentence Completion Measure of Ego Development, <u>Journal of Personality Assessment</u>, (1975), vol. 36, pp. 236-243.
- Robinson, J.P., and Shaver, P.R. <u>Measures of Social Psychological Attitudes</u>.

 Ann Arbour: The Institute of Social Research, 1969, revised

 1973.
- Rosenberg, M. Self-Esteem Scale (1965). In J.P. Robinson and P.R. Shaver,

 Measures of Social Psychological Attitudes. Ann Arbour: The
 Institute for Social Research, 1969, revised 1973, p. 81.
- Shephard, R.N. "The Analysis of Proximities: Multidimensional Scaling with an Unknown Distance Function," Psychometrika, (1962), vol. 27, pp. 125-139.
- Streuning, E., and Richardson, A. Alienation via Rejection (1965). In J.P. Robinson and P.R. Shaver, Measures of Social Psychological Attitudes. Ann Arbour: The Institute of Social Research, 1969, revised 1973, p. 268.
- Sullivan, E.V., McCullough, G., and Stager, M. "A Developmental Study of the Relationship Between Conceptual, Ego, and Moral Development,"

 <u>Child Development</u>, 1970, vol. 41, pp. 399-411.
- Torgenson, W.S. "Multidimensional Scaling I: Theory and Method,"

 <u>Psychometrika</u>, (1952), vol. <u>17</u>, pp. 401-419,

Torgenson, W.S. Theory and Methods of Scaling. New York: John Wiley and Sons, Inc., 1958.

White, R.W. <u>Lives in Progress</u>. Second Edition. New York: Holt, Rinehart and Winston, Inc., 1966.

CHAPTER V

INTERPERSONAL INTERDEPENDENCE:

A CONCLUSION

A major conclusion that has been reached a number of times, and in a number of ways throughout this treatise is that persons are interdependent. In this chapter, the critical nature of interpersonal interdependence will be explored from a transcendental, developmental, metaphysical, existential, therapeutic, and metatheoretical point of view.

A Transcendental Point of View

A transcendental deduction attempts to delimit those conditions that are indispensable for the explanation of any given phenomenon.

Kant (1929) deduced that a reference to a priori concepts was indispensable for the explanation of human knowledge as we experience it. In this treatise, it was deduced that a reference to a person's concept of person is indispensable for the explanation of human action. It was further deduced that interpersonal interaction is a prerequisite

for the emergence of a person's concept of person, and thus the self-consciousness that it brings with it. With regard to the emergence of the self or self-consciousness therefore, persons can be said to be interdependent from a transcendental point of view.

Other than logical argument, empirical evidence was offered in support of this transcendental viewpoint. The study cited was one done by Gallup (1977) in which it was found that isolate-reared chimpanzees, unlike normals, failed to show any sign of self-recognition when exposed to a mirror. When two isolate-reared chimps were given remedial social experience by being housed in the same cage, both showed signs of self-recognition, in contrast to a third, who was kept in isolation and who showed no sign of self-recognition. Gallup argues that these findings. lend support to the Cooley/Mead model of self-concept emergence; i.e., that a self-concept, or self-consciousness, is an interpersonal phenomenon, and as such, can only emerge with social interaction.

A Developmental Point of View

The emergence and/or maintenance of a social rule requires the co-operative participation of most, if not all, of the individuals involved. In this sense, each member of a social system is dependent on every other member for that system's maintenance (cf. the example of a baseball game). Thus, the larger a social system, the larger the radius of interdependence.

It has been argued that the self develops by way of the dual processes of "quantitative expansion" (with regard to the number of viewpoints that an individual is able to consider at any one time) and "qualitative upgrading" (with regard to the social rules that an individual presumes operative). Another way of putting this would be to say that the extension of one's concept of person expands — and in the process one's concept becomes more abstract — as an increasing number of viewpoints of others are seen to interlock to form ever larger social systems. From a developmental point of view, therefore, not only are persons interdependent for the possibility of evolving through each developmental step, but as well, as development proceeds, the radius of one's interpersonal dependence grows.

This expanding radius of interdependence became evident as development was traced through the three major milestones of social concept evolution. Thus, it became apparent that at the earliest level of development, social concept emergence requires interaction (at minimum) with only one significant other. At the next step of development, however, in order for the child to move from the "play" to the "game" stage, he must first be exposed to "team functioning." This requires the co-operative interaction of two or more individuals other than the child himself. At the very highest levels of social concept development, if autonomous/ethical interactions are to become manifest, this would require, in principle, the co-operative interaction of all persons insofar as they are persons. While this latter notion of "kingdom of

ends" (Kant; 1956, 1967), "cult of man" (Durkheim, 1951), or "man coming to recognize his species being" (Marx, 1967) is undoubtedly idealistic, the principle that underlies it is the same as for all social systems; namely that the emergence and/or maintenance of social rules -- whatever the degree of abstraction -- requires the cooperation of all those involved. Such is the nature of interpersonal interdependence, and such, no doubt, is the source of the profound "respect for persons" that individuals engaged in moral thought are purported to develop (Downie and Telfer, 1969; Peters, 1966; Harris, 1968).

A Metaphysical Point of View

A major conclusion of the present Concept of Person theory is that the actions of persons are free from the behavioral molding forces of the external environment, only to the extent that they are influenced by the imagined viewpoints of others. The theory argues, in other words, that the freedom of all persons like in their capacity to co-operate with one another. If one takes the term "metaphysical" in its literal sense -- meaning "beyond nature" -- it is in this sense that persons can be said to be interdependent from a metaphysical point of view.

Cooley argues the same position in his book Human Nature and the Social Order (1964). He says that since

it is only through . . . social development that mankind has emerged from animal bondage into that organic* freedom, wonderful though far from complete, that we now enjoy . . . it is . . . only common sense to say that we exercise our freedom through co-operation with others. (p. 50)

Of the oft cited philosophical problem concerning man's individual free will, Cooley says:

If you think of human life as a whole and of each individual as a member and not a fragment, as, in my opinion, you must if you base your thoughts on a direct study of society and not upon metaphysical or theological preconceptions, the question of whether the will is free or not, is seen to be meaningless . . . It is often necessary to consider the individual with reference to his opposition to other persons, or to prevailing tendencies, and in so doing it may be convenient to speak of him as separate from and antithetical to the life about him; but this separateness and opposition are incidental, like the right hand pulling against the left to break a string, and there seems to be no sufficient warrant for extending it into a general or philosophical proposition.

There may be some sense in which the question of the freedom of the will is still of interest; but it seems to me that the student of social relations may well pass it by as one of those scholastic controversies which are settled, if at all, not by being decided one way or the other, but by becoming obsolete. (p. 56)

An Existential Point of View

On the basis of the presupposition that "existence precedes essence,"

* An organic view of the relation between society and the individual "stresses both the unity of the whole and the peculiar value of the individual, explaining each by the other. . . . A well-developed individual can only exist in and through a well-developed whole, and vice versa" (Cooley, 1964, p. 36).

existential philosophers argue that man has the capacity to create his own essence. What existential philosophers mean by "essence" is something akin to "raison d'être." Thus, to argue that persons are existentially interdependent, is to argue that they are interdependent with regard to creating meaning in life.

Existential interdependence is the topic of Buber's books <u>I</u> and <u>Thou</u> (1958), <u>Between Man and Man</u> (1961), and <u>Knowledge of Man</u> (1965). <u>Buber</u> argues that neither man alone, nor man in the collective, can find meaning: it is only through participation in genuine interpersonal encounters that man can come to realize his essence.

Of modern individualism, Buber says (1961) that "to save himself from the despair with which his solitary state threatens him, man resorts to the expedient of glorifying it" (pp. 241-242). He says that "modern individualism has [thus] essentially an imaginary basis" and for that reason founders because "imagination is not capable of actually conquering the given situation" (p. 242).

Of modern collectivism, Buber (1961) says:

Man in a collective is not man with man. Here the person is not freed from his isolation, by communing with living beings which henceforth live with him; the "whole," with its claim on the wholeness of everyman, aims logically and successfully at reducing, neutralizing, devaluating and desecrating every bond with living beings. That tender surface of personal life is progressively deadened or desensitized. Man's

isolation is not overcome here, but overpowered and numbed. (p. 242)

In place of this "false alternative" of individualism versus collectivism, Buber offers a genuine third alternative -- "by 'genuine' being understood a point of view which cannot be reduced to one of the first two, and does not represent a mere compromise between them" (p. 244). In the following, the reader will note the similarity between what Buber calls the third alternative of the "in between," and what has here been referred to as the "leap toward uniqueness" -- the third and final milestone in social concept development. Buber (1961) says:

The fundamental fact of human existence is neither the individual as such nor the aggregate as such. Each, considered by itself is a mighty abstraction. The individual is a fact of existence in so far as he steps into a living relation with other individuals. The aggregate is a fact of existence in so far as it is built up of living units of relation. The fundamental fact of human existence is man with man. What is peculiarly characteristic of the human world is above all that something takes place between one being and another the like of which can be found nowhere in nature. Language is only a sign and a means for Man is made man by it It is rooted in one being turning to another as another, as this particular other being, in order to communicate with it in a sphere which is common to them but which reaches out beyond the sphere of each. . I call this sphere, which is established with the existence of man as man but which is conceptually still uncomprehended, the sphere of "between." being realized in very different degrees, it is a primal category of human reality. This is where the genuine third alternative must begin,

The view which establishes the concept "between" is to be acquired by no longer localizing the relation between human beings, as is customary, either within individual souls or in a general world which embraces and determines them, but in actual fact between them. (p. 244)

In his book <u>The Social Self</u> (1954), Pfuetze argues that there are striking and significant similarities between Buber's theoretical position and that of George Herbert Mead—two thinkers otherwise widely divergent and uncongenial in many respects (p. 9). Their major similarity lies in the fact that they both argue that man's essence is realized only through interpersonal interaction; their uncongeniality rests in their divergent starting points, viz: American, social behaviorism versus European existential, personalistic, theology.

What Pfuetz fails to note is the way Buber and Mead differ and in that sense masks the major point of each. Pfuetze does not point out that, unlike Mead, Buber is not making any claims about the logically necessary conditions for the existence of the self. Quite the contrary. In order to enter a dialogical "I-Thou" relationship -- i.e., in order to take up the role of another in Buber's sense -- the existence of an individual self is already presupposed*. This just is the gift that one brings to "the between" -- one's very self. While Buber indeed makes the claim that one can only find one's "real" self through dialogue, what he means by this, is that it is only through dialogue that a self finds meaning, i.e., its reason for being. From Buber's viewpoint, once

^{*} Not only is the individual self a prerequisite for the I-Thou relationship, but as well, a fundamental understanding of oneself, i.e., a meeting between I and I, may also be a prerequisite. Thus, Buber tends to agree with Carl Rogers when he says:" I guess I have the feeling that it is when the person has met himself in that sense, probably in a good many different aspects, that then and perhaps only then, is he really capable of meeting another in an I-Thou relationship" (The Knowledge of Man, 1965, p. 178).

man understands that the "essence of man which is special to him can be known only in the living relationship" (1961, p. 246), then "meaning is assured. The question about the meaning in life is no longer there.

Nothing can any longer be meaningless" (1958, p. 110).

Unlike Mead, whose concern is with the minimum conditions of human existence, Buber's concern is with the maximization of human potential. From Buber's point of view, the critical aspect of interpersonal interaction is the extent to which it gives meaning to life.

A Therapeutic Point of View

To the extent that psychiatric disorders are a form of developmental arrest or regression -- as some have argued (Guntrip, 1969; Arieti, 1974; Kernberg, 1976; Kohut, 1977; Mahler and Kaplan, 1977; etc.) and the data presented here suggest -- the present developmental model of self has important implications with regard to the treatment of those disorders. Since the model argues that development is a function of the quantity and quality of the interpersonal interactions in which an individual partakes, it follows that a necessary ingredient of successful treatment will be the establishment of a nurturing relationship between therapist and client. This supposition is in line with the Rogerian thesis (1961, p. 44) that in the treatment of psychological disorders, it is not so much the theoretical orientation of the therapist that is important, as it is the capacity of the therapist to enter into a

genuine relationship with his client. Of this aspect of therapy, Rogers says:

The more that the client perceives the therapist as real or genuine, as empathic, as having an unconditional regard for him, the more the client will move away from a static, fixed, unfeeling impersonal type of functioning, and the more he will move toward a way of functioning marked by a fluid, changing, acceptant experiencing of differentiated personal feelings. The consequence of this movement is an alteration in personality and behavior in the direction of psychic health and maturity and more realistic relationships to self, others, and the environment. (p. 66)

In a similar vein, Guntrip (1969) describes Fairbairn as saying that since "the patient cannot surrender his internal bad objects until the analyst has become a sufficiently good object to him" (p. 311), a critical element in therapy is the degree to which a therapist can be "human, natural, and real" (p. 312). Of training analysis, Guntrip quotes' Fairbairn as saying:

The reason, basically, for a training analysis, is not primarily to "learn a technique," but to make sufficient progress towards becoming a whole or integrated person, capable of effecting a real relationship through genuine care for and understanding of the patient enmeshed in his subjective difficulties. Only that could justify us in thinking that we have the right to offer to another human being a chance to find his own unity of true self-hood in and through his dealings with us. (p. 312)

The Guntrip/Fairbairnian approach is referred to as an "objectrelations" approach. It is founded on the assumption that human nature '
is based in a "libidinal drive toward forming good relationships"

(Guntrip, 1968, p. 19), and that the self only becomes a "person through meaningful relationships," which in optimal circumstances, are formed first with "mother, then the family, and finally, with the ever-enlarging world" (p. 243). With regard to psychological disorders, a major aim of the object-relations approach is to provide a "corrective experience" for an individual as far as his interpersonal encounters are concerned.

An object-relations approach can be seen in contrast to both a traditional Freudian approach and a behaviorist approach. A traditional Freudian approach is one that is based on the assumption that "the id, man's basic and unconscious nature, is primarily made up of instincts which would, if permitted expression, result in incest, murder and other crimes. The whole problem of therapy, as seen by this group, is how to hold these untamed forces in check in a wholesome and constructive manner, rather than in the costly fashion of the neurotic" (Rogers, 1961, p. 91).

A behaviorist approach is one that is derived from either the s-s or s-r model of learning theory. The whole problem of therapy, as seen by this group therefore, is how to modify maladaptive behavior through the manipulation of positive and negative reinforcements. Of this more "objective" approach to psychotherapy, Guntrip (1969) says:

Faced with such an enormous problem as mass mental ill-health in the community we can be grateful for any sympton-relieving treatment that can be proved to be helpful, whether behavior

therapy, drugs, ECT or any other kind; but psychotherapy accepts the responsibility* of working for something more fundamental; long-term stabilizing changes in the total personality. (p. 325)

With regard to the apparently superior "scientific base" of the behavioral approach, Guntrip (1969) says further that:

. . a great deal of psychiatry and behavior therapy today is an unrecognized attempt to make science take over our responsibilities for human living. At a time when philosophers of science are themselves expanding the concept of science, psychotherapy must disentangle itself from a false subordination to the orthodox scientific outlook of the last few centuries. The business of science is not to be a substitute for our human living as "persons," but to give us the tools with which to carry out our purposes: Science cannot take over, or provide any substitute for, the essential human activity of making personal relationships in which we can experience the reality of both ourselves and other people, and thus find meaning and value in living. Psychotherapy is a part of this essentially "human living" and its aims cannot be achieved by any impersonal material technique. Psychotherapy must use phychodynamic knowledge, which has its own objectivity and is the only truly "psychological science," as a tool in the service of human personality and its rights to be given personal relationships of a kind which will permit and "facilitate" (vide Winnicott) growth to maturity of personality. (p. 326)

A Metatheoretical Point of View

It was assumed at the outset, and shown to be true in the execution, that a formulation of an adequate model of human action would require

* It is also of note that psychotherapy is also accepting the responsibility of attempting to shorten the course of treatment so that it can be made available to an ever increasing number of clients (cf. Davanloo, 1978; Sifneos, 1979).

the combined insights of an interdisciplinary approach. To the extent that the model is seen to be adequate, therefore, it thereby supports the metatheoretical conclusion that persons qua theorists are interdependent. It argues that like personal development, theoretical development requires that theorists from different disciplines "consider the viewpoint of others."

a) Psychology/Sociology

In his article "Superego and the Theory of Social Systems" (1964a), Parsons argues, in particular, for the need for co-operation and communication between the two disciplines of psychology and sociology. With regard to their divergent viewpoints, he says:

Psychoanalysis, in common with other traditions of psychological thought, has naturally concentrated on the study of the personality of the individual as the focus of its frame of reference. Sociology, on the other hand, has equally naturally been primarily concerned with the patterning of the behavior of a plurality of individuals as constituting what, increasingly, we tend to call a social system. Because of historical differences of perspective and points of departure, the conceptual schemes arrived at from these two starting points have in general not been fully congruent with each other, and this fact has occasioned a good deal of misunderstandings. (p. 18)

With regard to the possibility of a common meeting ground, he says:

The essential starting point of an attempt to link these two bodies of theory is the analysis of certain fundamental features of the interaction of two or more persons, the process of

interaction itself being conceived as a system. Once the essentials of such an interactive system have been made clear, the implications of the analysis can be followed in both directions: the study of the structure and functioning of the personality as a system, in relation to other personalities; and the study of the functioning of the social system as a system. (p. 20)

D

Parsons goes on to suggest that this analysis of the "fundamental features of the interaction of two or more persons" has never been adequately carried out, precisely because this is an area of study that has hitherto "fallen between the two stools of psychology and sociology" (p. 20). He says:

On the one hand, Freud and his followers, by concentrating on the single personality, have failed to consider adequately the implications of the individual's interaction with other personalities to form a system. On the other hand, Durkheim and the other sociologists have failed, in their concentration on the social system as a system, to consider systematically the implications of the fact that it is the interaction of personalities which constitutes the social system with which they have been dealing, and that, therefore, adequate analysis of motivational process in such a system must reckon with the problems of personality. (p. 20)

Of othe field of "object-relations" that forms the corner-stone of the present developmental model of self, Parsons says (1964b):

... the field of "object-relations" (is) the most important area of articulation between psychoanalytic theory of the personality of the individual and the sociological theory of the structure and functioning of social systems. (p. 79)

throughout the course of personality development, identification, object-choice, and internalization are processes of relating the individual to and integrating him in the social system, and, through it, the culture. these processes are a relational matter, eventually technical: analysis has to be applied to both sets of relata, as well as to the relationship itself Had Freud lived long enough to enter more deeply into the technical analysis of the object-systems to which the individual becomes related, he would inevitably have had to become, in part, a sociologist, for the structure of these object-systems is'-- not merely is influenced by -- the structure of the society itself. Essentially, Freud's theory of object-relations is a theory of the relation of the individual personality to the social system. It is a primary meeting ground of the two disciplines of psychology and sociology.

b) Psychology/Psychology

Within the field of psychology itself, the study of human action has taken two quite different theoretical routes, viz: the "external" (Mahoney, 1977), "objective" (Guntrip, 1965), behaviorist, approach, versus the "internal," "subjective," cognitive/psychoanalytic, approach. Traditionally these two approaches have been presumed mutually exclusive. Recently however, a revolution for integration (Mahoney, 1977) has been under way. Not only are theorists now arguing the need for "complementarity" with respect to understanding human action (Bandura, 1974; Mahoney, 1977), but as well, a dramatic rise in eclecticism in the area of psychotherapy has recently been noted (Garfield and Kurtz, 1976).

The present developmental model of self argues strongly for the

need of such a detente. More specifically it argues that an understanding of the behavior of man qua animate being requires an appeal to learning theory, whereas an understanding of the behavior of man qua person requires an appeal to the cognitive/psychoanalytic approach.

With regard to the relative weight of these two approaches, the model argues that at lower levels of social concept development, an external approach will have greater explanatory power than an internal approach; but that at higher levels of social concept development, the reverse will be true. This "gradual shift" argument find interesting corroboration in the gradual "external - internal" shift that has been found to take place in the development of self-concepts in children.

Rosenberg (1979) summarizes the results of one such study in the following manner:

To summarize, when asked what the person who knows him best knows that others do not, the older child tends to answer in terms of a psychological interior — a world of general emotions, attitudes, wishes, and secrets — while the younger child is more likely to respond in terms of a social exterior — a world of behavior, objective facts, overt achievements, and manifested preferences. The younger child's view is turned outward, toward the overt and visible; the older child's view is turned inward, toward the private and invisible.

Self-concept development, then, would appear to follow an extremely interesting course. As the child grows older, he becomes less of a demographer, less of a behaviorist, more of a psychological clinician. Expressed in broadest terms, with increasing age, the child becomes less of a Skinnerian, more of a Freudian. (p. 202, emphasis Rosenberg's)

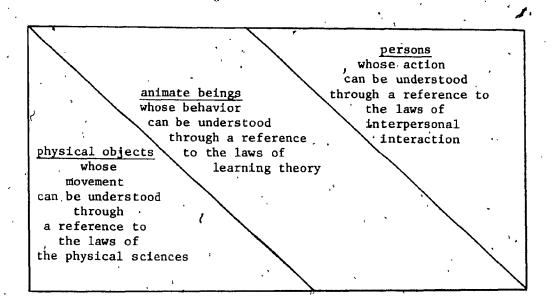
c) Philosophy/Psychology/Psychology

It has long been assumed in philosophy that metaphysical questions concerning the nature of the self have a critical bearing on a number of important issues such as: whether man is free or not; whether he is responsible for his own behavior or not; whether genuine moral thought and action are possible or not. For the most part, these questions are posed in precisely these dichotomous terms*.' Either human beings have selves, or minds, or are conscious in a way that renders them different in kind from other objects in the universe; or they do not.

Irrespective of the enormous tangles that are generated in these philosophical debates, the a priori assumption that the self is/an "all-or-nothing" phenomenon is rarely questioned. As we have seen, however, such a view of the self runs contrary to both developmental theory and research. We can speculate, therefore, that had philosophers been more atuned to the work of developmental theorists (e.g., Loevinger, 1976; Kohlberg, 1968, 1969), they might have more seriously considered the following maxim: what is important in the study of the self is not the examination of the impact and implications of the presence or absence of a self as such, but rather the examination of the impact and implications of the presence of a self that is more or less developed.

^{*} With the notable exception of Parfit who argues that personal identity is all-or-nothing in its logic, but a matter of degree in its nature (1971a, b).

Although developmental theory may have had little impact on philosophical thinking, this is not true of psychoanalysis or behavior-Given the mutual antagonism of these two approaches, however, philosophers have had difficulty incorporating the insights of either. It can be speculated that had there been less friction within the field of psychology itself, the philosophical picture of "persons" might have been quite different. Contrary to their traditional mode of disjunctive thinking, philosophers might have realized that if a contrast between persons and non-persons can be made at all, it can not be made with only one theoretical stroke. Rather than arguing, as Strawson does in his important paper "Persons" (1959), that the universe can be divided up into two basic particulars, namely physical objects and persons, a third option might have become evident. This third option is that the universe can be divided up into three basic particulars: physical objects, animate beings, and persons (see Figure 9).



Note: Rorty (1965) argues that an ontological question concerning whether entities are essentially the same or different (e.g., persons and physical objects) translates into an epistomological question about whether their apprehension requires a reference to the same or different theoretical frameworks. It is argued here that the explanation of (i) the movement of physical objects, (ii) the behavior of animate beings, and (iii) the actions of persons each requires a reference to a unique theoretical framework. According to Rorty's criterion, therefore, this tripartite epistomological distinction serves a ground for the ontological claim that each of these entities is essentially different from the other.

Figure 9. A tripartite distinction.

The importance of recognizing that persons are essentially different from animate beings as well as physical objects can not be over-emphasized. Contrasts not only sharpen our focus, they are a precondition of it. The notorious difficulty in elucidating the differentiating characteristics of persons, has been at least partially a consequence of the fact that too few philosophers have recognized the category of non-persons as When philosophers employ the "persons versus non-persons itself dyadic. contrast" as a technique for illuminating the former, they fail to recognize that the gulf is too wide and the void is filled with unacknowledged and different markers, viz. between persons and non-persons including animate and inanimate beings and between animate beings including persons as against inanimate objects and so on - all of which results in a great waste of energy and misunderstanding*. The fact that one and the same being, can provide a demonstration of human action. animate behavior, and inanimate movement, ought to have been warning

^{*} See for example, Passmore (1955) and Heath (1955) who argue that there is a necessary confusion built into the notion of "intention" and the role which intention plays in directing human action. On the one hand there is a behaviorist or "coherence" model which holds that one can impute intentions to an individual on the basis of observed coherence of action, and on the other hand there is the "mental antecedent" or "planning" model which holds that intentions must be conscious. After exploring the ramifications of each of these models, Passmore concludes that "each account has us saying what we don't want to say, or not saying what we do want to say." It seems to me, however, that. the problem of which of these two models to refer to when discussing the role of intention in behavior quite straight-forwardly dissipates with the recognition that it depends upon whether one is focusing on animate behavior -- human or otherwise -- which is intentional in the coherence sense, or on the "self-conscious" action of persons, which is intentional in the "conscious" sense.

enough for philosophers that the quality of the examination would be determined, to a large extent, by the quality of the initial categorization. Since animate behavior is so obviously different in kind from both inanimate movement and human action, it is an enigma why so many philosophers have systematically ignored this "bridging" phenomenon. Since the raising of questions always creates stakes, it may be that they perceived that the lesser evil of a lost debate, would be the epithet of determined but sophisticated molecules, rather than dumb and ordinary Skinner rats.

References

- Arieti, S. <u>Interpretation of Schizophrenia</u>. New York: Basic Books, Inc., 1974
- Bandura, A. "Behavior Therapy and the Models of Man," American Psychologist, (1974), vol. 29, pp. 859-569.
- Buber, M. I and Thou. New York: Charles Scribners' sons, 1958.
 - . Between Man and Man. London: The Fontana Library, 1961.
- The Knowledge of Man. M. Friedman (ed.). New York:
 Harper and Row, Pub., Inc., 1965.
- Cooley, C.H. Human Nature and the Social Order. New York: Schocken Books, 1964.
- Davanloo, H. (ed.). <u>Basic Principles and Techniques in Short-Term</u>
 Psychotherapy. New York: Spectrum Publications, Inc.,
 1978.
- Downie, R.S., and Telfer, E. Respect for Persons. London: George Allen and Unwin, 1969.
- Durkheim, E. <u>Suicide</u>, Translated by J.A. Spaulding and G. Simpson. Edited by G. Simpson. New York: Macmillan Co. Inc., The Free Press edition, 1951.
- Gallup, G.C. "Self-Recognition in Primates: A Comparative Approach to the Bidirectional Properties of Consciousness," American Psychologist, (May, 1977), vol. 32, pp. 329-338.
- Garfield, S.L., and Kurtz, P. "Clinical Psychologists in the 1970s," American Psychologist, (1976), vol. 31, pp. 1-9.
- Guntrip, H. Schizoid Phenomena, Object Relations and the Self. New York: International Universities Press, Inc., 1969.
- Harris, E.E. "Respect for Persons," in R.T.D. George (ed.), Ethics and Society. London: Macmillan Pub. Co., 1968.
- Heath, P.L. "Intentions," <u>Proceeding of the Aristotelian Society</u>, Supplementary Vol., (1955), vol. 29, pp. 147-164.
- Kant, I. Critique of Pure Reason. Translated by N Kemp Smith.

 London: Macmillan and Co. Ltd., 1929.

- Kant, I. Critique of Practical Reason. Translated by L.W. Beck. New York: Bobbs-Merrill Co. Inc., 1956.
- The Groundwork of the Metaphysics of Morals. Translated by H.J. Paton. New York: Harper and Row, Pub., 1967.
- Kernberg, O. Object Relations Theory and Clinical Psychoanalysis. New, York: Jason Aronson, 1976.
- Kohlberg, L. "Moral Development," in International Encyclopedia of the Social Sciences. London: Crowell, Collier, and Macmillan Inc., 1968, pp. 489-494.
- . "Stages and Sequences: 'The Cognitive-Developmental Approach to Socialization," in D. Gaslin (ed.), <u>Handbook of Socialization</u>
 Theory and Research. New York: Rand-McNally, 1969.
- Kohut, H. <u>The Restoration of the Self</u>. New York: International Universities Press, Inc., 1977.
- Loevinger, J. <u>Ego Development</u>. San Francisco: Jossey-Bass Inc. Pub., 1976.
- Mahler, M.S., and Kaplan, L. "Developmental Aspects in the Assessment of Narcissistic and So-Called Borderline Personalities," in P. Horticollis (ed.), Borderline Personality Disorders: The Concept, the Syndrome, the Patient. New York: International Universities Press, Inc., 1977.
- Mahoney, M.J. "Reflection on the Cognitive-Learning Trend in Psychotherapy,"

 <u>American Psychologist</u>, (1977), vol. 32, pp. 5-13.
- Marx, K. "On the Jewish Question," in L.D. Easton and K.H. Guddat (eds.),

 Writings of the Young Marx on Philosophy and Society. New York:
 Anchor Books. 1971, pp. 240-241.
- Parfit, D. "Personal Identity," Philosophical Review, (1971), vol. 80, pp. 1-27. (a)
- . "On the Importance of Self-Identity," Journal of Philosophy. (1971), vol. 68, pp. 683-690. (b)
- Parsons, T. "Superego and the Theory of Social Systems," in T. Parsons,

 Social Structure and Personality. London: Collier-Macmillan,

 Ltd., 1964. (a)
 - . "Social Structure and the Development of Personality: Freud's Contribution to the Integration of Psychology and Sociology," in T. Parsons, Social Structure and Personality. London: Collier-Macmillan, Ltd., 1964. (b)

- Passmore, J.A. "Intention," Aristotelian Society, Supplementary Vol., (1955), vol. 29, pp. 131-146.
- Peters, R.S. Ethics and Education. London: George Allen and Unwin Ltd., 1966.
- Pfuetze, P.E. The Social Self. New York: Bookman Associates, 1954.
- Rogers, C.R. On Becoming a Person: A Therapist's View of Psychotherapy.

 London: Constable and Co. Ltd., 1961.
- Rorty, R. "Mind-Body Identity, Privacy and Categories," Review of Metaphysics, (1965), vol. 19, pp. 24-54.
- Rosenberg, M. Conceiving the Self. New York: Basic Books, Inc. Pub., 1979.
- Sifneos, P.E. Short-Term Dynamic Psychotherapy: Evaluation and Techniques. New York: Plenum Pub. Co., 1979.
- Strawson, P.F. "Persons," in P. Strawson, <u>Individuals</u>. London: Methuen and Co. Ltd., 1959.

BIBLIOGRAPHY

Books

- Anscomb, G.E.M. Intention. Oxford: Basil Blackwell, 1972.
- Arieti, S. Interpretation of Schizophrenia. New York: Basic Books, Inc., 1274
- Armstrong, D.M. Belief and Knowledge. Cambridge: Cambridge University Press, 1973.
- Ayer, A.J. The Problem of Knowledge. Baltimore: Penguin Books, 1956.
- Bellak, L., Hurvich, M., and Geldiman, H.K. Ego Functions in Schizophrenics, Neurotics, and Normals: A Systematic Study of Conceptual, Diagnostic and Therapeutic Aspects. New York: John Wiley and Sons, 1973
- Bennett, J. Rationality: An Essay Towards Analysis. London: Routledge and Kegan Paul Ltd., 1964.
- Berger, P.L., and Luckman, T. <u>The Social Construction of Reality</u>. New York: Doubleday and Co., Inc., Anchor Books edition, 1967
- Bernstein, R.J. <u>Praxis and Action</u>. London: Gerald Duckworth & Co. Ltd., 1972
- Bindra, D. A Theory of Intelligent Behavior. New York: John Wiley and Sons, 1976
- Bion, W.R. Learning From Experience. London: Heinemann, 1962.
- Bolles, R.C. Learning Theory. New York: Holt, Rinehart and Winston, 1975.
- Borger, R., and Cioffi, F. (eds.) <u>Explanations in the Behavioral</u>
 Sciences: Confrontations. Cambridge: Cambridge University
 Press, 1970.
- Buber, M. I And Thou. New York: Chrales Scribner's Sons, 1958.
 - . Between Man and Man. London: The Fontana Library, 1961.

- Buber, M. The Knowledge of Man. M. Friedman (ed.). New York: Harper and Row, Pub. Inc., 1965.
- Cooley, C.H. Human Nature and the Social Order. New York: Schocken Books, 1964.
- Davanloo, H. (ed.) <u>Basic Principles and Techniques in Short-Term</u>
 Psychotherapy. New York: Spectrum Publications, Inc., 1978.
- Downie, R.S., and Telfer, E. <u>Respect for Persons</u>. London: George Allen and Unwin, 1969.
- Durkheim, E. The Rules of Sociological Method. Translated and edited by G.C. Catlin. New York: Collier-Macmillan, The Free Press edition, 1951.
- Suicide. Translated by J.A. Spoulding and G. Simpson.

 Edited-by-G.-Simpson. New York: Macmillan Co. Inc., The
 Free Press edition, 1951.
- The Elementary Forms of the Religious Life: A Study in Religious Sociology. Translated by J.W. Swain. New York: Macmillan Co., 1968. Second edition, London: George Allen and Unwin, 1976.
- Primitive Classification. Translated and edited by R. Needham. London: Cohen and West, 1963.
- New York: Macmillan Co. Inc., The Free Press edition, 1974.
- Erikson, E. Childhood and Society. St. Albans, Herts.: Triad/Paladin, 1977.
- . Identity and the Life Cycle. New York: W.W. Norton and Co., 1980.
- Fairbairn, W.R.D. An Object Relations Theory of Personality. New York: Basic Books, 1952.
- Festinger, L. A Theory of Cognitive Dissonance. Stanford, California:
 . University Press, 1962.
- Fodor, J.A. <u>Psychological Explanation: An Introduction to the Philosophy of Psychology.</u> New York: Random House, 1968.

Freud, S. The Interpretation of Dreams. London: George Allen and Unwin, 1954, An Outline of Psychoanalysis. Translated by J. Strachey. New York: W.W. Norton and Co. Inc., 1949. Beyond the Pleasure Principle. Translated by J. Strachey: New York: W.W. Norton and Co. Inc., 1961. Gardner, H. The Quest For Mind. London: Quartet Books Ltd., 1976. Gauthier, D. Practical Reasoning. London: Oxford University Press, 1963. Geach, P. Mental Acts: Their Content and Their Objects. London: Routledge and Kegan Paul Ltd., 1957. Gerth, H., and Mill, C.W. Character and Social Structure. New York: ' Harcourt, Brace and World, Inc., 1953. Giddens, A. Capitalism and Modern Social Theory: An Analysis of the Writings of Marx, Durkheim and Max Weber. Cambridge: Cambridge University Press, 1971. New Rules of Sociological Method: A Positive Critique of Interpretative Sociologies. London: Hutchinson and Co. Ltd. 1976. Ginsberg, H., and Opper, S. Piaget's Theory of Intellectual Development: Englewood Cliffs: Prentice Hall Inc., 1969. An Introduction. Glover, J. Responsibility. New York: Humanities Press, 1970. Goffman, E. The Presentation of Self in Everyday Life. New York: Doubleday Anchor Books, 1959. Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. New York: Doubleday Anchor Books, 1961. Behavior in Public Places: Notes on the Social Organization New York: Macmillan, The Free Press edition, of Gatherings. 1963. Encounters. Middlesex: Penguin Books Ltd., 1972. Good, P.K., and Branter, J.P. A Practical Guide to the MMPI: An Introduction for Psychologists, Physicians, Social Workers and other Professionals. Minneapolis: University of Minnesota Press, 1961.

- Gordon, D.C. Overcoming the Fear of Death. Baltimore: Penguin Books Inc., 1970.
- Grice, R. The Grounds of Moral Judgment. Cambridge: Cambridge University Press, 1967.
- Guntrip, H. Schizoid Phenomena, Object Relations and the Self. New York: International Universities Press, Inc., 1969.
- Hall, C.S. A Primer of Freudian Psychology. New York: The World Publishing Co., 1954.
- Hare, R.M. The Language of Morals. Oxford: The Clarendon Press, 1952.
- Freedom and Reason. Oxford: The Clarendon Press, 1963.
- Hathaway, S.R., and McKinley, J.C. <u>Booklet for the Minnesota Multiphasic</u>

 <u>Personality Inventory</u>. New York: The Psychological Corporation,
 1943.
- Helmstadter, G.C. Principles of Psychological Measurement. New York:
 Meredith Pub., Co., 1964.
- Hook, S. The Paradoxes of Freedom. Berkeley: University of California Press, 1970.
- Horney, K. Our Inner Conflicts: A Constructive Theory of Neurosis. New York: Norton, 1945.
- Neurosis and Human Growth: A Struggle Toward Self-Realization.

 New York: W.W. Norton and Co. Inc., 1950.
- Hudson, W.D. Modern Moral Philosophy. Garden City, New York: Anchor Books, 1970.
- Hunt, J. McV. <u>Intelligence and Experience</u>. New York: Ronald Press Co., 1961.
- Husserl, E. Formal and Transcendental Logic. Translated by D. Cairns.
 The Hague: Martinus Nijhoff, 1969.
- Israel, J. Alienation: From Marx to Modern Society. Boston: Allyn and Bacon, Inc., 1971.
- Jay, M. The Dialectical Imagination: A History of the Frankfurt School and the Institute of Social Research 1923-1950. Boston: Little Brown and Co., 1973.

- Kant, I. Critique of Pure Reason. Translated by N. Kemp-Smith. London:
 Macmillan and Co. Ltd., 1929.
- . Critique of Practical Reason. Translated by L.W. Beck. New York: Bobbs-Merrill Co. Inc., 1956.
 - Religion Within the Limits of Reason Alone. Translated by T.M. Greene and H.H. Hudson. New York: Harper and Row, Pub., 1960.
- . The Groundwork of the Metaphysics of Morals. Translated by H.J. Paton. New York: Harper and Row, Pub., 1967.
- Kaplan, L.J. Oneness and Separateness: From Infant to Individual. New York: Simon and Schuster, 1978.
- Kernberg, O.F. Object Relations Theory and Clinical Psychoanalysis. New York: Jason Aronson, 1976.
- Klein, M. The Psychoanalysis of Children. London: Hogarth Press, 1932.
- Kohut, H. The Restoration of the Self. New York: International Universities Press, Inc., 1977.
- Kuhn, T.S. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press, 1970.
- Laing, R.D. The Divided Self. Harmondsworth: Penguin Books, Ltd., 1965.
- . Self and Others. Harmondsworth: Penguin Books, Ltd., 1971.
- Lakatos, I., and Musgrave, A. (eds.) <u>Criticism and the Growth of Knowledge</u>.

 London: Cambridge University Press, 1970.
- Lemke, E., and Wiersma, W. <u>Principles of Psychological Measurement</u>. Chicago: Rand McNally College Pub. Co., 1976.
- Lewis, C.I. Mind and the World Order. New York: Dover Pub., 1956.
- Lewis, M., and Brook-Gunn, M. Social Cognition and the Acquisition of the Self. New York: Plenum Press, 1979.
- Lindsay, P., and Norman, D. <u>Human Information Processing</u>. New York:
 Academic Press, 1972.
- Locke, D. Myself and Others. Oxford: Clarendon Press, 1968.
- Loevinger, J. Ego Development. San Francisco: Jossey-Bass Inc. Pub., 1976.

- Loevinger, J., and Wessler, R. Measuring Ego Development I: Construction and Use of a Sentence Completion Test. San Francisco: Josey-Bass Inc. Pub., 1970.
- Lyons, D. Forms and Limits of Utilitarianism. Oxford: Clarendon Press, 1965.
- MacIntyre, A.C. The Unconscious: A Conceptual Analysis. London: Routledge and Kegan Paul Ltd., 1958.
- Macmurray, J. The Self as Agent. London: Faber and Faber Ltd., 1957.
- Mahler, M.S., Pine, F., and Bergman, A. The Psychological Birth of the Human Infant: Symbiosis and Individuation. London: Hutchinson and Co., Pub., Ltd., 1975.
- Malcolm, N. Dreaming. London: Routledge and Kegan Paul Ltd., 1959.
- Marcuse, H. One-Dimerional Man: Studies in the Ideology of Advanced Industrial Society. Boston: Beacon Press, 1964.
- Massaro, D. Experimental Psychology and Information Processing. Chicago: Rand McNally, 1975.
- Mattox, B. Getting It Together: Dilemmas for the Classroom. San Diego: Pennant Press, 1975.
- May, R. Psychology and the Human Dilemma. Princeton: D. Van. Nostrand Co. Inc., 1967.
- Mead, G.H. On Social Psychology. A. Strauss (ed.). Chicago: University of Chicago Press, 1934.
- Milner, P.M. Physiological Psychology. New York: Holt, Rinehart and Winston, Inc., 1970.
- Mischel, T. (ed.) The Self: Psychological and Philosophical Issues.
 Oxford: Basil Blackwell, 1977.
- Munroe, R.L. Schools of Psychoanalytic Thought: An Exposition, Critique and Attempt at Integration. New York: The Dryden Press Pub., 1955.
- Nagel, T. The Possibility of Altruism. Oxford: Clarendon Press, 1970.
- Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Bent, D.H.

 SPSS: Statistical Package for the Social Sciences. New York;

 McGraw-Hill, Inc., 1970.

- Ornstein, R.E. <u>The Psychology of Consciousness</u>. New York: Penguin Books 1972.
- Parsons, T. Social Structure and Personality. London: Collier-Macmillan Ltd., 1964.
- Pears, D. Questions in the Philosophy of Mind. London: Gerald Duckworth and Co. Ltd., 1975.
- Peters, R.S. The Concept of Motivation. London: Routledge and Kegan Paul Ltd., 1958.
- Ethics and Education. London: George Allen and Unwin Ltd.,
- Pfuetze, P.E., The Social Self. New York: Bookman Associates, 1954.
- Piaget, J. The Moral Judgment of the Child. New York: Free Press, 1932.
 - Six Psychological Studies. New York: Random House Inc., 1967.

人、外の衛衛衛見る軍等を強めけた

- . The Place of the Sciences of Man in the System of Sciences.

 New York: Harper and Row, Pub., 1970.
- _____. The Child and Reality. New York: Penguin Books, 1976.
- The Grasp of Consciousness. Cambridge: Harvard University
 Press, 1976.
- Ramsay, J.O. <u>Multiscale:</u> Four Programs for Multidimensional Scaling by the Method of Maximum Likelihood. Chicago: National Education Resources, Inc., 1978.
- Raphael, B. The Thinking Computer. San Francisco: W.H. Freeman and Co., 1976.
- Rawls, J. A Theory of Justice. Oxford: Clarendon Press, 1971.
- Riesman, D. The Lonely Crowd. New Haven: Yale University Press, 1950.
- Richards, D.A.J. A Theory of Reasons for Action. Oxford: Clarendon Press, 1971.
- Robinson, J.P., and Shaver, P.R. <u>Measures of Social Psychological Attitudes</u>.

 Ann Arbor: The Institute for Social Research, 1969, revised 1973.
- Rocher, G. <u>Talcott Parsons and American Sociology</u>. Translated by B. and S. Mennell. London: T. Nelson and Sons Ltd., 1974.

had digital top a such

- Rogers, S.R. On Becoming a Person: A Therapist's View of Psychotherapy. London: Constable and Co. Ltd., 1961.
- Rorty, A.O. (ed.) The Identities of Persons. Berkeley: University of California Press, 1976.
- Rosenberg, M. Conceiving the Self. New York: Basic Books, Inc. Pub., 1979.
- Runyon, R.P., and Harber, A. <u>Fundamentals of Behavioral Statistics</u>.

 Third edition. Reading, Mass.: Addison-Wesley Pub. Co.,
 1976.
- Ryle, G. The Concept of Mind. London: Hutchinson and Co. Ltd., 1949.
- Sartre, J.P. Being and Nothingness. Translated by H.E. Barnes. New York: Philosophical Library, 1956.
- Selye, H. The Stress of Life. New York: McGraw-Hill Book Co., 1956.
- Shaffer, H.R. The Growth of Sociability. Harmondsworth: Penguin Books Ltd., 1971.
- Shoemaker, S. <u>Self-Knowledge and Self-Identity</u>. Ithica: Cornell University Press, 1963.
- Sifneos, P.E. Short-Term Dynamic Psychotherapy: Evaluation and Techniques. New York: Plenum Pub. Co., 1979.
- Skinner, B.F. Beyond Freedom and Dignity. New York: Bantam Books Inc., 1971.
- Strawson, P.F. The Bounds of Sense. London: Methuen and Co. Ltd., 1966.
- Individuals. London: Methuen and Co. Ltd., 1959.
- Tart, C.T. States of Consciousness. New York: E.P. Dutton and Co., 1975.
- Altered States of Consciousness. New York: John Wiley and Sons, Inc., 1969.
- Taylor, C. Hegel. Cambridge: Cambridge University Press, 1975.
- Torgenson, W.S. Theory and Methods of Scaling. New York: John Wiley and Sons, Inc., 1958.
- Van Lawick-Goodall, J. <u>In the Shadow of Man</u>. London: William Collin's Sons and Co., Ltd., 1971.

- Weber, M. The Protestant Ethic and the Spirit of Capitalism. Translated by T. Parsons. New York: Charles Scriber's Sons, 1958.
- White, R.W. <u>Lives in Progress</u>. Second edition. New York: Holt, Rinehart and Winston, Inc., 1966.
- Winch, P. The Idea of a Social Science. London: Routledge and Kegan Paul Ltd., 1958.
- Wisdom, J. Philosophy and Psychoanalysis. Berkeley: University of California Press, 1969.
- Wittengenstein, L. <u>Tractatus Logico-Philosophicus</u>. Translated by D.F. Pears and B.F. McGuinness. London: Routledge and Kegan Paul Ltd., 1961.
- Philosophical Investigations. Translated by G.E.M.
 Anscombe. Oxford: Basil Blackwell, 1968.
- Wright, D. The Psychology of Moral Behavior. Harmondsworth: Penguin Books, 1971.

ARTICLES

- Alexander, P. "Cause and Cure in Psychotherapy," <u>Proceedings of the Aristotelian Society, Supplementary Vol.</u>, (1955), vol. 29, pp. 25-42.
- . "Wishes, Symptoms and Actions," <u>Proceedings of the Aristotelian Society, Supplementary Vol.</u>, (1974), vol. <u>58</u>, pp. 119-134.
- Amsterdam, B. "Mirror Self-Image Reactions Before Two," <u>Developmental</u>
 <u>Psychology</u>, (1972), vol. <u>5</u>, pp. 297-305.
- Anscombe, G.E.M. "Modern Moral Philosophy," in W.D. Hudson (ed.), The Is-Ought Question. London: Macmillan and Co. Ltd., 1969.
- Anthony, E.J. "The Significance of Jean Piaget for Child Psychiatry,"

 <u>British Journal of Medical Psychology</u>, (1956), vol. 29, pp.

 20-34.
- Armstrong, D.M. "The Headless Woman Illusion and the Defence of Materialism," Analysis, (1968), vol. 29, pp. 48-49.
- "Dispositions are Causes," <u>Analysis</u>, (1967-70), vol. 30, pp. 23-26.
- Bandura, A. "Behavior Therapy and the Models of Man," American Psychologist, (1974), vol. 29, pp. 859-869.
- Bedford, E. "Emotions," in V.C. Chappell (ed.), The Philosophy of Mind. Englewood Cliffs: Prentice-Hall, Inc., 1962.
- Reinforcement and Self-Recognition in the Baboon," in

 Contemporary Primatology: Proceedings of the Fifth

 International Congress of Primatology. Basil: Karger, 1975
- Berofsky, B. "Determinism and the Concept of a Person," <u>Journal of Philosophy</u>, (1963), vol. <u>60</u>, pp. 685-700.
- Bindra, D., and Campbell, J.F. "Motivational Effects of Rewarding Intracranial Stimulation," <u>Nature</u>, (July, 1967), vol. <u>215</u>, pp. 375-376.
- Bindra, D. "A Unified Account of Classical Conditioning and Operant Training," in A.H. Black and W.F. Prokasy (eds.), Classical Conditioning II: Current Research and Theory. New York:

 Appleton-Century-Crofts, 1972, pp. 453-481.

- Bindra, D. "A Motivational View of Learning, Performance, and Behavior Modification," <u>Psychological Review</u>, (1974), vol. <u>81</u>, pp. 199-213.
- "How Adaptive Behavior is Produced: A Perceptual-Motivational Alternative to Response-Reinforcement," The Behavioral and Brain Sciences, (1978), vol. 1, pp. 41-91.
- Blatt, M., and Kohlberg, L. "The Effects of Classroom Discussion on the Development of Moral Judgment," in L. Kohlberg and E. Turiel (eds.), Recent Research in Moral Development. New York: Holt, Rinehart and Winston, 1974.
- Boverman, I.K., Boverman, D.M., Clarkson, F.E., Rosencrantz, P.S., and Vogel; S.R. "Sex Role Steroetypes and Clinical Judgments of Mental Health," <u>Journal of Consulting and Clinical Psychology</u>, (1970), vol. 34, pp. 1-7.
- Bower, E. "Mythologies, Realities and Possibilities in Primary Prevention," in G. Albee and J. Joffee (eds.), Primary Prevention of Psychopathology. New Hampshire: The University Press of New England, 1977.
- Bower, G.H. "Analysis of a Mnemonic Device," American Scientist, (1970), vol. 58, pp. 496-510.
- Brennan, A. "Persons and Their Brains," Analysis, (1969-70), vol. 30, pp. 27-31.
- Brigham, J.C. "Ethnic Stereotypes," Psychological Bulletin, (1971), pp. 15-38.
- Bruner, J.S. "Ontogenesis of Speech Acts," <u>Journal of Child Language</u>, (1974), vol. <u>2</u>, pp. 1-19.
- Bunge, M. "Emergence and the Mind," Neuroscience, (1977), vol. 2, pp.
- Burnstein, N. "Strawson on the Concept of a Person," Mind, (1971), vol. 80, pp. 449-552.
- Cabanac, M. "Physiological Role of Pleasure," <u>Science</u>, (1971), vol. <u>173</u>, pp. 1103-1107.
- Cameron, N. "Experimental Analysis of Schizophrenic Thinking," in Language and Thought in Schizophrenia. J.S. Kasanin (ed.). New York: W.W. Norton and Co. Inc., 1964, pp. 50-62.
- Canfield, J.V., and Gustavson, D.F. "Self-Deception," Analysis, (1962-63), vol. 23, pp. 32-36.

- Cargile, J. "On Having Reasons," Analysis, (1966), vol. 26, p. 189.
- Carlson, R. "Stability and Change in the Adolescent's Self Image,"
 Child Development, (1965), vol. 36, pp. 659-666.
- Carmon, A., and Nachson, I. "Effect of Unilateral Brain Damage on Perception of Temporal Order," <u>Cortex</u>, (1971), vol. <u>7</u>, pp. 410-418.
- Carr, A.T. "Compulsive Neurosis: A Review of the Literature,"

 Psychological Bulletin, (1974), vol. 81, no. 5, pp. 311-318.
- Chandler, H.S. "Wiggins on Identity," Analysis, (1969), vol. 29, pp. 173-174.
- Chandler, M.J. "Egocentrism in Normal and Pathological Childhood Development," in F.J. Marks, W.W. Hartup and J. de Wit, Determinants of Behavioral Development. New York:

 Academic Press, 1972, pp. 569-576.
- "Egocentrism and Antisocial Behavior: The Assessment and Training of Social Perspective-Taking Skills,"

 <u>Developmental Psychology</u>, (1973), vol. 9, pp. 326-332.
- Chesno, F.A., and Kilmann, P.R. "Effects of Stimulation Intensity on Sociopathic Avoidance Learning," <u>Journal of Abnormal Psychology</u>, (1975), vol. 84, no. 2, pp. 144-150.
- Cioffi, F. "Wishes, Symptoms and Actions," <u>Proceedings of the Aristotelian Society</u>, Supplementary Vol., (1974), vol. <u>48</u>, pp. 97-119.
- Clark, H.H. "Linguistic Processes in Deductive Reasoning," <u>Psychological</u> Review, (1969), vol. <u>76</u>, no. <u>4</u>, pp. 387-404.
- Constantinople, A. "An Eriksonian Measure of Personality Development in College Students," <u>Developmental Psychology</u>, (1969), vol. <u>7</u>, pp. 357-372.
- Cowey, A., and Weiskrantz, L. "Demonstration of Cross-Modal Matching in Rhesus Monkeys, Macara Mulatta," Neuropsychologia, (1975), vol. 13, pp. 117-120.
- Cowley, F. "Identity of a Person and His Body," <u>Journal of Philosophy</u>, (1971), vol. <u>68</u>, pp. 678-683.
- Craik, F.I.M., and Lockhart, R.S. "Level of Processing: a Framework for Memory Research," <u>Journal of Verbal Learning and Verbal</u> Behavior, (1972), vol. 2, pp. 671-684.

- Daveny, T.F. "Intentions and Causes," Analysis, (1966), vol. 27, pp. 23-28.
- Davenport, R.K. "Intermodal Equivalence of Stimuli in Apes," Science, (1966), pp. 279-280.
- Davidson, D. "Actions, Reasons and Causes," <u>Journal of Philosophy</u>, (1963), vol. <u>60</u>, pp. 685-700, and reprinted in M. Brand (ed.), <u>The Nature of Human Action</u>. Illinois: Scott, Foresman and Co., 1970, pp. 67-79.
- "Causal Relations," <u>Journal of Philosophy</u>, (1967), vol. <u>67</u>, pp. 691-703.
 - "How Is Weakness Of Will Possible?," in J. Feinberg (ed.),

 Moral Concepts. Oxford: Oxford University Press, 1969.
- "The Individuation of Events," in N. Rescher (ed.), Essays in Honor of Carl G. Hempel. Dordrect, Holland: D. Reidal Pub. Co., 1969, pp. 216-234.
- "Mental Events," in L. Foster and J.W. Swanson (eds.),

 Experience and Theory. London: Gerald Duckworth and Co. Ltd.,
 1970, pp. 79-101.
- "Agency," in R. Binkley, R. Bronaugh, and A. Marras (eds.),

 Agent, Action and Reason. Oxford: Basil Blackwell, 1971, pp.
 3-25.
- "Psychology as Philosophy," in J. Glover (ed.), The Philosophy of Mind. Oxford: Oxford University Press, 1976, pp. 101-110.
- Davies, J.D., and Levine, M.W. "A Model for the Control of Ingestion,"

 <u>Psychological Review</u>, (1977), vol. <u>84</u>, pp. 379-412.
- Dennis, M., and Kohn, B. "Comprehension of Syntax in Infantile Hemiplegia after Cerebral Hemidecortication: Left Hemisphere Superiority,"

 <u>Brain and Language</u>, (1975), vol. 2, pp. 472-482.
- Dennis, M., and Whitaker, H.A. "Language Acquisition Following Hemidecortime cation: Linguistic Superiority of the Left Over the Right Hemisphere," Brain and Language, (1976), vol. 3, pp. 404-433.
- Deutch, J.A. "The Structural Basis of Behavior," in J. Glover (ed.), The Philosophy of Mind. Oxford: Oxford University Press, (1976), pp. 69-72.
- Dickinson, A., and Mackintosh, N.J. "Classical Conditioning in Animals,"
 Annual Review of Psychology, (1978), vol. 29, pp. 587-612.

- Dodwell, P.C. "Children's Understanding of Spatial Concepts," <u>Canadian</u> <u>Journal of Psychology</u>, (1963), vol. 17, pp. 141-161.
- Donnellan, K.S. "Reasons and Causes," in P. Edwards (ed.), <u>The Encyclopedia of Philosophy</u>. New York: Macmillan Pub. Co. Inc., 1967.
- Efron, R. "The Effect of Handedness on the Perception of Simultaneity and Temporal Order," Brain, (1963), vol. 86, pp. 261-284.
- Ehrlich, H.J., and Rinehart, J.W. "A Brief Report on the Methodology of Stereotype Research," Social Forces, (1965), vol. 43, pp. 564-575.
- Elkind, D. "Cognitive Development and Phychopathology: Observation and Ego Defence," in E. Schopler and R.J. Reichler (eds.),

 Psychopathology and Child Development. New York: Plenum Press, 1976, pp. 167-183.
- Ellis, A.J. "Causes and Objects of Emotions," <u>Analysis</u>, (1969-70), vol. 30, pp. 201-205.
- Filbey, R.A., and Gazzaniga, M.S. "Splitting the Normal Brain With Reaction Time," Psychonomic Science, (1968), vol. 17, pp. 335-336.
- Fodor, J. "Troubles About Action," Synthese, (1970), vol. 21, pp. 298-319.
- Foot, P. "Goodness and Choice," in W.D. Hudson (ed.), <u>The Is-Ought</u>

 <u>Question</u>. London: Macmillan and Co. Ltd., 1969.
- "Reasons for Action and Desires," <u>Proceedings of the Aristotelian Society</u>, <u>Supplementary Vol.</u>, (1972), vol. 46, pp. 203-210.
- . "Morality as a System of Hypothetical Imperatives," Philosophical Review, (1972), vol. 81, pp. 305-316.
- Forrest, T. "P-Predicates," in A. Stroll (ed.), Epistemology: New Essays
 in the Theory of Knowledge. San Diego: University of California,
 1967.
- Fough, H.G. "A Sociological Theory of Psychopathy," American Journal of Sociology, (1948), vol. 53, pp. 359-366.
- Fouriezos, G., and Wise, R.A. "Pimozide induced extinction of Intracranial self-stimulation: response patterns rule out motor or performance deficits," <u>Brain Research</u>, (1976), vol. <u>103</u>, pp. 377-380.
- Fouriezos, G., Hansson, P., and Wise, R.A. "Neuroleptic-Induced Attenuation of Brain Stimulation Reward in Rats," <u>Journal of Comparative and Physiological Psychology</u>, (1978), vol. 92, no. 4, pp. 661-671.

- Freed, R.B., and Fodor, J.A. "Pains, Puns, Persons and Pronouns,"
 Analysis, (1961-62), vol. 22, pp. 6-9.
- Friedman, J.L., and Luftus, E.F. "Retrieval of Words from Long-Term Memory," <u>Journal of Verbal Learning and Verbal Behavior</u>, (1971), vol. 10, pp. 107-115.
- Gadamer, H.G. "On the Solution and Function of Hermeneutical Reflection,"

 Continuum, Spring and Summer, (1970), vol. 8, nos. 1 and 2,

 pp. 76-95.
- Galin, D., and Ornstein, R. "Lateral Specialization of Cognitive, Mode: An EEG Study," <u>Psychophysiology</u>, (1972).
- Gallup, G.C. "Self-Recognition in Primates: A Comparative Approach to the Bidirectional Properties of Consciousness," <u>American Psychologist</u>, (May, 1977), vol. 32, pp. 329-338.
- Gardner, R.A., and Gardner, B.T. "Teaching Sign Language to a Chimpanzee," Science, (1969), vol. 165, pp. 664-672.
- Garfield, S.L., and Kurtz, P. "Clinical Psychologists in the 1970s,"

 American Psychologist, (1976), vol. 31, pp. 1-9.
- Gazzaniga, M., and Hillyard, S. "Language and Speech Capacity of the Right Hemisphere," <u>Neuropsychologia</u>, (1971) vol. <u>9</u>, pp. 273-280.
- Geach, P.T. "Ascriptivism," Philosophical Review, (1960), vol. 69, pp. 221-225, and reprinted in M. Brand, The Nature of Human Action. Illinois: Scott, Foresman and Co., 1970.
- Geertz, C. "Ritual and Social Change: A Javanese Example," American Anthropologist, (1957), vol. 59, pp. 32-54.
- Gibbs, B. "Putnam on Brains and Behavior," Analysis, (1969-70), vol. 30, pp. 53-55.
- Glazer, H.I., and Weiss, J.M. "Long-Term Interference Effect: An Alternative to 'Learned Helplessness'," Journal of Experimental Psychology, (1976), vol. 2, no. 3, pp. 202-213.
- Glickman, S.E., and Schiff, B.B. "A Biological Theory of Reinforcement,"

 Psychological Review, (1967), vol. 74, no. 2, pp. 81-103.
- Goldberg, B. "Can a Desire Be a Cause?," Analysis, (1964), vol. 25, p. 70.
- Goldstick, D. "Refutation of 'Ethical Egoism'," Analysis, (1973), vol. 34, pp. 38-39.

- Goldston, S.E. "Defining Primary Prevention," in G. Albee and J. Joffee (eds.), <u>Primary Prevention of Psychopathology</u>. New Hampshire: The University Press of New England, 1977.
- Gordon, L.M. "The Range of Application of 'Voluntary', 'Not Voluntary' and 'Involuntary'," <u>Analysis</u>, (1966), vol. <u>26</u>, pp. 149-152.
- Green, O.H., Intentions and Speech Acts, Analysis, (1969), vol. 29, pp. 109-112.
- Grice, P. "Meaning," <u>Philosophical Review</u>, (1957), pp. 377-388, and reprinted in P.F. Strawson (ed.), <u>Philosophical Logic</u>.
 Oxford: Oxford University Press, 1967.
- Gunderson, K. "Cybernetics," Encyclopedia of Philosophy, P. Edwards (ed.).
 London: Collier-Macmillan, 1972.
- Gustafson, D.F. "Momentary Intentions," Mind, (1968), vol. 77, pp. 1-13.
- _____. "On Unconscious Intentions," Philosophy, (1973), vol. 48, pp. 178-182.
- "On Doubting One's Intention," <u>Mind</u>, (1974), vol. <u>83</u>, pp. 114-115.
- Hamblin, C.L. "You And I," Analysis, (1972), vol. 33, pp. 1-4.
- Hamlyn, D.W. "Self-Deception," <u>Proceedings of the Aristotelian Society</u>, Supplementary Vol., (1971), vol. 45, pp. 45-60.
- "Unconscious Intentions," Philosophy, (1971), vol. 46, pp. 21-22.
- Hampshire, S. "Feeling and Expression," in J. Glover (ed.), The Philosophy of Mind. Oxford: Oxford University Press, 1976, pp. 73-83.
- Harris, E.E. "Respect for Persons," in R.T.D. George (ed.), Ethics and Society. London: Macmillan Pub. Co., 1968.
- Hauser, S.T. "Loevinger's Model and Measure of Ego Development: A Critical Review," <u>Psychological Bulletin</u>, (1976), vol. <u>83</u>, no. <u>5</u>, pp. 928-955.
- Haviland, S.E., and Clark, H.H. "What's New? Acquiring New Information as a Process in Comprehension," <u>Journal of Verbal Learning and Verbal Behavior</u>, (1974), vol. <u>13</u>, pp. 512-521.
- Heath, P.L. "Intentions," <u>Proceedings of the Aristotelian Society</u>, Supplementary Vol., (1955), vol. 29, pp. 147-164.

- Hebb, D.O. "Science and the World of Imagination," Canadian Psychological Review, (Jan., 1975), vol. 16, no. 1, pp. 4-11.
- "On the Nature of Fear," <u>Psychological Review</u>, (1953), vol. <u>53</u>, pp. 259-276.
- Hersh, H.M., and Caramaza, A. "A Fuzzy Set Approach to Modifiers and Vagueness in Natural Language," <u>Journal of Experimental Psychology</u>, (1976), vol. 105, no. 3, pp. 254-276.
- Hilgard, E.R. "Human Motives and the Concept of the Self," American Psychologist, (1949), vol. 4, pp. 379-387.
- Hintz, H.W. "Whitehead's Conception of the Organism and the Mind-Body Problem," in S. Hook (ed.), <u>Dimensions of Mind</u>. New York: New York University Press, 1960.
- Hoebel, B.G. "Brain Reward and Aversive Systems on the Control of Feeding and Sexual Behavior," Nebraska Symposium on Motivation, (1974), pp. 49-112.
- Hogan, J.A. "How Young Chicks Learn to Recognize Food," in R.A. Hinde and J. Stevenson-Hinde (eds.), Constraints and Learning: Limitations and Predispositions. London: Academic Press, 1973.

- Iseminger, G. "Meaning Criteria and P-Predicates," Analysis, (1963), vol. 24, pp. 11-18.
- Jacobs, H.L., and Sharma, K.N. "Tastes Versus Calories: Sensory and Metabolic Signals in the Control of Food Intake," <u>Annals of the New York Academy of Sciences</u>, (1969), vol. 157, pp. 1084-1125.
- Jacoby, L.L. "The Role of Mental Contiguity in Memory: Registration and Retrieval Effects," <u>Journal of Verbal Learning and Verbal Behavior</u>, (1974), vol. 13, pp. 483-496.
- James, W. "The Stream of Consciousness," in R.E. Ornstein (ed.), <u>The Nature of Human Consciousness: A Book of Readings</u>. San Francisco: W.H. Freeman and Co., 1973, pp. 153-166.
- Jenkins, J.J. "Remember That Old Theory of Memory? Well Forget It!,"

 American Psychologist, (Nov., 1974), pp. 785-795.
- Kent, E., and Grossman, S.P. "Evidence For a Conflict Interpretation of Anomolous Effects of Rewarding Stimulation," <u>Journal of Physiology</u>, (1969), vol. <u>69</u>, pp. 381-390.
- Kernberg, O. "Borderline Personality Organization," <u>Journal of the American</u>
 <u>Psychoanalytic Association</u>, (1967), vol. <u>15</u>, pp. 641-685.

- Kessler, M., and Albee, G. "Primary Prevention," in P. Mussen and M. Rosenburg (eds.), Annual Review of Psychology, vol. 26. Palo Alto" Annual Reviews, 1975.
- Kimura, D. "Left-Right Difference in Perception of Melodies," Quarterly Journal of Experimental Psychology, (1964), vol. 16, pp. 355-358.
- Kirkegaard-Sorenson, L., and Mednick, S.A. "Registered Criminality in Families With Children at High Risk for Schizophrenia," Journal of Abnormal Psychology, (1975), vol. 84, no. 3, pp. 197-204.
- Kochansky, G.E. "Risk Taking and Hedonic Mood Stimulation," <u>Journal of Abnormal Psychology</u>, (1973), vol. 81, pp. 80-86.
- Kohlberg, L., Yaeger, J., and Hjertholm, E. "The Development of Private Speech: Four Studies and a Review," <u>Child Development</u>, (1968), vol. 39, pp. 694-736.
- Kohlberg, L. "Moral Development," in <u>International Encyclopedia of the Social Sciences</u>. London: <u>Crowell, Collier and Macmillan Inc., 1968, pp. 489-494</u>.
- . "Stages and Sequences: The Cognitive-Developmental Approachs to Socialization," in D. Gaslin (ed.), Handbook of Socialization Theory and Research. New York: Rand-McNally, 1969.
- ______. "Stages and Aging in Moral Development Some Speculations,"

 The Gerontologist, (Winter, 1973), vol. 13, no. 4.
- Korner, S. "Rational Choice," <u>Proceedings of the Aristotelian Society</u>, Supplementary Vol., (1973), pp. 1-17.
- Kruskal, J.B. "Multidimensional Scaling by Optimizing Goodness of Fit to a Nonmetric Hypothesis," <u>Psychometrika</u>, (1964), vol. <u>29</u>, pp. 1-27. (a)
- Psychometrika, (1964), vol. 29, pp. 115-129. (b)
- Lambert, H. "Comparison of Cognitive Developmental Theories of Ego and Moral Development," Proceedings of the 80th Convention of the American Psychological Association, (1972), vol. 7, pp. 115-116.

 (Summary)
- Landesman, C. "Consciousness," The Encyclopedia of Philosophy. P. Edwards (ed.). London: Macmillan and Co. Ltd., 1967, vol. 2, 191-195.
- Langer, E.J., and Abelson, R.P. "A Patient by any Other Name . . . Clinical Group Difference in Labelling Bias," Journal of Consulting and Clinical Psychology, (1974), vol. 42, pp. 4-9.

- Lantz, D., and Stefflre, V. "Language and Cognition Revisited," <u>Journal of Abnormal and Social Psychology</u>, (1964), vol. <u>69</u>, pp. 172-181.
- Levison, A.B. "Explaining Human Actions," Chapter 5, in A.B. Levison,

 Knowledge and Society: An Introduction to the Philosophy of the

 Social Sciences. New York: The Bobbs-Merrill Co., Inc., Pub.,

 1974, pp. 101-120.
- "Scientific Psychology and Intentionality," Chapter 7, in A.B. Levison, Knowledge and Society: An Introduction to the Philosophy of the Social Sciences. New York: The Bobs-Merrill Co., Inc., Pub., 1974, pp. 140-158.
- Levy-Agresti, J., and Sperry, R.W. "Differential Perception Capacities in Major and Minor Hemispheres," Proceedings of the National Academy of Science, (1968), vol. 61, p. 1151.
- Levy, J. "Possible Basis for the Evolution of Lateral Specialization of the Human Brain," <u>Nature</u>, (1969), vol. <u>224</u>, p. 614.
- Locke, D. "The Privacy of Pains," Analysis, (1964), vol. 64, pp. 147-152.
- "Reasons, Wants and Gauses," American Philosophical Quarterly, (1974), vol. 11, pp. 169-179.
- Lovaas, O.I., Koegel, R., Simmons, J., and Long, J.S. "Some Generalization and Follow-up Measures on Autistic Children in Behavior Therapy,"

 Journal of Applied Behavior Analysis, (1973), vol. 6, pp. 131-166.
- Lukes, S. '"Relativism: Cognitive + Moral," Proceedings of the Aristotelian Society, Supplementary Vol., (1974), vol. 48, pp. 164-187.
- MacDonnell, M., and Flynn, J.P. "Sensory Control of Hypothalamic Attack,"
 Animal Behavior, (1966), vol. 14, pp. 399-405.
- MacIntyre, A. "Cause and Cure in Psychotherapy," <u>Proceedings of the Aristotelian Society, Supplementary Vol.</u>, (1955), vol. 29, pp. 43-58.
- Mahler, M.S., and Kaplan, L. "Developmental Aspects in the Assessment of Narcissistic and So-Called Borderline Personalities," in P. Horticollis (ed.), Borderline Personality Disorders: The Concept, the Syndrome, the Patient. New York: International Universities Press, Inc., 1977.
- Mahoney, M.J. "Reflection on the Cognitive-Learning Trend in Psychotherapy," American Psychologist, (1977), vol. 32, pp. 5-13.

- Malcolm, N. "Wittgenstein's Philosophical Investigations," in V.C.
 Chappell (ed.), The Philosophy of Mind. Englewood Cliffs:
 Prentice-Hall Inc., 1962.
 - "Knowledge of Other Minds," in V.C. Chappell (ed.), The
 Philosophy of Mind. Englewood Cliffs: Prentice-Hall Inc.,
 1962.
- Mandler, G. "From Association to Structure," <u>Psychological Review</u>, (1962), vol. <u>69</u>, no. <u>5</u>, pp. 415-427.
- Mannison, D.S. "On The Alleged Ambiguity of Strawson's P-Predicates," Analysis, (1962-63), vol. 23, pp. 3-5.
- _____. "Doing Something on Purpose But Not Intentionally,"
 Analysis, (1969-70), vol. 30, pp. 49-52.
- Marshall, L.C. "The Self-Concept: Fact or Artifact?," <u>Psychological</u>
 Bulletin, (1961), vol. 58, pp. 325-336.
- Martin, J.L. "Has Strawson Refuted Scepticism about Other Minds?,"
 Philosophy, (1974), vol. 49, pp. 420-428.
- Marx, K. "On the Jewish Question," in L.D. Easton and K.H. Guddat (eds.),
 Writings of the Young Marx on Philosophy and Society. New
 York: Anchor Books, 1971, pp. 240-241.
- Mason, W.A. "Environmental Model and Mental Modes: Representational Processes in the Great Apes and Man," American Psychology, (April, 1976), pp. 284-294.
- Mednick, S.A., and McNeil, T.F. "Current Methodology in Research on the Etiology of Schizophrenia: Serious Difficulties which Suggest the Use of the High-Risk-Group Method," Psychological Bulletin, (1968), vol. 70, pp. 681-693.
- Meikle, S. "Reasons for Action," <u>Philosophical Quarterly</u>, (1974), vol. 24, pp. 52-66.
- Melden, A.I. "Mere Behavior," in A.I. Melden, Free Action. New York:
 Humanities Press Inc., 1961, pp. 56-65. Reprinted in Myles
 Brand, the Nature of Human Action. Illinois: Scott, Foresman
 and Co., 1970, pp. 22-26.
 - "Action Equals Bodily Movement Plus Motive," in A.I. Melden, Free Action. New York: Humanities Press Inc., 1961, pp. 73-82. Reprinted M. Brand, The Nature of Human Action. Illinois: Scott, Foresman and Co., 1970, pp. 27-31.

- Melden, A.I. "Philosophy and the Understanding of Human Fact," in A. Stroll, <u>Epitemology: New Essays in the Theory of Knowledge</u>.

 San Diego: University of California, 1967.
- Menzel, E.W. "Chimpanzee Spatial Memory Organization," <u>Science</u>, (1973), vol. <u>182</u>, no. <u>4115</u>, pp. 943-945.
- Milligan, D.E. "Reasons As Explanations," Mind, (1974), vol. 83, pp. 180-193.
- Moore, B.R. "The Role of Directed Pavlovian Reactions in Simple Instrumental Learning in the Pigeon," in R.A. Hinde and J. Stevenson-Hinde (eds.), Constraints on Learning: Limitations and Predispositions. London: Academic Press, 1973.
- Montifiore, A. "Self-Reality, Self-Respect and Respect for Others,"

 <u>Mid-west Studies in Philosophy</u>, (1978), vol. 3, pp. 19 208.
- Morik, H. "Intentionality, Intensionality and the Psychological," Analysis (1971-72), vol. 32, pp. 39-44.
- Murphy, J.G. "Rationality and the Fear of Death," Monist, (1976), vol. 59, no. 2, p. 187.
- Murphy, J.M. "Psychiatric Labelling in Cross-Cultural Perspective," Science, (1976), vol. 191, pp. 1019-1028.
- Nagel, T. "Brain Bisection and the Unity of Consciousness," <u>Synthese</u>, (May, 1971).
- Nebes, R. "Superiority of the Minor Hemisphere in Commissurotomized Man for the Perceptional Part-Whole Relation," <u>Cortex</u>, (1971), vol. 7, pp. 333-349.
- "Dominance of the Minor Hemisphere in Commissurotomized Man on a Test of Figural Unification," <u>Brain</u>, (1972), vol. <u>95</u>, pp. 633-638.
- . "Perception of Spatial Relationships by the Right and Left Hemisphere in Commissurotomized Man," Neuropsychologia, (1973), vol. 11, pp. 285-289.
- "Hemispheric Specialization in Commissurotomized Man,"
 Psychological Bulletin, (1974), vol. 81, pp. 1-4.
- Nelson, K. "Concept, Word, and Sentence: Interrelation in Acquisition and Development," Psychological Review, (1974), vol. 81, no. 4, pp. 267-285.

- Nissen, H.W. "The Nature of the Drive as Innate Determinants of Behavioral Organization," Nebraska Symposium on Motivation. London: University of Nebraska Press, 1954, pp. 281-321.
- Noble, D. "Charles Taylor on Teleological Explanation," Analysis, (1967), vol. 27, p. 96.
- The Conceptual View of Teleology," Analysis, (1967), vol. 28.
- Ohman, A., Erixon, G., and Lofberg, I. "Phobias and Preparedness: Phobic Versus Neutral Pictures as Conditioned Stimuli For Human Autonomic Responses," <u>Journal of Abnormal Psychology</u>, (1975), vol. 84, pp. 41-45.
- Parfit, D. "Personal Identity," Philosophical Review, (1971), vol. 80, pp. 1-27. (a)
- "On The Importance of Self-Identity," Journal of Philosophy (1971), vol. 68, pp. 683-690. (b)
- Passmore, J.A. "Intention," <u>Aristotelian Society, Supplementary Vol.</u>, (1955), vol. 29, pp. 131-146.
- Patterson, F. "Conversations With a Gorilla," National Geographic, (Oct., 1978), vol. 154, no. 4, pp. 438-465.
- Pears, D. "Are Reasons for Actions Causes?," in A. Stroll (ed.),

 <u>Epistemology: New Essays in the Theory of Knowledge</u>. San Diego:
 University of California Press, 1967.
- Penelhum, T. "Personal Identity," in P. Edwards (ed.), The Encyclopedia of Philosophy. New York: Macmillan Pub., Co., Inc., 1967.
- _____. "The Importance of Self-Identity," <u>Journal of Philosophy</u>, (1971), vol. 68, pp. 667-678.
- Peterson, M.H. "Understanding Defence Mechanisms -- Programmed Instruction,"
 American Journal of Nursing, (Sept., 1972), vol. 72, no. 9, p. 12.
- Pines, M. "We are Left-Brained or Right-Brained," The New York Times

 Magazine, (Sept. 9, 1973).
- Place, U.T. "Is Consciousness a Brain Process?," in V.C. Chappell (ed.),

 The Philosophy of Mind. Englewood Cliffs: Prentice-Hall Inc.,

 1962.

- Polanyi, M. "Tacit Knowledge," from M. Polanyi, "Logic and Psychology,"

 American Phychologist, (1968), vol. 23, pp. 27-43, and
 reprinted in M.H. Marx and F.E. Goodson, Theories of Contemporary

 Psychology
 New York: Macmillan Pub., Co. Inc., 1976, pp.

 330-344.
- . "Understanding Ourselves," in R.E. Ornstein (ed.), <u>The Nature of Human Consciousness: A Book of Readings</u>. San Francisco: W.H. Freeman and Co., 1973, pp. 23-26.
- Premack, A.J., and Premack, D. "Teaching Language to an Ape," Scientific American, (1972), vol. 227, pp. 92-99.
- Premack, D. "Language and Intelligence in Ape and Man," Scientific American, (1976), vol. 64, pp. 674-683.
- Prior, A.N. "Self-Perception and Contingency," Analysis, (1969-70), vol. 30, pp. 46-49.
- Puccetti, R. "Can Humans Think?," Analysis, (1966), vol. 26, pp. 198-202.
- "Brain Transplantation and Personal Identity," Analysis, (1969), vol. 29, pp. 65-77.
- ______. "The Conquest of Death," <u>Monist</u>, (1976), vol. <u>59</u>, no. <u>2</u>, p. 252.
- Putman, H. "The Mental Life of Some Machines," in J. Glover (ed.), The Philosophy of Mind. Oxford: Oxford University Press, 1976, pp. 84-100.
- Quine, W.V.O. "On What There Is," in W.V.O. Quine, From & Logical Point of View. New York: Harper and Row Pub. Inc., 1963, pp. 1-9.
- Ramsay, J.O. "Maximum Likelihood Estimation in Multidimensional Scaling," Psychometrika, (1977), vol. 42, pp. 241-266.
- Redmore, C., and Waldman, K. "Reliability of a Sentence Completion Measure of Ego Development," <u>Journal of Personality Assessment</u>, (1975), vol. 36, pp. 236-243.
- Rorty, A.O. "Slaves and Machines," Analysis, (1961-62), vol. 22, pp. 118-120.
- Rorty, R. "Mind-Body, Identity, Privacy and Categories," Review of Metaphysics, (1965), vo-. 19, pp. 24-54.
- Rosch, E. "Cognitive Representations of Semantic Categories," <u>Journal of Experimental Psychology</u>: General, (1975), vol. <u>104</u>, no. <u>3</u>, pp. 192-233.

- Rosenham, D.L. "On Being Sane in Insane Places," Science, (1973), vol. 179, pp. 250-258.
- Roth, S., and Bootzin, R.R. "Effects of Experimentally Induced Expectancies on External Control: an Investigation of Learned Helplessness," <u>Journal of Perceptive and Social Psychology</u>, (1974), vol. <u>29</u>, pp. 253-264.
- Ruben, D.H. Social Relativism and the Theory of Right, Analysis, (1974), vol. 34, pp. 167-173.
- Runciman, W.G. "Relativism: Cognitive and Moral," <u>Proceedings of the Aristotelian Society, Supplementary Vol.</u>, (1974), vol. 48, pp. 191-208.
- Sameroff, A. "Concept of Humanity in Primary Prevention," in G. Albee and J. Joffee (eds.), <u>Primary Prevention in Psychopathology</u>. New Hampshire: The University of New England, 1977.
- Samuel, A.L. "Some Studies in Machine Learning Using the Game of Checkers II -- Recent Progress," <u>I.B.M. Journal of Research and Development</u>, (Nov., 1976), vol. <u>2</u>, pp. 601-617.
- Sarbin, T.R. "A Preface to a Psychological Analysis of the Self,"

 <u>Psychological Review</u>, (1952), vol. <u>59</u>, pp. 11-22.
- . "Role Theory," in G. Lindzey (ed.), Handbook of Social Psychology, vol. 1. Cambridge, Mass.: Addison-Wesby Publishing Co., 1954.
- Schulman, A.H., and Kaplowitz, C. "Mirror Image Response During the First Two Years of Life," <u>Development Psychology</u>, (1977), vol. <u>10</u>, pp. 133-142.
- Schmaul, F.J. "Punishment, Arousal and Avoidance Learning in Sociopaths,"
 Journal of Abnormal Psychology, (1970), vol. 76, pp. 325-335.
- Schneirla, T.C. "Aspects of Stimulation and Organization in Approach/ Withdrawal Processes Underlying Vertebrate Behavior Development," Advances in the Study of Behavior, (1965), vol. 1, pp. 1-74.
- Schutz, A. "Concept and Theory Formation in the Social Sciences," in M. Natanson (ed.), <u>Philosophy of Social Science</u>; a Reader. New York: Random House, 1963.
- "Common-sense and Scientific Interpretation of Human Action," in Natanson, (ed.), Philosophy of Social Science: a Reader.

 New York: Random House, 1963.
- Seligman, M. "Phobias and Preparedness," <u>Behavior Therapy</u>, (1971), vol. 2, pp. 307-320.

- Shantz, C.U. "The Development of Social Cognition," Chapter 5, in F.W. Heatherington (ed.), Review of Child Developmental Research.

 Chicago: The University of Chicago Press, 1975.
- Sherphard, R.N. "The Analysis of Proximities: Multidimensional Scaling with an Unknown Distance Function," Psychometrika, (1962), vol. 27, pp. 125-139.
- Shoemaker, S. "Critical Study: Myself and Others," Philosophical Quarterly, (1969), vol. 19, pp. 272-279.
 - . "Persons and Their Past," American Philosophical Quarterly, (1970), vol. 7, pp. 269-285.
- Shorter, J.M. "More About Bodily Continuity and Personal Identity,"
 Analysis, (1961-62), vol. 21, pp. 79-85.
- Proceedings of the Aristotelian Society, (1970-71).
- Philosophy. New York: Collier Macmillan Pub., 1967.
- Sihore, R.I. "Rorty's New Mark of the Mental," Analysis, (1975), vol. 35, pp. 192-194.
- Simmel, G. "The Stranger," in K. Wolff (ed.), The Sociology of George Simmel. New York: The Free Press, 1950, pp. 402-408.
- Simon, R.J., Fisher, B., Fleiss, J.L., Gurland, B.J., and Sharpe, L.
 Relationship between Psychopathology and British-or-AmericanOriented Diagnosis," <u>Journal of Abnormal Psychology</u>, (1971),
 vol. 78, no. 1, pp. 26-29.
- Slater, E.T.O., and Glithero, E. "A Follow-Up of Patients Diagnosed As Suffering From 'Hysteria'," Journal of Psychosomatic Research, (1965), vol. 9, pp. 9-13.
- Slobin, D. "Cognitive Prerequisites for the Development of Grammer," in C. Ferguson and D. Slobin (eds.), Studies of Child Language Development. New York: Holt, 1973.
- Sloman, A. "New Bodies for Sick Persons: Personal Identity Without Physical Continuity," Analysis, (1971-72), vol. 32, pp. 52-55.
- Smart, J.J.C. "Sensations and Brain Processes," (in V.C. Chappell (ed.),

 The Philosophy of Mind. Englewood Cliffs: Prentice-Hall Inc.,

 1962.

- Smith, A. "Nondominant Hemispherectomy," Neurology, (1969), vol. 19, pp. 442-445.
- Snyder, S.H. "The Dopamine Hypothsis of Schizophrenia: Focus on the Dopamine Pecepter," American Journal of Psychiatry, (1976), vol. 133, no. 2, pp. 197-201.
- Sperry, R.W. "Problems Outstanding in the Evolution of Brain Function,"

 <u>James Arthur Lecture</u>, American Museum of Natural History, New
 York, (1964).
- Spitzer, R.L. "On Pseudoscience in Science, Logic in Remission, and Psychiatric Diagnosis: A Critique of Rosenham's 'On Being Sane in Insane Places'," <u>Journal of Abnormal Psychology</u>, (1975), vol. 84, pp. 442-452.
- Squires, R. "Are Dispositions Causes?," Analysis, (1968), vol. 29, pp. 45-47.
- Srzednicki, J. "Could Machines Talk?," <u>Analysis</u>, (1961-62), vol. <u>22</u>, pp. 113-117.
- Stalley, R. "Intentions, Beliefs and Imperative Logic," Mind, (1972), vol. 81, pp. 18-28.
- Sullivan, C., Grant, M., and Grant, M. "The Development of Inter-Personal Maturity: Application to Delinquency," <u>Psychiatry</u>, (1957), vol. <u>20</u>, pp. 373-385.
- Sullivan, E.V., McCullough, G., and Stager, M. "A Developmental Study of the Relationship Between Conceptual, Ego, and Moral Development," Child Development, (1970), vol. 41, pp. 399-411.
- Sullivan, H.S. "The Language of Schizophrenia," in J.S. Kasanin (ed.),

 Language and Thought in Schizophrenia. New York: W.W. Norton
 and Co., Inc., 1964, pp. 4-15.
- Taylor, C. "Mind-Body Identity, A Side Issue?," Philosophical Review, (1967), vol. 76, pp. 201-213.
- "Teleological Explanation a Reply to Denis Noble," Analysis, (1967), vol. 27, pp. 141-143.
- Taylor, M. "Speculations on Bilingualism and the Cognitive Network," Working Papers in Bilingualism, (1974), vol. 2, pp. 68-124.
- Taylor, R. "Determinism," in P. Edwards (ed.), The Encyclopedia of Philosophy. New York: Macmillan Pub. Co. Inc., 1967.

- Tenen, S.S., and Miller, N.E. "Strength of Electrical Stimulation of Lateral Hypothalamus, Food Deprivation and Tolerance for Quinine in Food," <u>Journal of Comparative and Physiological Psychology</u>, (1964), vol. <u>58</u>, pp. 55-62.
- Thalberg, I. "Do We Cause Our Own Actions?," <u>Analysis</u>, (1967), vol. <u>27</u>, pp. 196-201.
- Torgenson, W.S. "Multidimensional Scaling I: Theory and Method," Psychometrika, (1952), vol. 17, pp. 401-419.
- Toulman, S. "Philosophy and Human Nature," in S. Toulman, Knowing and Acting: an Invitation to Philosophy. New York: Macmillan Pub. Co. Inc., 1976.
- "Individual and Collective Self-Understanding," in S.
 Toulman, Knowing and Acting: an Invitation to Philosophy.
 New York: Macmillan Pub. Co. Inc., 1976.
- "Philosophy and Action," in S. Toulman, Knowing and Acting: an Invitation to Philosophy. New York: Macmillan Pub. Co.
 Inc., 1976.
- "Self-Knowledge and Knowledge of the 'Self'," in T. Mischel (ed.), The Self: Psychological and Philosophical Issues.
 Oxford: Basil Blackwell, 1977.
- Turiel, E., Kohlberg, L., and Edward, C. "Cross Cultural Study of Development of Moral Judgment," in L. Kohlberg and E. Turiel (eds.), Recent Research in Moral Development. New York: Holt, Rinehart and Winston, 1974.
- Turing, A.M. "Computing Machinery and Intelligence," Mind, (Oct., 1950), vol. 59, pp. 433-460.
- Vaillant, G.E. "Natural History of Male Psychological Health: Relation of Choice of Ego Mechanisms of Defense of Adult Adjustment,"
 Arch. Gen. Psychiatry, (May, 1976), vol. 33, pp. 535-545.
- Waisman, F. Language Strata," in A. Flew (ed.), Logic and Languages.
 Oxford: Basil Blackwell, 1959, pp. 11-31.
- Watt, N.F., and Lubensky, A.W. "Childhood Roots of Schizophrenia," <u>Journal of Consulting and Clinical Psychology</u>, (1976), vol. <u>44</u>, no. <u>3</u>, pp. 363-375.
- Weiskrantz, L., and Cowey, A. "Cross-Model Matching in the Rhesus Monkey Using a Single Pair of Stimuli," Neuropsycholgia, (1975), vol. 13, pp. 257-261.

- Werner, H. "The Concept of Development From a Comparative and Organismic Point of View," in D.B. Harris (ed.), The Concept of Development. Minneapolis: University of Minnesota Press, 1957, pp. 125-148.
- Whiteley, C.H. "Rules of Language," <u>Analysis</u>, (1973-74), vol. <u>34</u>, pp. 33-38.
- Williams, B.A.O. "Personal Identity and Individuation," <u>Proceedings of the Aristotelian Society</u>, (1956-57), vol. <u>57</u>, pp. 229-253.
- "Imagination and the Self," <u>Proceedings of the British</u>
 Academy, (1966), vol. <u>52</u>, pp. 105-124.
- "The Self and The Future," Philosophical Review, (1970), vol. 79, pp. 161-180.
- "Egoism and Altruism," in B.A.O. Williams, <u>Problems of</u> the Self. Cambridge: Cambridge University Press, 1973.
- Wise, R.A. "Lateral Hypothalamic Electrical Stimulation: Does It Make Animals 'Hungry'?," <u>Brain Research</u>, (1974), vol. 67, pp. 187-209.
- "Catecholamine Theories of Reward: A Critical Review," Brain Research, (1978), vol. 152, pp. 215-247.
- Wise, R.A., and Albin, J. "Stimulation Induced Eating Disrupted by Conditioned Taste Aversion," <u>Behavioral Biology</u>, (1973), vol. 9, pp. 289-297.
- Wise, R.A., Spindler, J., de Wit, H., and Gerber, G.J. "Neuroleptic-Induced 'Anhedonia' in Rats: Pimozide Blocks Reward Quality of Food," <u>Science</u>, (July, 1978), vol. <u>201</u>, pp. 262-264.
- Woods, M. "Reasons for Action and Desire," <u>Proceedings of the Aristotelian</u> Society, Supplementary Vol., (1972), vol. 46, pp. 189-201.
- Worf, B.L. "Language, Mind and Reality," in R.E. Ornstein (ed.), The

 Nature of Human Consciousness: A Book of Readings. San

 Francisco: W.H. Freeman and Co., 1973, pp. 327-335.
- Zaidel, E. "Auditory Vocabulary of the Right Hemisphere Following Brain Bisection of Hemidecortication," Cortex, (1976).
- Zubin, J., and Spring, B. "Vulnerability -- A New View of Schizophrenia,"

 <u>Journal of Abnormal Psychology</u>, (1977), vol. <u>86</u>, no. <u>2</u>, pp.

 103-126.

MISCELLANEOUS

- Aronoff, J. A Test and Scoring Manual for the Measurement of Safety,
 Love and Belonging and Esteem Needs. Manuscript, Michigan
 State University, Department of Psychology, 1971.
- Christian, J. Psychological Differentiation and Definition of the Self:
 A Multidimensional Scaling Approach. Unpublished Ph.D.
 dissertation, McGill University, Montreal, Canada, 1976.

APPENDIX I

QUESTIONNAIRE ITEMS

a)	Questions	Measuring	Tendency	to	Self-Protect.
----	-----------	-----------	----------	----	---------------

٠ ,		r	<u>M</u> .	SD	Sig.
1.	You will get hurt less often, if you assume that most people will let you down (+).	.659	4.3	2.6	.001
2.*	Never tell anyone the real reason you did something unless it is useful to do so (+).	.658	3.4	2.3	:001
3.*	Anyone who completely trusts anyone else is asking for trouble (+).	.641	4.5	2.8	.001
4.	If it weren't for a lot of bad luck which I've encountered, I would be much more of a success today than I am (+).	.595	.3.7	2.7	.001
5.	People are either good or bad (+).	.563	2.9	2.4	.001
6.*	Sometimes you have to hurt other people to get what you want (+).	.546	4.1	2.7	.001
7.	Women are lucky because they can get married and live off men (+).	.544	2.9	2.2	.001
8.	A stranger is a person who can not be trusted and who must be studied carefully (+).	.526	3.5	2.3	.001
9.*	It/is smart to be nice to important people even if you don't like them (+).	.469	4.6	2.5	.001
10.*	The best way to handle people is to tell them what they want to hear (+).	.456	3.3	2.1	.001
		,			•

TOTAL: $\underline{M} = 37.36$ $\underline{SD} = 14.1$

^{*} Questions taken from 'Machiavellianism' test (Christie, 1969).

b)	Questions	Measuring	Conformity.

		•			,
	· · · · · · · · · · · · · · · · · · ·	<u>r</u>	<u> </u>	SD	Sig'.
1.	It is important that a woman should put her husband and family first (+).	.785	" 5.0 °	2.6	.001
2.	Despite what women's lib says, women are happiest when they get married and have children (+).	.652	-4.0	2.4	.001
3.	It is important that one's personal feelings do not get in the way of one's daily chores (+).	.615	5.5	2.5	.001
4.*	Homosexuals are sick people (+).	.606	4.1	2,7	.001
5.	Without a strict set of unbreakable rules, co-operation within groups usually breaks down into endless chatter (+).	.602	5.2	2.5	.001
6.	Getting too emotional is not good for anyone (+),	.57.8	5.2	2.7	.001
7.	People should always be friendly and nice $(+)$.	.555	5.3	2.4	.001
8.*	What youth needs most is strict discipline, rugged determination, and the will to work (+).	.552	5.4	2.4	.001
9.	A wife should love, honour, and obey her husband (+).	.543	4.7	2.4	.001
10.	Having good manners is very important (+).	.515	7.3	1.8	.001
	,				

TOTAL: M = 51.62 SD = 14.66

^{*} Questions taken from the "Balanced F-Scale" (Athanasiou, 1968).

		' . <i>'</i>		' <u>-</u>	•
c) ້ <u>Q</u> u	estions Measuring Tendency to be Conse	rvative.			•
۰		. <u>r</u>	M	SD	Sig.
1.*	Homosexuals are sick people (+).	.665	4.1	2.7	.001
2.*	What youth needs most is strict discipline, rugard determination, and the will to work (+).	.578	5.4	2.3	.001
3.	Strict law enforcement is necessary to preserve social tranquillity (+).	.538	5.8	2.3	.001
7.*	Most censorship of books, movies, or television is a violation of free speech and ought to be abolished (-).	.537	4.7	2.5	.001
5.	I would say that I believe in the capitalist philosophy and that I am proud of it (+).	.507	4.7	2.3	.001
6.*	It usually helps the child in later years if he is forced to conform to his parents' ideas (+).	.461	2.8	2.1	.001
7.*	Many modern paintings have both beauty and purpose (-).	.421	3.8	2.4	.001
8.**	Novels of stories that tell what people think and feel are more interesting than those which contain mainly action, romance, and adventure (-).	.397	3.6	2.3	.001
9.*	Sex offenders should be treated with expert care and understanding rather than punishment ().	. 357	4.0	2.6	.001
10.·	It is very important that people do not burden one another (+).	.313	5.5	2.4	.001
, ,	TOTAL:	<u>M</u> = 44	.13	<u>SD</u> = 11.	.52

^{*} Questions taken from the "Balanced F-Scale," (Athanasiou, 1968).

^{**} Question taken from the "California F-Scale," (Adorno et al., 1950).

<u>d)</u>	Questions Measuring High Moral Thought.	•			٠.,
		<u> </u>	<u>м</u>	SD	Sig.
1.*	Things work best when people conserva- themselves with their own welfare and let others take care of them- selves (-).	.682	6.4	2.2	.001
2:.*	An individual who has not caused another person's misfortune has no moral obligation to help the other person (-).	.678	7.0	2.0	.001
3.*.	The mere fact that one group or nation is prosperous and another is not, places no moral obligation on the "have" group to improve the lot of the "have not" group (-).	.658	6.5	2.3	.001
4.*	People should leave the prevention of immoral acts up to those whose jobs are specifically concerned with such prevention (-).	.637	6.6	2.4	.001
5.* 	Whether an individual acts to protect the welfare of persons beyond his circle of friends and relatives is a matter of personal preference not moral obligation (-).	.637	5.3	2.6	.001
6.*	One's major obligation to other men is to let them alone so that they may sink or swim by their own efforts (-).	.614	6.6	2.0	.001
7.	It is better to ignore a person in need when one feels no personal compassion for him than to act compassionately out of a sense of obligation (-).	.526	6.2	2.4	.001
8.*	Acting to protect the rights and in- terests of other members of one's community is a major obligation for all persons (+).	.499	6.3	2.0	.001

•		<u>r</u>	<u>m</u>	20	<u>51g.</u>
9.*	Not only does everyone have an in- alienable right to life, liberty and the pursuit of happiness, he also has an equally inalienable moral obligation to protect others from having these rights taken away (+).	. 415	6.8	2.1	.001
10.	There is a sense in which man's death makes his life somewhat	.341	5.8	. 2.6	.001

TOTAL: $\underline{M} = 63.55$ $\underline{SD} = 12.81$

Questionstaken from "Social Values Questionnaire," (Perloe, 1967)

e)	Questions	Measuring	External	Orientation.
----	-----------	-----------	----------	--------------

•	,	r	<u>m</u>	<u>SD</u>	Sig.
1.*	I sometimes feel confused about my- self because there seems to be so many "parts" of me to fit together (+).	.817	5.2	2.8	.001
2.*	I quite often feel "spaced" not really in touch with myself (+).	.777	6.0	2.8	.001
3.*	I quite often get the feeling I'm not really the "same person" (+).	.739	5.4	2.7	.001
4.*	I quite often find myself wondering who'l am (+).	.712	5.4	2.7	.001
5.*	I feel very uncomfortable with people who don't make it clear how they feel about me (+).	.623	5.0	2.4	.001
6.*	When I think about it, I quite often do things because of external pres- sure (parents, friends, etc.) (+).	.614	4.8	2.5	.001
7.*	I have so many conflicting views of myself that I sometimes think that the statement "ignorance is bliss" is true (+).	.607	6.0	2.6	.001
8.*	I feel very uncomfortable when I don't know how I stand in the eyes of people around me (+).	.604	4.4	2.6	.001
9.*	It helps me to believe in a person who can make me forget my own worries (+).	.525	4.4	2.3	.001
10.*	It's very important to me to have, or get a job which others respect (+).	.490	4.7	2.5	.001
1	TOTAL:	M = 5	1.32	SD = 16	.88

TOTAL: $\underline{M} = 51.32$ $\underline{SD} = 16.8$

^{*} Questions taken from Christian, (1967).

f)	Questions Measuring Social Isolation.		•		
		r	M	SD,	Sig.
1.*	Sometimes I feel all alone in the world (+).	.639	5.7	2.8	.001
2.*	The world in which we live is basically a friendly place (-).	.578	5.0	2.4	.001
3.	Sometimes I feel very distant from people even when I am with them (+).	:550	6.2	2.4 .	.001
4.*	Don't feet on to the comment of the comment	•		•	1
4.*	Real friends are as easy as ever to find (-).	.546	6.5	2.6	.001
5.	Our culture today, has really hit the "pits" (+).	.545	4.5	2.3	.001
6.	Sometimes I feel like a tiny speck alone in the middle of a large universe (+).	.5 45	5.4	. 2.8	.001
7.*	People are just naturally friendly and helpful (-).	. 521	5.1	2,3	.001
· · ;	and neipidi ().	. 721	. 3.1	213	.001
8.*	One can always find friends if he shows himself friendly (-).	.505	3.2	2.1	.001
9.	There are few dependable ties between people any more (+).	.485	4 .1 , .	2.5	.001
10.	With a little patience and under- standing, communication with others is really very easy (-).	.447	3.2	2.0	.001

TOTAL:

 $\underline{M} = 48.87$ $\underline{SD} = 13.02$

^{*} Questions taken from the "Alienation Scale," (Dean, 1961).

g) - Questions Measuring Anomie.

	•		<u>r</u>	<u>M</u>	<u>SD</u> .	Sig.
1. ,	There are so many values these days, that it is hard to figure out what to value at all (+).		•773·	4.2	2.5.	.001
2.**	There are so many ideas about what is right and wrong these days that it is hard to figure out how to live one's life (+).	•	.733	4.4	2.6	.001
3.*	The only thing that one can be sure of today is that one can be sure of nothing (+).	· · · · · · · · · · · · · · · · · · ·	.720	4.4	2.7	.001
4.*	Peoples' ideas change so much that I wonder if we'll ever have anything to depend on (+).	,	.673	4.0	2.2	.001
5.**	Things are changing so fast these days that one doesn't know what to expect from day to day (+).	-	.645	. 4.9	2.4	.001
6.	Really I haven't "a clue" of what life is all about and for that matter I don't think anyone else does either (+).		.601	3.6	2.3	.001
7.	We have lost control of the world, and will never regain it (+).	'	.582	3.7	2.2	.001
8.*	I often wonder what the meaning of life really is (+).		. 568	5.8	. 2.7	.001
9.*	We are just so many cogs in the machinery of life (+).	'	•552	4.4	2.5	,001
10.**	There is not much chance that people will really do something to make this country a better place to live in (+).	,	.534	4.1	2.1	.001

TOTAL: M = 43.25 SD = 15.34

^{*} Questions taken from "Alienation Scale," (Dean, 1961).

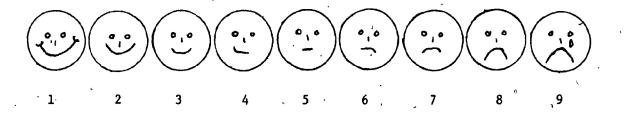
^{**} Questions taken from "Alienation Via Rejection," (Streuning and Richardson, 1965).

h)	Questions Measuring Sense of Well-Being.				•
	•	r	. <u>.</u> <u>М</u>	SD	Sig.
1.**	All in all, I am inclined to feel that I am a failure (-).	.800	6.3	2.7	.001
2.**	On the whole I am satisfied with myself $(+)$.	.784	5.6	2.7	.001
3.**	I feel I do not have much to be proud of $(-)$.	.799	6.6	2.6	.001
4.**	At times I think I am no good at all (-).	.765	5.2	2.9	.001
5.*	I am certainly lacking in self- confidence (-).	.755	4.9	2.8	.001
6.	The thing I like about myself, is just about nothing (-).	.754	7.3	2.3.	.001
7.*	I usually feel that life is worth-while (+).	.744	7.0	2.2	.001
8.**	I wish I could have more respect for myself (-).	.706	4.9	2.9	.001
9.*	Life usually hands me a pretty raw deal (-).	.688	6.5	2.5	.001
10.*	I don't seem to care what happens to me (-).	.686	7.2	2.6	.001
11.	Pick the face which is representative of how you usually feel (+).	.665	6.1	1.5	.001
0,0		0,0			
` · 1	2 3 4 5 6	, 7	{	3	9 .

12. I have a profound sense of wellbeing (+).

.650 5.3 2.4 .001

•		. <u>r</u>	<u>M</u>	SD	Sig.
13.*	When in a group of people, I have trouble thinking of the right thing to say (-).	.640	5.5	2.5	∮001 -
14.*	My daily life is full of things that keep me interested (+).	.636	5.8	2.8	.001
15.**	I take a positive attitude toward myself (+).	.622	5.6	2.5	.001
16.**	I feel that I'm a person of worth, at least on equal basis with others (+).	.617	7.1	2.2	.001
17.*	Several times a week I feel as if something dreadful is about to happen (-).	.596	6.7	2.6	.001
18.	There are many times when I am so unhappy I can hardly stand it (-).	.590	5.3	2.9	.001
19.**	I am able to do things as well as most people (+).	.589	6.4	2.3	.001
20.	Pick the face which is representative of how you feel right now (+).	.518	5.9 <u>(</u>	1.6	.001



TOTAL: M = 122.26 SD = 33.43

^{*} Questions taken from the "California Psychological Inventory," (Gough, 1956).

^{**} Questions taken from the "Self-Esteem Scale," (Rosenberg, 1965).

i)	Questions	Measuring	Tendency	to Lie.	

-,	-3					•
,		,	<u>r</u>	<u>M</u>	SD	Sig.
1.*	•	I do not like everyone I know (+).	.590°	2.9	2.4	.001
2.*		I do not always tell the truth (+).	.345	2.0	2.0	.001
3. *		I get angrý sometimes (+).	≠ .542	2.2.	1.7	.001
4.*		I gossip a little at times (+).	.541	- 3.9	. 2.3	.001
5.*		At times I feel like swearing (+).	.534	2.6	2.1	.001
6 .*		Sometimes when I am not feeling well I am cross (+).	.503	4.0	2.3	.001
7.*	.,	Once in a while I put off until tomorrow what I ought to do today (+).	483	2.7	2.2	.001
8.*		Once in a while I laugh at a dirty joke (+).	.409	2.5,	2.0	.001
9.*		I like to know some important people because it makes me feel taportant.	.339\	5.3	2.6	.001
10.*	•	I do not read every editorial in the newspaper every day (+).	.327	2.0	2.0	.001

TOTAL: M = 32.82 SD = 10.83

 $[\]star$ Questions taken from the MMPI L(Lie) Scale (Hathaway and McKinley, 1943).

APPENDIX II

SENTENCE COMPLETION STEMS

- *1. I should like to
- **2. Raising a family -
- **3. a. (complete only if you are a woman) When I am with a man
 - b. (complete only if you are a man) When I am with a woman
- *4. If I could only

W

- **5. When they avoided me
- *6. Most important
- **7. If my mother
- **8. The thing I like about myself is
- **9. What gets me into trouble is
- *10. Other people are
- **11. My mother and I
- **12. Education
- **13. Women are lucky because

- *14. If I could change anything I
- **15. When I am nervous
- **16. a. (complete only if you are a woman)
 A woman feels good when
 - b. (complete only if you are a man)
 A man feels good when
- **17. 'When someone won't join in group activities
- **18. When people are helpless
- *19. What bothers me most
- *20. The people I like best
- **21. Men are lucky because
- **22. I feel sorry
- **23. If I can't get what I want
- **24. My father
 - *25. If I am put under pressure
- **26. My main problem is
- **27. 1 am
- *28. I am happy when

- *29. I want
- **30. If my father
- **31. When they talked about sex I
- **32. a. (complete only if you are a woman)

 The worst thing about being a woman
 - b. (complete only if you are a man) The worst thing about being a man
- **33. My conscience bothers me if
- *34. If I were in charge
- *35. People think I am
- *36. Its fun to day dream abouts

- ** Stems from Loevinger and Wessler (1970).
- * Stems from Aronoff (1970).

APPENDIX III

STIMULUS CATEGORIES FOR MULTIDIMENSIONAL SCALING

- 1. Your mother (or stepmother).
- Your father (or stepfather).
- 3. Your brother (or a boy nearest your own age who is most like a brother to you).
- 4. Your sister (or a girl nearest your own age who is most like a sister to you).
- 5. Your wife (or husband) or your girlfriend (or boyfriend). If this does not apply, a person you might like to be your girlfriend or boyfriend.
- 6. Your closest friend of the same sex as yourself.
- 7. A friend of the opposite sex whom you would like to be closer to.
- 8. A friend of the same sex whom you would like to be closer to.
- 9. A person of the same sex as yourself who you once thought was a good friend but who strongly disappointed you later.
- 10. A person known to you personally with whom you would be most willing to talk over your personal feelings.
- 11. A person you know who for some reason appears to dislike you.
- 12. A person you would most like to help or for whom you feel sympathy.
- 13. A person with whom you feel very uncomfortable.
- 14. A person of the opposite sex to yourself who you once thought was a good friend but who strongly disappointed you later.
- 15. Your closest friend of the opposite sex. .
- 16. The warmest person you know.
- 17. A person you trust the most.
- 18. Yourself.