ROLE CONSTRUCTS VERSUS PART CONSTRUCTS

AND

INTERPERSONAL UNDERSTANDING

DISSERTATION

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CHAPTER I

INTRODUCTION

What we are here calling interpersonal understanding has been referred to variously as "social sensitivity," "empathy," "diagnosis," "social perception," etc. For the time being we shall define it as the ability to anticipate, or predict the behavior (broadly defined) of another person. The more accurate the prediction, the greater the understanding.

The general aim of this dissertation is to test several theoretical hypotheses regarding the antecedents and consequents of accurate interpersonal understanding, derived from Kelly's *Psychology of Personal Constructs* (43).

From this point of view, some degree of interpersonal understanding is a prerequisite to all interpersonal relationships. We adjust our own behavior to the predictions we make about how the other fellow will behave. Naturally, not all predictions are based upon profound insight into our neighbors. When driving, for example, we rely upon our knowledge of cultural rules; we expect other drivers to conform to the J-curve. Usually they do, so we are able to get along, even with unrefined predictions. Occasionally however, the importance of more intimate knowledge about how a given individual will behave is rudely brought home.
to us. The unavoidable inaccuracies that crop up when we "predict the mode" for each individual contribute significantly to the prosperity of body-and-fender shops.

The pervasiveness of interpersonal understanding is evident in most of our everyday relationships. We learn to anticipate the reactions of our friends on a wide variety of issues, and eventually, we even become fairly accurate in our predictions of our spouses. In psychology, the development of psychotherapy has been essentially a search for more effective techniques and concepts to facilitate therapists' understanding of their clients.

Only recently, however, have the correlates of interpersonal understanding been studied empirically. As a result, a few antecedent-consequent relationships have been experimentally demonstrated. Hardly any have been cross-validated.

Another reflection of the recency of interest in this area of research is the lack of any systematic theoretical point of view among the various investigators. For the most part, as Cronbach (13) has pointed out, workers in the area have been more concerned with the operations and immediate results of their studies, than with the place of their findings in the larger framework of knowledge and theory that comprises what we know about behavior.

As we mentioned above, the hypotheses for this study were derived from personal construct theory. Within this
theoretical approach, there are several possible points of entry to the study of interpersonal understanding. We decided to investigate the relationship between information about the person to be predicted, and accuracy of prediction; specifically, does "objective information" about another lead to more accurate prediction of his responses to a social behavior questionnaire than "subjective information"? By subjective information we mean a sampling of an individual's personal point of view, and by objective information a sampling of peer descriptions of him. Traditionally, American psychology has favored objective information—as in studies of "insight" in which insight is defined as agreement between a subject's self-evaluation and the majority-vote of peer evaluations of him. The peer evaluations are assumed to be the more objective—and more accurate data. Subjective information has been relegated to the realm of unreliability. Perhaps we ought to let the person back into the picture; it is our basic assumption that his behavior will be determined by his personal interpretation of himself and the situation within which he is performing, rather than by the "average" peer description of him. Thus, current psychological assumptions notwithstanding, we attempted to test in this study the relative accuracy of interpersonal predictions based upon objective and subjective information about predictees; our hypothesis was that subjective information would lead to more accurate prediction.
CHAPTER II

THEORETICAL POSITION

1. Historical Background

Like many another concept in psychology, interpersonal understanding can be traced through history—mainly in the insights of novelists and the deliberations of philosophers. However, again like many another concept, experimental study of interpersonal understanding is quite recent.

The first efforts to apply scientific method to the study of interpersonal understanding were the "emotion-judging" studies, which began shortly after the turn of the century. The approach was simple and straightforward; judges were shown pictures of people, and tried to guess what emotion the person was experiencing. Notcutt and Silva (53), summarizing the "emotion-judging era," said:

The result of these studies was on the whole disappointing. They failed to achieve any decisive analysis of how good our knowledge is or how it is obtained. In common with other studies of the time, these experiments dealt with mind-in-general rather than with individuals, and with momentary states rather than with more stable qualities of personality. This line of experiment seems to have petered out about 1928, after various sceptical studies had emphasized the imperfections of our judgments of emotions (53, p. 30).
As early as 1915, however, at least a few investigators were studying "individuals" and "stable qualities." Cogan, Conklin, and Hollingworth (10) reported a study in which they compared self-analyses with test findings and ratings by others. But this was an isolated effort; interest in the study of interpersonal predictions languished until the late forties. Since then interest has steadily mounted. The youth and vigor of this area of research is suggested by the fact that of 70 studies reviewed for this paper, 26 have appeared since Taft's review of the field in February of 1955 (64).

2. Some Theoretical Lacunae

In their haste to probe into the mysteries of interpersonal processes, investigators have largely ignored theoretical considerations. Occasionally, ad hoc theoretical sketches have been suggested, but explicit statements of basic assumptions, and formal descriptions of presumed relationships among variables have been conspicuously absent. Cronbach (13, 36) pointed out some of the methodological pitfalls in research on interpersonal understanding, and criticized the "ultra-operationalism" of some experimenters, but there has been little evidence that his views are widely shared.

The most popular theoretical construct in this area
seems to be "empathy," and the most popular "empathy" is Dymond's (17). She defines empathy as: "...the imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does" (17, p. 127). Unfortunately, Dymond has not attempted to link empathy with any systematic framework of constructs--rather it stands in magnificent but inscrutable isolation. As will be seen later, it also becomes a task of hairline nicety to distinguish empathy from some other constructs in common use.

In spite of the inadequacies of the construct of empathy there have been no serious contenders for its position. In this paper, we shall outline a theoretical rationale which is more comprehensive than the empirical "empathy" approach, and which will enable us both to interpret what others have found and to suggest further hypotheses.

3. Implications of the Psychology of Personal Constructs: A Theoretical Approach to Interpersonal Understanding

The theoretical approach which we are proposing will be described in three steps. First, the basic assumptions underlying the approach will be presented. Second, we shall define and elaborate the constructs we shall be using. Third, a sequential outline of interpersonal processes will be described.
Although the approach we are proposing is derived from the Psychology of Personal Constructs, it is not all of personal construct theory. Rather it is a condensation, intended to embrace essentially the diadic interpersonal relationship.

a. Basic Assumptions

The essential structure of personal construct theory is provided in its fundamental postulate. Any hypotheses derived from personal construct theory contain, tacitly or otherwise, this initial assumption. Kelly has formulated it as follows:

1. Fundamental Postulate: A person's processes are psychologically channelized by the ways in which he anticipates events (43, p. 46).

   In the formal description of his theory, Kelly has elaborated the basic postulate by means of eleven corollaries. Although all the corollaries are in some degree relevant to our outline, only the Sociality Corollary, which is the most definitive for interpersonal relationships, will be presented:

2. Sociality Corollary: To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person (43, p. 95).

b. Definition of Terms

The notion of construing deserves attention; we shall have occasion later to be concerned with its nature and effects. In the context of the basic postulate, it is
through construing events that an individual anticipates them. Kelly says: "By construing we mean 'placing an interpretation': a person places an interpretation upon what is construed. He erects a structure, within the framework of which the substance takes shape or assumes meaning" (43, p. 50).

This process of construing or interpreting is carried on by means of constructs; abstracted dichotomous dimensions that provide the texture of an individual's understanding of his world. In Kelly's words: "In its minimum context a construct is a way in which at least two elements are similar and contrast with a third. There must therefore be at least three elements in the context. There may, of course, be many more" (43, p. 61).

There is another stage in the organization of an individual's understanding. Each individual is seen as constructing a theory about the world—that is, constructs are not isolated things, but related and integrated into a more or less comprehensive system. Thus, from the personal construct point of view, individuals develop construction systems: "A system implies a grouping of elements in which incompatibilities and inconsistencies have been minimized. They do not disappear altogether, of course. The systematization helps the person to avoid making contradictory predictions" (43, p. 57).
Personal Constructs vs Group Constructs: In our earlier discussion of constructs we were referring to personal constructs. Personal constructs are the concepts an individual develops to order and understand his world. For our purposes here we shall consider the constructs an individual uses to describe other people as his personal constructs; they represent his own outlook. Group constructs, on the other hand, will be defined here as constructs applied to any given individual by others; they represent his position in the eyes of others.

Let us suppose we ask a group of people to describe each other. Charley is a member of the group. His descriptions of the others are what we are calling his personal constructs. If we read his descriptions of the others we can also learn something about Charley; we have "subjective" information about him. But we can get another kind of information about Charley. If we read what the others in the group have had to say about him, we have what we are calling group constructs. Perhaps we can learn something about Charley by reading what others have said about him; we have "objective" information about him.

Role Constructs vs Part Constructs: The distinction we have just made between personal and group constructs is the basis on which we differentiate between role and part constructs. In the Psychology of Personal Constructs, role
constructs are defined as constructs which have as their elements the constructs of another person. What we are saying here is that the elements upon which role constructs are based are personal constructs. Part constructs, however, are constructs which have as their elements the constructs of someone other than the person in question. The elements upon which part constructs are based are group constructs.

In the terms of our previous example, suppose I want to construe Charley. If I know Charley's personal constructs (i.e., his descriptions of others), the constructs I form about Charley will be role constructs. But if I know only the group constructs about Charley (i.e., the way he was described by others), the constructs I form about Charley will be part constructs.

This distinction is important from the point of view of the Psychology of Personal Constructs, which assumes that effective interpersonal relationships are based upon role constructs.

c. Sequential Processes in Interpersonal Relationships

Our theoretical approach leads us to expect interpersonal relationships to exhibit certain recurring sequences of events. The one that seems most important for our purpose is the construction-prediction-validation sequence.
We shall describe this sequence as it theoretically occurs for one participant in a diadic relationship.

1. Construction: The construction stage of the sequence provides a convenient springboard. To understand how construction determines the relationship, we shall inspect four different, though interrelated aspects of the construction process.

In the first place, an individual brings his construction system with him. His interpretation of "the other fellow," and his own behavior depend, to a certain extent, upon various characteristics of his construction system. For instance, does he use many constructs or few? Does he rely primarily upon constellatory constructs, or does he utilize a more propositional approach? Is he well-stocked with permeable constructs, or does he have to trust to tight, brittle constructs?

Within the framework of his construction system the individual interprets or construes the situation. Here we are on less steady ground; in comparison with the efforts that have been made to understand other variables (i.e., "personality"), psychologists have done precious little to understand how people characteristically interpret situations.

Finally, the course of the relationship is most intimately affected by the individual's construction of the
other person, and his construction of his role. We are interested in the dimensions he applies to the other: does he place him on a "friendly-unfriendly" continuum, or does he contrast him with others who are "aggressive," or just conceive of him as a "fat" or "skinny" person? Does he view his own role in terms of "kindliness"? Or does he view himself as playing out an "independent," or a "submissive" role?

2. Prediction: Our basic postulate states that persons "anticipate events"; the constructions we have been describing are not an end in themselves, but rather means to anticipation, or prediction. In other words, through his constructions, the individual makes certain predictions about the sort of person he is dealing with, and the sort of behavior he can expect.

3. Validation: Having made his predictions, our hypothetical person sorts out the events that become available during his interaction with the other person. He compares what he sees with what he expected to see, and assesses his accuracy—i.e., he estimates the validity or invalidity of his predictions. In Kelly's terms: "Validation represents the compatibility (subjectively construed) between one's predictions and the outcome he observes. Invalidation represents incompatibility (subjectively construed) between one's prediction and the outcome.
he observes" (43, p. 158).

At this point, our person begins all over again. Using his validity-invalidity estimate as his guide, he begins revising his constructions and predictions; a new construction-prediction-validation sequence begins.

Before we go on to elaborate some of the theoretical relationships between the stages of the construction-prediction-validation sequence, we had better point out that this outline is naturally somewhat artificial. Although the essential nature of the process is theoretically accurate, the sequence itself does not occur "naturally" in quite so mechanistic a fashion. What we have is a model, intended to provide a suggestive schema, not a faithful word-picture of a real-live interaction.

4. Inter-stage Relationships: The theoretical step from construing to predicting is not necessarily a long or difficult one, but it does require some elaboration. Shoemaker (58) demonstrated that it is possible for judges to match persons with their Rep Test protocols after watching them in a role-play situation. This suggests that there are definable relationships (as our theory would lead us to expect) between constructs and behavior. An individual's constructs may contain, as elements, specific behaviors. If we ask him to describe the behaviors he would expect from another person to whom a particular construct was
applied, he could do so. In fact, this approach was tried during an early stage of the pretesting period for this dissertation. With a sample of two, it was found that the subjects were able to list behaviors implied by some of the constructs they had used on a Rep Test. For the present, we hypothesize that, to put it simply, constructs carry predictive implications. To describe another person as "sincere" means that we will expect from him what we have come to expect from "sincere" people in general.
CHAPTER III

REVIEW OF LITERATURE

1. Conceptual Ambiguity and Research Results

The personal construct point of view adopted here emphasizes the importance of the construction systems that people use to understand the "real" world. Of course, the notion that there is not a point-for-point correspondence between ultimate reality and an individual's conception of what is real is not unique to personal construct theory. In various other theories we find constructs like "phenomenal field," "representational process," "life space," and "meaningful environment."

Naturally these constructs are not all mutually interchangeable, but they do reflect a common orientation to the problem of predicting behavior. Predictions are based upon the subject's perceptual, cognitive, or functional response to his environment, rather than upon physical or other "real" measures of the environment (41). As we shall see, this distinction is not always clearly maintained in research, at least in the area of interpersonal understanding.

a. Two Kinds of Similarity

The effect on interpersonal relationships of the similarity between two persons has been investigated
frequently. But the experimenters have not always dis-
tinguished similarity as they measured it, and similarity
as it was perceived by their subjects. As a result, the
apparently contradictory findings from different experiments
have brewed confusion.

Let us give names to the two kinds of similarity. By structural similarity we shall mean similarity as measured by the experimenter, e.g., by counting the number of times two subjects responded the same way to a questionnaire. By construed similarity we shall mean the similarity one person sees between himself and another, e.g., the number of times he predicts another person's responses to a questionnaire to be the same as his own.

From our point of view, the more important kind of similarity, for the purpose of predicting the relationship between two individuals, is construed similarity.

Several studies have either dealt directly with, or have implications for the antecedents of construed similarity. Scodel and Freedman (57) found that subjects who themselves scored high on the California F-scale tended to attribute high scores to others, regardless of their actual F-scale status. Bieri, Blacharsky, and Reid (7) reported that better adjusted subjects (on the Rotter ISB) tended to see others as more similar to themselves on the Taylor
Manifest Anxiety Scale. Consistent with this finding is Jackson and Carr's (39), that nurses assumed more similarity between themselves and others than did schizophrenic patients. That this may be a result of factors other than the "adjustment" of the subjects, however, is suggested by Bieri's (6) finding that white-white partners see each other as more similar to themselves after an interaction than negro-white partners. Bieri also found that negro-white partners interacted less than white-white partners. The differences found by Jackson and Carr, and Bieri, Blacharsky, and Reid might be more closely related to the amount of contact with others, and to culturally fostered stereotypes about who is "different" than to "adjustment," per se.

Other factors which have been found to be associated with the tendency to see another person as like oneself are whether or not one "likes" him (25, 65), and the focus of one's attention during a conversation with him (48).

Fiedler (25), who equates high construed similarity with "liking," or "closeness," has reported that the rated "goodness" of therapists is correlated with the amount of similarity they assume between their patients and themselves (22). This finding was supported by Parloff (54), who found that therapists who construed their patients as more similar to their "ideal self" (i.e., to the therapists'
ideal self) were judged to have better therapeutic relationships. Although the small samples (in Parloff's study, only two therapists were involved), and the deficiencies of therapy-therapist ratings prevent us from considering these studies definitive, they do suggest the importance of construed similarity in interpersonal relationships. In general, good relationships and high assumed similarity seem to go hand in hand.

When we inspect the results of studies dealing with structural similarity, however, we find little consistency. For example, in studies that have attempted to study the relationship between the structural similarity of two persons and their accuracy in predicting each other, two studies (35, 59) report a significant positive relationship, two (53, 63) report positive relationships of unknown significance, and two (5, 11) report no relationship, or an insignificant negative relationship.

This is about what we would expect. Indirectly, structural similarity may exert an influence upon interpersonal processes: if two people share high structural similarity they will find their construed similarity validated, and their construed dissimilarity invalidated. However, this may not occur if they are unable to construe similarity between themselves. As with Bieri's negro-white pairs, individuals may continue to construe each other as
highly dissimilar, and receive little invalidation because they seldom associate with each other.

b. The Status of "Projection"

Workers in the area of interpersonal understanding have frequently been troubled by the suggestion that they may really be measuring projection when they think they are measuring understanding (5, 18, 26, 36, 39). Unfortunately, the concept of projection has become so broad and so oversimplified that it is difficult to know what, if anything, it is supposed to mean. In the published reports the term "projection" has been applied to assumed, but inaccurate similarity in predictions, to the approach to understanding others used by some subjects, and even, it seems, to any inaccuracy of prediction!

Since the favorite definition, in terms of frequency of use, is Hastorf and Bender's: "...the attribution to others of one's own needs, interests, and attitudes" (36), it may be better to drop the term projection entirely, in favor of "construed similarity," which is more descriptive and less ambiguous.

The psychoanalytic definition, which stresses the unconscious aspects of projection as a defense mechanism, has appeared extremely rarely in research literature. None of the people currently engaged in research on interpersonal understanding has structured his operations in terms of
psychoanalytic "projection."

c. Two Kinds of Accuracy

In discussing the concept of "similarity" between individuals, we emphasized the importance of the distinction between the experimenter's measures of similarity, and the degree of similarity perceived by the subject. This dimension applies with equal force to the concept of "accuracy" of interpersonal prediction.

We shall use the term accuracy to mean the "rightness" of one subject's predictions about another, as measured by the experimenter. There is no need to find a term to describe the subject's estimate of the "rightness" of his predictions; it was referred to earlier as validation (p. 11).

By this time there is probably not much doubt about which kind of "rightness" we will bet on. We have stated earlier that an individual revises his constructions and predictions on the basis of his validation estimates. Therefore, if we wish to predict his behavior, it is more important for us to know whether he thinks he was right, than to know just how many "hits" he had by our count. Probably there is some degree of correspondence between our objective measures and his subjective evaluation, but unfortunately no research on this correspondence exists at present. A few studies have come close, though. Poch (55),
for instance, found that if she told subjects certain predictions were "generally accurate" or "generally inaccurate," the constructs upon which the "accurate" predictions had been based remained stable and tended to be used again, whereas the constructs upon which the "inaccurate" predictions had been based changed, and tended to be abandoned. None of the literature reviewed, however, attempted to ascertain the subject's estimate of the validity of his predictions; there is plenty of room for research here.

d. The Concept of "Empathy"

We pointed out earlier that empathy has been the only concept to find its way into the writing of many of the psychologists who have been doing research on interpersonal understanding. We also suggested that if we examined it closely it might be a not wholly adequate concept. That is what we shall do now.

The chief exponent of empathy has been Dymond (16, 17, 18, 19, 20). She defines empathy as "...the imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does" (17, p. 127).

In the same paper from which this definition of empathy was taken, Dymond states that projection is "antithetical" to empathy. She says:
Projection seems to be an antithetical process to empathy since projection involves the attribution of one's own wishes, attitudes and behavior to some thing, or some one other than the self. If projec­tion is involved, therefore, the thoughts and feel­ings of the self are attributed to the other rather than those of the other being experienced. The individual who attempts to understand the behavior of others using projection as the mechanism, assumes that 'Since this is how I would feel if I were in his situation, this is how he must feel' (18, p. 344).

Not only does it seem to require an awfully close shave to separate these two concepts, but of the two, it is projection that sounds the more intelligible. At least as she defines projection it has a tentative quality of con­struing the other person on the basis of experience in this world. Empathy on the other hand suggests that one can really know how things look from inside another person.

This may be demonstrated more dramatically by the following two definitions:

(1). "They (investigators) have recognized for some time that patterns of thoughts and feelings are transmitted from one person to another during social interaction, in a manner quite outside the realm of direct verbal or written communication" (63, p. 75).

(2). "(It is)...the exchange of ideas or feelings between persons...under conditions which patently belong to another realm of discourse from that of the use of the sense organs" (50, p. 89).

One is a definition of empathy used by an exper­i­menter in a recent article, the other is a definition of spontaneous telepathy.

The haziness of conceptualization surrounding
empathy was also pointed out by Gage and Cronbach: "...one test of empathy finds out how accurately subjects predict the ratings acquaintances will give them. Another test of empathy requires that subjects estimate the musical preferences of the average factory worker. Not surprisingly, these tests correlate only .02" (26, p. 411).

Another of Cronbach's criticisms of the current experimental approach to empathy was: "...of late, workers have seemed content to regard 'empathy' as 'what empathy tests measure'" (13, p. 177). Dymond states: "The author hoped that the same method which proved of such value in solving some of the important problems in the area of intelligence, the construction and standardization of a test, could be successfully applied to this area of empathy" (18, p. 344).

In view of the halo of uncertainty which surrounds the concept of empathy, it would seem to be no great loss to drop the term entirely. It was designed to explain the processes by which one individual obtains the information on which he bases his predictions of another. In practice, however, it seems only to offer an untestable explanation which, if anything, discourages research on these processes. From the theoretical approach we have assumed here, we have no need for empathy, for the events which it was intended to subsume are already bracketed by our basic postulate and its corollaries.
2. Research Results and the Construction-Prediction-Validation Sequence

In the psychological literature on interpersonal understanding, some aspects of the construction-prediction-validation sequence have been intensively studied, while others have been virtually ignored. Of course, it must be admitted that workers in the field have not been using this sequence as the theoretical model for their studies, so perhaps this lopsided emphasis is not too surprising.

In reviewing the literature we shall use four major sub-headings: a. Personality and Prediction- studies which have implications for the relationship between characteristics of an individual's construction system and his predictions of others, b. Situational Influences- studies which have implications for the relationship between certain aspects of the situation within which predictions are made and their influence on the predictions, c. Information and Prediction- studies relating to the influence of the kind of information the predictor possesses about the predictee upon his predictions, and d. Prediction Effects- studies which point up the relationship between predictions and subsequent events in the interpersonal situation.

a. Personality and Prediction

Adjustment and Prediction: No very convincing study has been reported linking adjustment (variously
measured) with accuracy of prediction. Jackson and Carr (39) found that, when predicting their best friend's responses, student nurses were more accurate than female schizophrenic patients. They were also more accurate in predicting the responses of patients as a group, but not more accurate when predicting nurses as a group. These results are not entirely unequivocal, however, for the patients' "best friends" were chosen from among their fellow-inmates, while the nurses' "best friends" were chosen from among their acquaintances in a more intimate class that had both opportunity and incentive to know each other well. Then, too, it would be expected that the nurses, through staff conferences, case studies, etc., would come to learn a good bit more about the patient group than the patient group could learn about the nurses.

Wittich (69), working with enlisted airmen who had worked together in small groups, reported a correlation of .11 between adjustment scores on the Bell Adjustment Inventory and accuracy of prediction of other group members' responses to the same instrument. In another study, Lindgren and Robinson (46) selected the five worst and the seven best "empathizers" (as indicated by Dymond's test) from a group of 87 subjects, and administered the MMPI to them. In general, the good empathizers got better MMPI scores than the poor empathizers. Neither of these
studies suggest very strongly that adjustment (at least as measured by screening tests) and predictive accuracy are related.

Similarly, Davids (14) found a positive, but insignificant correlation \( r = 0.14 \) between "alienation" (attributing socially undesirable traits to oneself) and inaccuracy of estimates of the responses of an "average Harvard student."

Speroff (61) studied the relationship between accident-proneness and "empathic ability" (the accuracy with which subjects can estimate the musical preferences, reading interests, and chief annoyances of an "average man"). His finding suggested a highly significant relationship between good "empathic" ability and good accident record. This study has been cited in several reviews in support of the hypothesized relationship between interpersonal understanding and adjustment. However, its support is vitiated by a "Correction and Apology" which appeared later in the same journal in which the study was published. Through an error in calculation, the Critical Ratio had been reported as 4.14; actually the correct figure was 0.414 (62).

In addition to the insignificant positive correlations between adjustment and interpersonal understanding, one insignificant negative correlation was found. In a previously mentioned study by Bieri, Blacharsky and Reid
(7) a correlation of $>.19$ was reported between adjustment, measured by the Rotter ISB, and predictive accuracy, when predicting friends' responses to the Taylor Manifest Anxiety Scale.

From some points of view, "insight" is considered an indication of good adjustment. If agreement between an individual's ratings of himself, and the ratings given him by a group is accepted as a definition of insight, then there is some support for the hypothesis that insight and predictive accuracy are related. Adams (1) found a correlation of $.25$ between insight and accuracy, and Dymond (18) reported a correlation of $.65$ for the same variables.

"Implicit Personality Theories" and Prediction: Luft (46) has suggested the term "implicit hypotheses" to represent the tendency of subjects to link various trait-names—i.e., a person described only as "kindly" may be gratuitously attributed "warmth," "generosity" and "intelligence." We are using "implicit personality theories" to mean the same thing; it amounts to what Kelly (43) has referred to as "construct linkages"—the connections an individual makes among various constructs. For example, for a person to describe another as "independent" may imply that he is also "sincere" and "controlled." Naturally, not all implicit personality theories are as preemptive as the example above, nor as invidious as most stereotypes (e.g.,
stereotypes about "Jews" and "Niggers"). Relatively few studies have dealt directly with the effects of these implicit theories.

In a suggestive study by Gollin and Rosenberg (30), subjects were shown a movie in which a woman was portrayed as promiscuous, but kind. They then wrote descriptions of her character. Gollin and Rosenberg found that some subjects tended to integrate the two themes, others presented both themes without integrating them into a consistent personality description, while a third group selected one of the themes and ignored the other—to them the star was either promiscuous or kind, but not both. We would expect that in their dealings with others, the subjects who tended to use primarily preemptive constructs (i.e., "Nothing but...": "If she is promiscuous, she is nothing but promiscuous") would also tend to be less accurate. This remains to be tested.

Asch (2) reported a series of experimental vignettes, in which he read subjects lists of adjectives (the subjects were told the adjectives all applied to a real person) and then had them write free descriptions of the "people." He found that the inclusion or exclusion of an adjective, or replacing it by its opposite resulted in distinctly different descriptions. In a follow-up to Asch's work, Kelley (42) gave students a brief "biography" of a substitute
instructor who was to take over their class for one day. The lists were all identical, with one exception. Half the lists included the word "cold" in describing the instructor, the other half had instead the word "warm." In the free descriptions written after the class, the subjects given the "warm" biography described the instructor more favorably than the subjects given the "cold" biography.

Riemers and Remmers (56) attempted to test the accuracy with which union officials could predict the responses of management personnel on the "How Supervize?" test (a test of "democratic" supervisory practices). The union officials attributed to management "...less understanding of good supervisory attitudes and methods than it actually (has)" (56, p. 436). However, these results tell less about how union leaders perceive management personnel in general than about their implicit theories about one unfavorable stereotype, for they were attempting to predict the responses of a "typical company man" (p. 429), which, for most union members is an epithet.

It might be expected that the implicit personality theories of clinical psychologists would arouse the interest of research workers. However, like psychotherapy, clinician's implicit hypotheses have come in for little experimental scrutiny. The only study which seemed to fit this area was performed by Fiedler and Senior (24), who found
that therapists tended to underestimate the extent to which patients they were currently seeing in therapy actually corresponded to their ideal (i.e., to the therapist's conception of how he would ideally like to be). This finding must be viewed with caution, though, for of 84 correlations in this study, only three were significant at the .05 level; we could expect to find four by chance alone!

**Age, Intelligence, Sex and Prediction:** With the exception that sixth-grade children tend to predict their classmates' choices of preferred activities better than second-grade children (20), no consistent relationships between interpersonal understanding and either age or intelligence have been reported.

Sex differences, however, do crop up. In general there is a tendency for women to be better predictors of others than men. Two studies reported that husbands were more accurate than their wives, when each predicted the other (12, 53), and one reported no difference (11). However, when predicting persons other than one's spouse, women consistently out-predicted men (9, 17, 18, 68).

"The Good Judge of Personality": In 1927, Adams published a study entitled "The Good Judge of Personality" (1). As a result of his study of the ability of subjects to predict each others responses, he concluded: "The good judge of others tends to be touchy, quick of temper, glum
and moody, and lacking in courage. (He)...tends to be either antisocial or indifferent" (pp. 179-180).

In 1950, Dymond, on the basis of a similar study, reported that the "good judge of others" tended to be warm and affectionate, and to like others, while the "bad judge of others" tended to be a lone wolf, mistrustful and egocentric, who uses other people for his own purposes, and for power and status (18, pp. 348-349).

According to these results the good judge and the bad judge appear to have exchanged personalities during the interval. The good and bad judge have been called a lot of other names, too (9, 14, 45) but it does not seem worthwhile to list them. Underlying these "good judge-bad judge" studies is the assumption that there are certain "kinds" of people who are, in all (or at least most) times and places good judges of others, and other "kinds" who are not. The problem then, is to sort them into piles and label them. But unfortunately, as the contradictory results from various "sorting" studies show, the subjects repeatedly refuse to fit into the experimenter's pigeonholes.

Another possible approach is to view good judging as a resultant of a combination of factors, including, in addition to the judge's personality, the circumstances under which the predictions are made, the information the judge possesses about the predictee, the behavior he is attempting
to predict, etc. The theory we have adopted here attempts to specify some of these factors, and to construct verifiable hypotheses to test them.

b. Situational Influences

The study of situational influences upon interpersonal prediction has not proved to be popular among research workers. None of the studies reviewed was intended by their authors to be investigations of situational effects, but a few seemed to have implications for this area, even though their main focus was elsewhere. Webb (67), for example, compared group- and self-ratings of intelligence with the scores actually obtained on the Otis Quick-scoring Mental Abilities Test. He found positive, but insignificant correlations. The subjects were naval aviation cadets, who had occasion to know each other's abilities very well after 15 weeks of living and working and going to class together; they should have done better. Since they were well acquainted, and since their ratings presumably could effect each other's chances to be accepted for flight training (in addition to ratings on intelligence, they rated each other on probable success in flight school and as a pilot), we might expect a marked tendency to "rate good," thus lowering the correlation with measured intelligence, which presumably would be less "fakable." The author, however, did not present enough statistical information to test this hypothesis.
A number of studies have been reported in which the predictions of leaders were compared with the predictions of non-leaders. Since leaders are in a position to have access to more members of the group more often than non-leaders, they should probably be more aware of the majority opinion of the group members, and hence, be better able to predict the modal response of the group members on various issues.

Chowdhry and Newcomb (6) reported that leaders consistently predicted group opinion better than non-leaders on issues relevant to the group, but not on issues irrelevant to the group. Similarly, Greer, Galanter and Nordlie (31) found that army rifle squad leaders predicted the group preference hierarchy more accurately than non-leaders. Trapp (66) studying the interpersonal patterns and typical constructs of leaders and non-leaders among sorority girls also found the leaders to be the more accurate predictors of group members' responses to a modified Rosenzweig picture-frustration test. Negative results were reported by Hites and Campbell (38). They found no difference in accuracy between leaders and non-leaders. However, their study is less than convincing. The subjects were fraternity students, the "relevant" issues were "...day to day problems such as food, housing, and group dissensions, with which every leader should be vitally concerned" (p. 99). It seems
somewhat unlikely that fraternity groups would be "vitally concerned" about food and housing. Then too, the predictions were made to a 19-item scale, subdivided into five different areas. This would mean that the predictions for any one area were based on only three or four items. For the present, the weight of evidence favors the hypothesis that leaders predict group opinions on issues important to the group more accurately than non-leaders.

c. Information and Prediction

In this section we shall be considering studies dealing with the influence upon prediction of varying kinds and amount of information about the predictee. Although relatively little has been done in this area, some suggestive findings have been reported.

**Minimal Information:** Two "mass empathy" tests have been published. One, by Norman and Ainsworth (51) requires subjects to guess the responses of "most people your age and sex" to the Guilford-Martin Inventory of Factors CAMIN. The other, by Kerr and Speroff (44) requires them to guess the musical preferences, reading preferences, and common annoyances of the average factory worker. However, they have not published regarding factors influencing accuracy other than the lack of correlation between tests of "mass empathy" and individual measures of predictive accuracy (3, 34, 52).
Observation of Predictee, With and Without Interaction: An interesting study by Giedt (29) indicated that, in attempting to predict a subject's ISB responses, knowing what he said in an interview was more important than knowing what he did. Giedt exposed clinically-oriented judges (psychologists, psychiatrists, and social workers) to four experimental conditions: a. Judges watched a sound-movie of an interview, b. Others heard only the sound-track from the movie, c. Others read a typescript of the interview, and d. the fourth group saw only a silent movie of the interview. Predictions based on sound-movie, sound-track, and typescript were not significantly different from each other, but all were significantly better than predictions from silent-movie.

When observation and interaction are combined, as in an actual interview between the predictor and predictee, predictions should be even more accurate, but this has not been studied. One study, however, did compare the effects of different orientations during an interview. Lundy (48) instructed some subjects to attend to themselves during an interview, and others to attend to their partner. He found that the "attend to the other" subjects predicted their partners more accurately than the "attend to yourself" subjects.

"Objective" vs "Subjective" Information: In an
earlier section (p. 10) we used "subjective" to mean, essentially, "what a person says about himself," and "objective" to mean "what others say about him." We shall continue to use them here in the same sense.

No studies could be found that investigated the effects of objective information upon accuracy of prediction. The previously cited studies by Asch (2) and others (33, 42, 49), revealed that systematic changes in descriptions of hypothetical people could be obtained by systematic changes in the adjectives used to introduce the person, but no measures of accuracy were obtained, even in those studies in which "real" people were involved.

Soskin (60) studied the effects on predictions of knowing a subject's Rorschach responses. The elaborate system of interpretation that has been built around the Rorschach takes it out of the realm of our definition of subjective information. The subject's responses to the Rorschach are considered, not so much from the position of what the subject intended to convey, as from a more or less rigidly codified theoretical position. The influence of this codified position upon prediction was demonstrated by Soskin (60). Using a graduate student as the subject, Soskin constructed a special test which described fifty situations involving the subject; for each item there were five alternative actions, only one of which actually
represented the subject's behavior in the situation described. The behaviors for the test were collected through interviews with the student, with his wife, and with various of his friends. In addition, actual observations were made in his home and while he was at work. This test was then administered to eight judges (7 psychologists and 1 psychiatrist), who attempted to guess which alternatives were "true." The judges were next given the subject's Rorschach protocol to study. Then they again tried to guess which alternative represented the subject's actual behavior in the situations described. The first time around, the judges attributed more "adjustive" than "maladjustive" behaviors to the subject. But the second time, after having seen his Rorschach responses, they attributed more "maladjustive" than "adjustive" behaviors to him. This difference was significant at the .01 level (60, p. 127).

d. Prediction Effects

In this section, two topics will be considered. The first is the relationship between prediction and certain "social" events (i.e., sociometric choice, amount of interaction, etc.). The second is the effect of validation and invalidation upon subsequent events.

**Prediction and Choice:** Studies by Davitz (15), and Fiedler, Warrington, and Blaisdell (25) indicated a significant positive relationship between the degree of
similarity an individual saw between himself and another and his tendency to choose the other on a sociometric device. In an interesting study designed to control both the "cues" from the predictee, and the "expectations" of the predictor, Grossack (32) presented group members with two sets of descriptions. Each subject was given a set of instructions that amounted to his "role" in the group, and a set of "notes" supposedly written by each of the other subjects. After a discussion period the subjects ranked each other on "contribution to the meeting" and friendliness, and indicated who they would choose as a partner for another meeting. In general, the subjects who had been described as "cooperative" were preferred to the subjects described as "competitive." However, the subjects who had themselves been given a "competitive" role to play tended to choose others who had been described as "competitive."

The influence of construction upon interaction was demonstrated in a previously mentioned study by Kelley (42). Students in an undergraduate course were told that their regular instructor was out of town, and that his place would be taken by a new instructor. They were given a short "biography" of the new instructor; the biographies differed in one detail—for half the class the words "rather cold" appeared in the biography, for the other half the words "very warm" were used. When the students
were asked later to write free descriptions of the new instructor, those given the "warm" biography described him more favorably than those given "cold" biography. In addition the students who saw the instructor in a favorable light tended to initiate interactions with him more frequently than the students who had unfavorable impressions of him. Kelley also reported:

Persons having unfavorable impressions of the instructor at the end of the first class meeting tended less often to initiate interactions with him in the succeeding four meetings than did those having favorable first impressions. There was also some tendency...for those persons who interacted least with the instructor to change least in their judgments of him from the first to later impressions (42, p. 438).

In a similar vein, we might mention Bieri's (6) finding that white-white pairs of subjects had a higher level of interaction and shifted more in the direction of assumed similarity than negro-white pairs, and Shoemaker's (59) finding that persons with whom subjects felt more "comfortable" were predicted more accurately.

**Validation and Invalidation:** What happens to a construct when predictions based on it are validated or invalidated? Poch (55) attempted to answer this question by obtaining both predictions, and the constructs on which the predictions were based from subjects. She found that subjects who were informed that their predictions had been "generally accurate" tended to utilize the "validated"
constructs again in unchanged form. "Invalidated" constructs however, were changed, and tended not to be used again. This suggests that the clinicians in Soskin's study (60) probably perceived the Rorschach data as invalidating their predictions, since there was a significant shift in their predictions after Rorschach data was made available to them.

3. Summary

In spite of the recent spurt of interest in interpersonal understanding, most of the research that has been done must be considered tentative and exploratory. Workers have gone off in all directions looking for facts; only rarely has one worker attempted to follow-up or elaborate the findings of another. Nor is there evidence that the workers have been burdened by slavish subservience to theoretical frameworks. On the other hand, empirical study in this area is still new; reports of experimental results are still somewhat novel--no one has written a book about interpersonal understanding yet. Therefore, our summary will be looking more to the future than to the past.

Various studies that have attempted to demonstrate relationships between interpersonal understanding and loosely conceived personality variables have not been fruitful. Consistent relationships between predictive
accuracy and "adjustment" are not likely to be found. However, as the studies on "insight" indicate, predictable relationships can be expected between relevant, operationally intelligible constructs. There are both logical and theoretical reasons to expect certain aspects of an individual's construction system to be related to his ability to predict certain people (i.e., constructs he has available which he sees as applicable to the predictee, his "implicit hypotheses," etc.), but it is not likely that these relationships will be clarified by a brutally empirical approach—e.g., correlating Rorschach, TAT, MMPI, etc. scores with accuracy to discover the relationship between personality and ability to understand others.

The study of situational influences upon behavior is, in general, relatively untouched. Theoretical analysis is acutely needed, and even normative studies of "How Experimenters Interpret Experimental Situations vs How Subjects Interpret Them" would be valuable at present.

Gage and Cronbach (26) have used the term "Input" to refer to the information concerning the predictee that is available to the judge, or predictor. Studies in this area, though scarce, suggest that variations in the kind and amount of information available directly influence the predictions made. However, the important question of accuracy—i.e., "What sort of information increases accuracy?", has not been studied.
In any analysis of interpersonal understanding we eventually come to the problem of complex relationships among prediction, interaction between persons, changes in prediction, etc. The question of whether or not predictive accuracy is related to effectiveness in social relationships has been little studied. Chowdhry and Newcomb (8), Greer, et. al. (31), and Trapp (66) found that leaders tended to predict the responses of group members more accurately than non-leaders. Also, Kelley's study (42) indicated that if one person views another in an unfavorable light, he tends to avoid him, and thus has little opportunity to revise his opinion. It would be interesting to know whether forced interaction leads to a shift toward more favorable constructions of the other person. Another question of importance here is: how much, or little, inaccuracy is needed to invalidate an individual's construction of another? Like the problems mentioned earlier in this summary, to find the answers to these questions will require further research.
CHAPTER IV

BIOGRAPHY OF THE HYPOTHESES

In its original, tentative form, the main hypothesis of this dissertation was: "understanding how another person sees things is a better basis for a cooperative relationship than understanding how others see him." Essentially this was a restatement of the Sociality Corollary (p. 8) in a form amenable to experimental test.

It was pointed out earlier that little is known as yet about the influence upon prediction of information regarding the predictee. This study was intended to clarify some of the questions relating to the relative influence of what we have called "subjective" as opposed to "objective" information about the predictee (pp. 35-37).

1. The Pretest Period

In order to test the hypothesis that understanding how another person sees things is a better basis for a cooperative relationship than understanding how others see him, it was necessary to devise operations for: a. "How he sees things" vs "How others see him", b. "understanding," and c. "cooperative relationship."

a. "How he sees things" vs "How others see him"

The Role Construct Repertory Test (Ren Test)
originated by Kelly (43) utilizes the familiar concept-formation task procedure to study some of the typical constructs an individual uses to understand various common figures, i.e., friends, family, etc. Because of its flexibility of administration the Rep Test could be adapted to provide both the "objective" and "subjective" information needed. That is, if an individual were listed as a figure on the Rep Tests of several people who knew him, the constructs they formed when sorting him with others could be used as information about "how others see him." The same individual's own Rep Test constructs could be used as information about "how he sees things."

It will be recalled that earlier in this paper we used the term "Personal Construct" to refer to "how he sees things" (i.e., the constructs used by an individual), and the term "Group Construct" to refer to "how others see him" (i.e., the constructs used by others when describing the individual) (p. 10). We shall use the terms "Personal Construct" and "Group Construct" from this point on with these meanings in mind.

From the point of view of the predictor who is attempting to understand another person, it is necessary to construe the information given him about the other. We have differentiated the constructs used by the predictor on the basis of the kind of information given him (pp. 10-11).
Given another individual's Personal Constructs, the predictor forms "Role Constructs" (i.e., constructs whose elements are the constructs of another person) about him. Given the Group Constructs applied to the individual, the predictor forms "Part Constructs" (i.e., constructs whose elements are the constructs other people have used to describe the person) about him. When we use the terms "Role Construct" and "Part Construct" these are the meanings we shall be intending to convey.

b. "Understanding"

The touchstone for interpersonal understanding is prediction. This hard-headed, pragmatic approach has appealed to many workers, with the consequence that the predictions of judges have been compared with the actual responses of predictees on a wide variety of instruments, including social behavior inventories (4), personality questionnaires (23), leadership questionnaires (27), inventories of values (37), etc.

For this study, a specially constructed questionnaire was used. True-false items were selected from a large number of different instruments, with three criteria in mind: (1) the items must be socially oriented—that is, the response must be related to interpersonal behavior or attitudes, (2) the items must be reasonably easy to predict on the basis of short acquaintance—both obvious
(e.g., "I frequently pick my nose in public") and extremely subtle (e.g., "I think my parents' attitude toward me was unfair") items were eliminated, and (3) the items must be first-person declarative statements—complex, qualified statements were eliminated.

c. "Cooperative relationship"

Exigencies of time and availability of subjects prevented taking actual comparative measures of relationships over a period of time. Consequently, a putative cooperative relationship was designed, and sociometric choice of partners for such a relationship were used in the place of more direct measures.

The "potential relationship" used was invented with several qualifications in mind. In the first place, the relationship was intended to demand ability to understand, and to be able to anticipate the reactions of the chosen partner. In addition, to encourage the interest of the subjects in their choice for the relationship, it was structured in somewhat dramatic terms. To fill these requirements, the subjects were to be instructed to choose a partner for an espionage mission. It was emphasized that some risk was involved, and that understanding of the partner was crucial, but the nature of the espionage mission itself was allowed to remain ambiguous. This was done to diminish, as much as possible, any tendency to
choose partners for reasons of special ability or knowledge, which would be irrelevant for our purposes.

2. Pretest Procedure and Results

   a. Controls

   A common method of controlling variables is to match groups of subjects on the variables before exposing them to the experimental conditions. Our theoretical approach, however, emphasizes the individuality of persons, and leads us to suspect controls which attempt to match one subject with another; too many uncontrolled differences can still remain to influence one's results in unsuspected ways.

   In view of this, we attempted to make each subject his own control. Essentially, this means that each subject was exposed to all experimental conditions. Results were then compared for the different experimental conditions as they affected each individual; the subject's responses under one experimental condition were compared with his response under a second experimental condition.

   In order to do this with our subjects, it was decided to have them meet in groups of three. Each individual would be given "objective" information about one of his group-partners, and "subjective" information about the other. The relative influence of each kind of information could then be measured by comparing, for each person, his
predictions when given "objective" and when given "subjective" information. The influence of the two kinds of information upon his choice of a partner could also be measured in the same way.

b. Pretest Procedure

Several groups of subjects, both male and female, were obtained from elementary psychology courses at the Ohio State University. In all, 24 subjects took part in the pretesting.

The subjects first met as a group and were administered the Rep Test. Unfortunately for our purposes, none of the subjects was acquainted; as a result, it was impossible to obtain Group Constructs. In order to test the basic design, a different dimension of information was substituted; each subject's Rep was scanned quickly, and two lists of constructs prepared. The first list contained "psychological constructs" (i.e., constructs that described others in terms of attitudes, "traits," or interests—for example: "has a lot of personality" vs "little personality," "lose patience easily" vs "very patient," etc.), and the second, "circumstantial constructs" (i.e., constructs which described others in terms of social position, physical characteristics, or achievement status—for example: "both professional women" vs "a student," "male" vs "female," "war veterans" vs "never served," etc.).
The subjects were divided into trios; each subject was given the "psychological constructs" of one of his partners, and the "circumstantial constructs" of the other. The subjects studied each other's construct lists for several minutes. After studying the lists, they conducted a 10-minute discussion. The topic for the discussion was a vacation the three of them might take together (previous studies by Bieri (6) and Lundy (48) have indicated that this topic provides for fairly easy agreement to be reached, produces a high level of interaction, and is within the acquaintance of college students). The subjects were instructed to pay attention to each other, since they would be asked to predict certain things about each other and to choose one of their partners to accompany them on the previously described espionage mission.

c. Pretest Results

The results suggested that knowledge of another's psychological constructs resulted in more accurate prediction of his responses to the questionnaire items than knowledge of his circumstantial constructs. This was clearly not a test of the effectiveness of Role Constructs as opposed to Part Constructs; since the predictors were basing their constructions in all cases upon the predictee's own constructs, only Role Constructs were involved. However, the differences in accuracy suggested that we might expect
predictable differences for our main hypothesis.

It was apparent, on the other hand, that we would have to select our subjects in such a manner that it would be possible to obtain both Personal Constructs and Group Constructs for each member of the group.

Insofar as choice of partner was concerned, the kind of constructs given to the person doing the choosing did not seem to make any difference. But the data did reveal that subjects tended to choose the partner they predicted better, regardless of the kind of constructs they were given.

Finally, the pretest data indicated that subjects who themselves tended primarily to use psychological constructs were the more accurate predictors.

d. Implications of the Pretest Results

The finding that differences in the kinds of constructs given to predictors seemed to make a difference in the accuracy of their predictions suggested that we were probably on the right track, though we should have to pay attention to our selection of subjects in order to obtain the two kinds of constructs upon which our hypothesis was based.

We had expected that choice of a partner for the espionage mission would be related to understanding; this was part of our original hypothesis. The pretest data
suggested that the relationship might be somewhat complex, however. Given a perfect correlation between kind of information and understanding, choice would seem to follow directly. Since this correlation was not perfect, it would be necessary, in our experimental hypotheses, to consider both relations, i.e., between information and choice, and between understanding and choice.

Our pretesting also indicated that there might be differences in accuracy attributable to factors not directly related to the kind of information given the predictor. For instance, the characteristic approach of the predictor to others, that is, whether he tended to construe others in what we have called psychological as opposed to circumstantial terms seemed related to accuracy. It would, therefore, behoove us to take account of these potential influences upon accuracy in our hypotheses.

Finally, there was some doubt whether or not the espionage mission might be too dramatic and unlikely to be appropriate for female subjects. An inquiry was conducted during pretesting to determine whether the female subjects would respond differently if the choice of partner were predicted on less glamorous terms. The results indicated that they would not have responded differently, and that they favored retaining the espionage mission over several possible alternatives that were suggested--
e.g., summer camp counselor, business partner, etc.

3. Experimental Hypotheses

**Prediction Hypothesis**

I. An individual's understanding of another person will be more accurate if he construes the other person with Role Constructs rather than with Part Constructs.

**Choice Hypotheses**

II. An individual will choose as his partner in a projected cooperative relationship a person whom he has construed with Role Constructs in preference to a person whom he has construed with Part Constructs.

III. An individual will choose as his partner in a projected cooperative relationship a person he understands more accurately, whether he has construed the person with Role Constructs or Part Constructs.

**Control Hypothesis**

IV. An individual who characteristically construes others with psychological constructs will understand others more accurately than an individual who characteristically construes others with circumstantial constructs.

Even though we used subjects as their own controls, there was the possibility that systematic influences from various sources could be associated with accuracy of prediction. Like the previous hypothesis, these control hypotheses are intended to account for some of the major inter-individual differences which might influence accuracy. On theoretical grounds we did not expect these
variables to be significantly related to accuracy of prediction; therefore they are stated in null form.

V. An individual's age is unrelated to the accuracy of his understanding of others.

VI. An individual's college rank is unrelated to the accuracy of his understanding of others.

VII. An individual's intelligence test rank is unrelated to the accuracy of his understanding of others.

VIII. An individual's sex is unrelated to the accuracy of his understanding of others of the same sex (although both sexes were represented in our sample, subjects were all assigned to like-sex groups).
CHAPTER V

PROCEDURE

1. Sample

The subjects for this study were all students in an elementary course in educational psychology. Four different classes took part in this experiment, numbering, in all, 110 students. However, attrition took its inevitable toll. The final sample, for whom complete data were available, numbered 72. There were 48 females and 24 males, primarily majors in education, with an age range from 17-26. Although all year levels were represented, the sample contained mainly freshmen and sophomores (42 freshmen, 22 sophomores, 5 juniors, and 3 seniors). Intelligence test scores, from the Ohio State Psychological Examination, approximated a normal distribution.

2. Method

The data were collected during three regularly scheduled classroom meetings; the entire class took part in each meeting.

a. First Meeting

Before the first experimental session the regular classroom instructor introduced the Experimenter (E) to the class, and explained briefly that they had been
selected to take part in an experiment dealing with interpersonal relationships.

The Acquaintance Check List (Appendix A)—somewhat misnamed, since the subjects actually wrote a free list of the names of classroom friends—was then administered. This concluded the first meeting.

The Acquaintance Check List was designed to obtain the names of others in his class who were reasonably well-known to each individual. From these lists were taken the names of persons whom the individual would construe during the second meeting.

Between meetings an individual Rep Test (Appendix B) was made up for each class member. These specially constructed tests contained sixteen figures, to be sorted on sixteen different sorts. Eleven of the figures were taken from Kelly's figure list (43, p. 227). The remaining five were classmates (Appendix B).

b. Second Meeting

The second meeting took place from three to five days after the first meeting. At this time, the prepared Rep Tests were distributed. Instructions for filling out the Reps were read to the class, and demonstrated (Appendix B). When the subjects had completed the Rep Test, they each filled out an Information Sheet (Appendix C) on which they indicated their age, college rank, etc. This concluded
Rep Test constructs are formed on groups of three figures ("triads") selected from the total list of figures. These triads are the principal elements in the construct formed on them, that is, the construct is specifically designed to indicate "a way in which two of them are alike, and at the same time different from the third" (43, p. 222). Thus, although the construct may be extended to include other figures, its focus of convenience (the elements for which it is maximally relevant) is the triad on which it was formed.

Now each person in our sample appeared in the figure lists on the Reps given to five of his classmates. On each of these Reps he appeared as a principal figure in three different triads. Thus, for each person, we were able to obtain fifteen constructs which included him within their focus of convenience. These were our Group Constructs for that person. For each person, a list was made of the Group Constructs applied to him; the lists were typed on 5x8 paper, and titled: "Constructs used to describe: (subject's name)" (Appendix D).

The Personal Constructs for each individual were obtained directly from his own Rep Test. These were also typed in lists, and titled: "Constructs used by: "subject's name)" (Appendix D).
The information sheets were our source of data for the subjects' sex, age, and college rank. Intelligence test scores (Ohio State Psychological Examination) were obtained from the university's files.

c. Third Meeting

The third meeting followed the second by about a week. First, the questionnaire we had developed was administered. The questionnaire contained 39 true-false statements dealing with social attitudes, behaviors, and interests. It was titled simply "Questionnaire, Personal Form" (Appendix E). The subjects were instructed to encircle either "T" or "F" depending on whether or not they believed the statement to be true or false for themselves (Appendix E).

After all the subjects had completed the questionnaire they were assigned to groups of three. Composition of the groups was determined by two factors: (1) the three members were to be of the same sex, and (2) none of the group members was to have been mentioned on each other's Acquaintance Check Lists.

At this point a prepared explanation of the experiment (Appendix E) was read to the subjects. It was explained that mutual understanding and choice among espionage agents was important for survival and success, and that, by taking part in the experiment, the subjects
were contributing to the study of this relationship.

The subjects were requested to assume that they were all candidates for an espionage mission, and were all equally well qualified. The importance of understanding their partners was emphasized. E explained how the construct lists might be used to help understand another person.

The subjects were told they would have a fifteen minute discussion period, during which they were to plan a vacation the three of them might take together. They were instructed to use the period to learn as much as they could about the outlooks of their discussion partners, since they would be asked later to choose one of these partners to accompany them on the espionage mission, and to predict certain things about each of them.

The subjects then introduced themselves, and were given the construct lists for each of the others in their group. They were given Group Constructs for one partner, and the Personal Constructs of the other. After they had studied the construct lists for five minutes the discussion period was begun.

Following the discussion period the subjects filled out the "Questionnaire, Prediction Form" (Appendix E). The items on this questionnaire were identical with the items on the "Personal Form," but this time the subjects were
instructed to respond as they believed each of their partners had responded. They also chose one of the others for the espionage mission. This concluded the third meeting.

3. Experimental and Statistical Measures

a. Role Constructs vs Part Constructs

During one part of the experiment each subject attempted to predict the questionnaire responses of two others. For one of the predictees, he had a list of Personal Constructs, i.e., constructs which that predictee had used on his own Rep Test. In construing this predictee, the predictor used Role Constructs, i.e., constructs which have as their elements the constructs of the other person.

For the other predictee, he had a list of Group Constructs, i.e., constructs used by various people to describe the predictee. In construing this predictee, the predictor used Part Constructs, i.e., constructs which have as their elements, not the constructs used by the predictee, but the constructs applied to him by several people who know him.

However, constructs are two-ended propositions. There are always two poles, representing the construct dichotomy, e.g., "tall vs short," "male vs. female," etc. Thus when Group Constructs are used to describe an
individual, it is really a dimension that is applied to him. Our theoretical position commits us to the view that it is the nature of the dimension rather than an individual's specific locus on the dimension that is important. On the other hand, it is possible that knowing both the dimension and the individual's position on the dimension would convey more information than knowing the dimension alone. Consequently, the subjects in this experiment received two different forms of Group Constructs: (1) Structured Group Constructs, giving both the dimension and the individual's position on the dimension--e.g., "Tall - Short"; the underlined term indicating the pole of the dichotomy actually applied to the person being described, and (2) Unstructured Group Constructs, giving only the dimension--e.g., "Tall - Short"; without indicating which pole had been specifically applied to the person being described. As a result, three comparisons of accuracy were made. First, the accuracy of predictions from Role Constructs was compared with the accuracy from Part Constructs (regardless of the form of Group Construct upon which the Part Constructs were based); second, accuracy from Role Constructs was compared with accuracy from Part Constructs which were based upon Structured Group Constructs; and third, Role Construct accuracy was compared with the accuracy of Part Constructs based upon Unstructured Group Constructs.
b. Accuracy Measure

Our measure of accuracy was simply the number of hits made by a predictor. That is, the number of responses correctly predicted was counted for each prediction; the total number of such correct predictions was used as a measure of accuracy.

c. Psychological vs Circumstantial Constructs

The number of psychological, as opposed to circumstantial constructs used by each subject was determined by rating each construct on his Rep Test as either psychological or circumstantial. Subjects who were judged to have used ten or more psychological constructs were considered to "characteristically construe others with psychological constructs," and those who were judged to have used eight or fewer psychological constructs were considered to "characteristically construe others with circumstantial constructs." The reliability of the judgments was determined by comparing the results of four different judges on a sample of twenty randomly selected Rep Tests. Per cent agreement between pairs of judges ranged from 88.3 to 98.2; the mean for all the judges was 93.7 per cent.

d. Statistical Measures

In order to expedite data handling, all the data for each subject were coded and punched on IBM cards (see Appendix F for the IBM master code used).
Chi-square and Fisher's t-test were employed to test the significance of differences, using formulae from Edwards (21) and Jenkins (40). All significance estimates are from tables published in Edwards (21).
CHAPTER VI

RESULTS

1. Prediction Hypothesis

The experimental findings relevant to the Prediction Hypothesis are presented in Table I.

TABLE I

Comparison of Mean Accuracy Scores for Predictions Based Upon Role Constructs and Part Constructs

<table>
<thead>
<tr>
<th>Prediction</th>
<th>M</th>
<th>S</th>
<th>r(RC•PC)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Constructs</td>
<td>25.50</td>
<td>3.97</td>
<td>0.27</td>
<td>2.18</td>
<td>0.02</td>
</tr>
<tr>
<td>Part Constructs</td>
<td>24.28</td>
<td>3.82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subgroup I
Part Constructs based upon Structured Group Constructs (N=38)

<table>
<thead>
<tr>
<th>Prediction</th>
<th>M</th>
<th>S</th>
<th>r(RC•PC)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Constructs</td>
<td>26.00</td>
<td>3.28</td>
<td>0.07</td>
<td>2.18</td>
<td>0.02</td>
</tr>
<tr>
<td>Part Constructs</td>
<td>24.34</td>
<td>3.58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subgroup II
Part Constructs based upon Unstructured Group Constructs (N=34)

<table>
<thead>
<tr>
<th>Prediction</th>
<th>M</th>
<th>S</th>
<th>r(RC•PC)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Constructs</td>
<td>24.94</td>
<td>4.32</td>
<td>0.36</td>
<td>0.91</td>
<td>0.18</td>
</tr>
<tr>
<td>Part Constructs</td>
<td>24.20</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note - Significance estimates based upon formulae for correlated measures.
* one-tailed test
Our Prediction Hypothesis stated that an individual's understanding of another person will be more accurate if he construes the other person with Role Constructs rather than with Part Constructs. The hypothesis was supported at the .02 level of significance.

It had been suggested that the difference in amount of "information" conveyed by Personal Constructs might be equalized if predictors knew not only the dimension involved in Group Constructs applied to a predictee, but also knew the locus of the individual on the construct. Contrary to this suggestion, as Table I indicates, there is not a significant difference in the accuracy of predictions based upon Structured, as opposed to Unstructured Group Constructs.

Our results could also be compared to determine inter-individual accuracy in prediction. Each person was predicted by two others, one of whom construed him with Role Constructs, the other of whom construed him with Part Constructs. Therefore, for each individual, the relative accuracy of the two predictions made about him was compared. This comparison yielded a significant difference in favor of Role Constructs (t = 2.38, p = .02). Thus, our results indicate not only that an individual will predict another more accurately with Role Constructs than with Part Constructs, but also, that, between two individuals who are predicting the same person, the one who uses Role Constructs
will tend to be the more accurate in his predictions.

a. Control Variables and Prediction

Investigation of sex differences in accuracy of prediction revealed that the female subjects tended to be much more accurate in their predictions than males (t=4.71, p< .01). Since the t-test was inapplicable to the other non-dichotomous variables, the chi-square test was used. None of the other control variables was significantly related to accuracy of prediction, as Table II indicates.

TABLE II

<table>
<thead>
<tr>
<th>Variable</th>
<th>$X^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>College rank</td>
<td>2.94</td>
<td>3</td>
<td>.24</td>
</tr>
<tr>
<td>OSPE rank</td>
<td>.72</td>
<td>3</td>
<td>.85</td>
</tr>
<tr>
<td>Age</td>
<td>1.34</td>
<td>6</td>
<td>.70</td>
</tr>
</tbody>
</table>

2. Choice Hypotheses

Two potential relationships between understanding and choice were hypothesized. The hypotheses and results are stated below.

a. Choice Hypothesis I: An individual will choose as his partner in a projected cooperative relationship a person whom he has construed with Role Constructs in preference to
a person whom he has construed with Part Constructs. This hypothesis was not supported \( (X^2 = 2.00, p = .17) \). In fact, the trend was in the opposite direction—i.e., Part Construct partners tended to be preferred.

b. Choice Hypothesis II: An individual will choose as his partner in a projected cooperative relationship a person he understands more accurately, whether he has construed the person with Role Constructs or Part Constructs. This hypothesis was not supported \( (X^2 = .748, p = .40) \).

c. Control Variables and Choice

As Table III indicates, there were no significant relationships between individual choices and age, grade, or intelligence. Sex was inapplicable here since all choices were necessarily like-sex choices.

TABLE III
Control Variables and Choice of Partner

<table>
<thead>
<tr>
<th>Variable</th>
<th>( X^2 )</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>College rank</td>
<td>3.82</td>
<td>3</td>
<td>.30</td>
</tr>
<tr>
<td>OSPE rank</td>
<td>3.94</td>
<td>3</td>
<td>.15</td>
</tr>
<tr>
<td>Age</td>
<td>8.41</td>
<td>6</td>
<td>.20</td>
</tr>
</tbody>
</table>
3. Psychological vs Circumstantial Constructs and Prediction

On the basis of our pretest finding that subjects who more frequently used psychological constructs tended to be more accurate in their predictions of others, we had constructed the following hypothesis: An individual who characteristically construes others with psychological constructs will understand others more accurately than an individual who characteristically construes others with circumstantial constructs. This hypothesis was not supported ($t = 1.03$, $p = .20$). Rather, the trend was in the opposite direction.
1. Information and Understanding

Logically, we would expect that the more we know about someone, the better we should be able to predict his behavior. In fact, in this study we defined "how much" our subjects knew about each other in terms of "how well" they could predict each other. But if we go back a step and begin wondering how we can get to "know more" about another person, we immediately find ourselves in trouble. Psychologists of different theoretical persuasions would suggest a variety of different kinds of information "important" for understanding other people. What we attempted to do with our major hypothesis was to strike a dimension through these various kinds of information. Essentially we hypothesized that information "from" an individual would permit us to understand him better than information "about" him. Our results seem to support this position.

Our results also revealed a striking relationship between accuracy of prediction and sex of the predictor. The girls in our sample were significantly more accurate in their predictions than the boys. Similar findings have been reported in studies by Cline (9), Dymond (17, 18), and
Winslow (68). In all cases the subjects involved were college students. This is interesting, because two studies in which husbands and wives predicted each other reported the men to be the more accurate predictors (12, 53), and one reported no difference in accuracy between husbands and wives (11). These results are inconclusive, but suggest that husbands and wives probably do not differ in accuracy. It might appear at first that these somewhat contradictory findings were due to greater male proficiency in cross-sex (husband-wife) predictions, and greater female proficiency in like-sex (one female student predicting another, as in this study) predictions. However, three of the four studies which reported greater accuracy for female students (9, 17, 18) involved cross-sex predictions. Perhaps the greater accuracy of females in the student group is partly attributable to differences in cultural orientation to the education of the sexes. Boys are expected to be attending to, and planning a career, whereas girls are more often expected to focus their studies upon the "gentle arts" without trying to carve out a career for themselves. If we may stretch Lundy's "attending to self"-"attending to others," dimension, we might hypothesize that girls are encouraged to "attend to others" and, as a result, are more accurate than boys who are encouraged to "attend to themselves."
Another possibility, in our study, was that the greater accuracy of the female subjects resulted from greater homogeneity among them—that is, if all the girls responded pretty much the same way to the questionnaire, they would be relatively easy to predict. In order to test this possibility, a special Stereotypy Index was calculated. The number of each sex who had responded "true," and the number who had responded "false" were counted for each item. Then, for each sex separately, the Stereotypy Index for each item was determined by dividing the larger response frequency by the number of subjects responding (response frequencies as such were not directly comparable, since there were not equal numbers of each sex). A Chi-square comparison revealed that the females were slightly less homogeneous than the males, though the tendency was not significant ($X^2 = .208$, $p = .65$). Further evidence that our female subjects were not more homogeneous than the males was obtained by comparing the variances of the two groups. Again, the comparison indicated that the females tended to be somewhat more variable ($F = 1.11$, $p = greater than .10$). On the basis of these findings, it seems likely that we can reject the possibility that greater accuracy of prediction among girls was due to greater homogeneity in their responses. Rather, it appears that, among college students at least, girls are generally
more accurate predictors of others than boys.

2. Understanding and Interpersonal Preference

Neither of our Choice Hypotheses was supported. That is, tendency to choose another to share a cooperative relationship was not found to be significantly related to either the kind of constructs involved, or to the accuracy with which the chosen person was predicted. As we shall see, the relationship between understanding and preference is more subtle than our hypotheses.

In an earlier section, several studies which had dealt with the relationship between prediction and choice were reviewed (pp. 37-38). Davitz (15) and Fiedler, Warrington and Blaisdell (25) reported that choice was significantly associated with the similarity an individual construed between himself and another, but not with the structural similarity of the subjects. Also, Grossack (32) found that subjects who were given a "competitive" role to play in a group tended to choose others who were described as "competitive." Analysis of our data indicate a similar relationship. That is, our subjects tended to choose others whom they construed as similar to themselves ($X^2 = 11.878, p = .01$), but did not tend to choose others whose responses actually corresponded most to their own ($X^2 = 1.792, p = .42$). Although we had not hypothesized
this relationship, it is consistent with our theoretical position that the way in which an individual construes events is a more important determinant of his behavior than the "objective" nature of the event. In fact, for our sample, structural and construed similarity were not significantly correlated ($r = .19$, $p = .10$). In each of the studies that reported a relationship between construed similarity and preference, including ours, the subjects were unacquainted before the experiment began. During the early stages of an interpersonal relationship, construed similarity may represent the subject's estimate of compatibility between himself and another person. The more compatible he perceives them to be, the more likely he is to seek to extend the relationship.

But construed similarity is not the only basis upon which individuals can predicate their interpersonal preferences. Even though our hypotheses were too broad to reveal a relationship between understanding and choice, it seemed likely that further investigation should be attempted. One possibility was that "predictability" might be associated with choice (i.e., subjects who are "easy to understand" are more frequently chosen than subjects who are "hard to understand"). To test this, we ranked the subjects according to the degree of accuracy with which their responses had been predicted by others and the frequency with which
they had been chosen by others. There was no relationship
\( (X^2 = .110, p = .70) \). We did not seem to be on the right
track.

Another possibility was that persons would choose
others who understood them, rather than others whom they
understood. To test this, we determined the frequency
with which subjects chose the partner who predicted them
better, and the frequency with which they chose the partner
who predicted them less accurately. In general, subjects
tended to prefer the partner who predicted them more accu­
rately, though the relationship was not statistically
significant \( (X^2 = 2.00, p = .16) \). This suggested the next
step.

There was a slight tendency for subjects to prefer
the partner they were able to predict more accurately, and
a somewhat more marked tendency to choose the partner who
predicted them more accurately. Perhaps the relationship
was reciprocal. That is, it may be that subjects will tend
to choose each other if they both understand each other,
and to reject each other if neither understands the other.
To test this, we selected two groups of subjects. One
group contained fifteen pairs of subjects, each of whom
had predicted the other's responses more accurately than
he had predicted the responses of the third group member.
The second group contained fifteen pairs of subjects, each
of whom had predicted the other's responses less accurately than he had the responses of the third group member. Mutual choices and rejections for both groups were then compared. The results indicated that subjects who understand each other choose each other, whereas subjects who do not understand each other so well do not choose each other \( (X^2 = 7.87, p = .02) \). Now the relationship between understanding and preference seemed a little clearer. An individual will be more likely to prefer another individual whom he understands, provided the other person understands him, too. He is less likely to choose an individual he does not understand, especially if the other person reciprocates his lack of understanding.

A comparison of the choices of good predictors, as opposed to poor predictors, in this study, revealed that the better predictors (i.e., subjects above the median for the total sample) tended to prefer the less accurately predicted of their partners. The poorer predictors (i.e., below the sample median), on the other hand, tended to choose the partner they predicted better \( (X^2 = 4.303, p = .04) \). This finding is consistent with certain implications of the constructs of "extension" and "definition" as they are used in personal construct theory (43, pp. 66-67).

From this point of view, extension and definition are ways in which individuals elaborate their construction
systems. An individual extends his system when he tries it out on new events or situations to "see whether it will fit"; he risks invalidation to seek comprehensiveness. He defines his system, on the other hand, when he sticks to what he knows; he risks losing comprehensiveness to seek irrefutable validation. Now, if an individual's anticipations begin to go awry we would expect him to favor an approach emphasizing definition rather than extension. He will try to make sure of what he thinks he knows, and tighten things up generally, before he risks any more bets on uncertainties. On the other hand, if his predictions are generally turning out to be accurate, he can begin to do some experimenting with events he does not understand too well as yet.

Thus, if we assume that the subjects who are in the top half of our sample in terms of accuracy represent persons whose construction systems are generally performing pretty well, and if we assume that the bottom half of this distribution represents persons who are losing a lot of bets on their predictions,¹ then their preference tendencies make sense. The better predictors choose the person who

¹The difference in accuracy of predictions between the two groups is indicated by the fact that the poor predictions of the "good predictors" are more accurate than the good predictions of the "nocr predictors" (t = 1.433, p = .16).
offers the greater possibility of extension, and the poorer predictors choose the person who offers the greater probability of definition.

At the beginning of this discussion we suggested that our experimental hypotheses had been too ingenuous to reveal the relationships between understanding and preference. As a result of our empirical investigation of this relationship, we have uncovered several potentially promising possibilities. In the first place, an individual's initial estimate of the probable compatibility between himself and another person tends to influence his choice. That is, an individual tends to prefer another person whom he initially perceives to be similar to himself. Another suggested relationship was between mutuality of understanding and choice, i.e., individuals who understand each other tend to choose each other, whereas individuals who do not understand each other tend not to choose each other. Finally, our results indicated that persons whose predictions are generally accurate tend to "take a chance" and choose the less well understood of two potential partners; persons whose predictions are generally less accurate tend to "play it safe" and choose the better understood partner. Of course, these suggested relationships require further verification—they are offered as hypotheses for future study.
3. Theoretical Implications

According to the psychology of personal constructs, an individual's behavior is determined by the constructs he uses. This presumed relationship was tested experimentally by Shoemaker (58), who found that judges were able to match construct lists taken from Rep Tests with the social behavior of subjects in a role-play situation. The results of this study are felt to offer further support; with construct lists similar to those used by Shoemaker, our subjects were able to predict each other's questionnaire responses more accurately than when they were given lists of constructs based upon third party descriptions. However, our subjects were able to obtain additional information through interaction; it would be valuable to test the accuracy of predictions based upon knowledge of an individual's constructs, without actual interaction with him. Taking a different point of view, the results of these studies could be considered as validational evidence for the Rep Test.

From the results of his study of the effects of interaction upon interpersonal understanding, Bieri (6) formulated what has come to be called the Bieri Hypothesis. In simple language the hypothesis states that "after a brief social interaction with a person one is likely to
construe that person as more like himself than he did at the beginning of the interaction" (43, p. 293). Our data offered an opportunity to test an implication of this hypothesis. Let us suppose that the Bieri Hypothesis is true; that there is a general tendency to construe others as more similar to oneself after a brief social interaction with them. Suppose, also, that two subjects are actually quite similar. Their predictions of each other, after an interaction will be more accurate than their predictions before the interaction. Conversely, if two subjects are quite dissimilar, their post-interaction predictions will be less accurate than their pre-interaction predictions.

Now, our data contained only post-interaction predictions, so we could not measure shifts in accuracy. However, we could measure the post-interaction accuracy of similar and dissimilar subjects. If these post-interaction measures indicated that similar subjects were more accurate than dissimilar subjects, it would seem to provide indirect support for the Bieri Hypothesis. Comparison of the accuracy scores of high- and low-similarity subjects revealed that the high-similarity subjects were significantly more accurate than the low-similarity subjects (t = 3.81, p = .01). Thus, our findings are interpreted as consistent with the Bieri Hypothesis.
CHAPTER VIII

SUMMARY AND CONCLUSIONS

Research in the area of interpersonal understanding has lacked a systematic theoretical rationale. A tentative theoretical model, derived from the Psychology of Personal Constructs, was described.

Four experimental hypotheses were tested. They are presented here in non-theoretical terms.

1. Interpersonal predictions will be more accurate if they are based upon knowledge of the predictee's outlook, as opposed to descriptions of the predictee by others.

2. Knowledge of another person's outlook will lead to choosing him; knowledge of how he has been described by others will not.

3. The more accurate an individual's understanding of another person, the more likely he is to choose him.

4. Individuals who characteristically interpret other persons in psychological terms will be more accurate predictors of others than individuals who characteristically interpret other persons in circumstantial terms.

Method: Seventy-two college students filled out specially constructed Role Construct Repertory Tests (Rep Test) containing the names of several of their classmates. From these tests, two lists of constructs were prepared for
each subject. One list (A) contained the constructs the individual had used when filling out the Pep Test; this list was the predictor's source of information about the predictee's outlook. The second list (B) contained the constructs classmates had used to describe the individual; this list became the predictor's source of information about the way the predictee was described by others.

Subjects met in groups of three. Each member was given two lists of constructs, one for each of the other group members. One of the lists was an "A" list, the other a "B" list. Following a brief discussion each group member predicted the responses of the other two on a questionnaire dealing with social attitudes and interests, and chose one of the two as a partner for a projected cooperative relationship.

Results: The hypothesized relationship between accuracy of prediction and knowledge of the predictee's outlook was supported. The other hypotheses were not supported. Analysis of the data revealed several significant empirical relationships which were suggested as hypotheses for future research. The implications of the results for Personal Construct theory were discussed.

Conclusions: In general, knowledge of another person's outlook facilitates prediction of his behavior. Interpersonal preference appears to depend on a number of
factors, including, among others, initial estimates of compatibility, reciprocal understanding, and intercurrent factors involving the construction systems of the persons involved. Further research in this area is needed to clarify some of the issues involved.
APPENDIXES
APPENDIX A

Acquaintance Check List
Acquaintance Check List

1. In the space below, please write the names of people in this class whom you know very well - that is, people in this class who are good friends of yours, or close friends.

2. In the space below, please write the names of people in this class who you know only casually - that is, people in this class whom you would consider acquaintances, but not good friends, or close friends.
APPENDIX B

Role Construct Repertory Test

Figure List for the Role Construct Repertory Test

Instructions for the Role Construct Repertory Test
Role Construct Repertory Test
### TABLE IV

Figure List for the Role Construct Repertory Test

<table>
<thead>
<tr>
<th>Number</th>
<th>Figure description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yourself.</td>
</tr>
<tr>
<td>2.</td>
<td>Your mother.</td>
</tr>
<tr>
<td>3.</td>
<td>Your father.</td>
</tr>
<tr>
<td>4.</td>
<td>Your brother nearest your own age. If you have no brother, the name of a boy near your age who was most like a brother to you during your early teens.</td>
</tr>
<tr>
<td>5.</td>
<td>Your sister nearest your own age. If you have no sister, the name of a girl near your own age who was most like a sister to you during your early teens.</td>
</tr>
<tr>
<td>6.</td>
<td>Your wife or husband, or, if you are not married, your closest present friend of the opposite sex from yourself.</td>
</tr>
<tr>
<td>7.</td>
<td>Your closest present friend of the same sex as yourself.</td>
</tr>
<tr>
<td>8.</td>
<td>The most successful person whom you know personally.</td>
</tr>
<tr>
<td>9.</td>
<td>The happiest person whom you know personally.</td>
</tr>
<tr>
<td>10.</td>
<td>The teacher who influenced you most in high school.</td>
</tr>
<tr>
<td>11.</td>
<td>A teacher you disliked in high school, or the teacher of a subject you disliked in high school.</td>
</tr>
<tr>
<td>12.</td>
<td><em>Classmate.</em></td>
</tr>
<tr>
<td>13.</td>
<td><em>Classmate.</em></td>
</tr>
<tr>
<td>15.</td>
<td><em>Classmate.</em></td>
</tr>
<tr>
<td>16.</td>
<td><em>Classmate.</em></td>
</tr>
</tbody>
</table>

*The actual names which appeared in these items were taken from each person's Acquaintance Check List. They were written in by the experimenter before the test was given to the subject.*
Instructions
for the
Role Construct Repertory Test

"Look at the first row of squares. Three of them have circles in them. This means that you are first to consider the three people whose names appear above them.

In what way are two of them alike, and at the same time different from the third? Think about them until you decide the way in which two of them are alike and which sets them off from the third person.

When you have decided which two are alike, and the way in which they are alike, put an 'X' in the two circles under the two who are alike. Do not put any mark in the third circle.

Now write in the blank under 'Construct' a word or short phrase that tells how they are alike.

Next write in the blank under 'Contrast' what you consider to be the opposite of this.

Now, consider each of the other people whose names appear at the tops of the columns. In addition to the persons you have marked with an 'X', which ones also have this characteristic? Put a check mark—not an 'X'—under their names.

Then go to the next row. Do all the rows in the same way."
APPENDIX C

Information Sheet
Information Sheet

Name ________________ Age ________________

College major ________________ Year in college ________________

Father's occupation ________________

Mother's occupation ________________

What occupation are you planning to enter? ________________

What do you believe your final grade in Psych 407 (this course) will be? ________________

How many brothers and sisters do you have?

Older brothers ________________ Older sisters ________________

Younger brothers ________________ Younger sisters ________________
APPENDIX D

Sample Construct List:
Personal Constructs

Sample Construct List:
Unstructured Group Constructs

Sample Construct List:
Structured Group Constructs
### TABLE V

**Sample Construct List:**
**Personal Constructs**

<table>
<thead>
<tr>
<th>Constructs used by:</th>
<th>(Subject's name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>related</td>
<td>- not related</td>
</tr>
<tr>
<td>teachers</td>
<td>- students</td>
</tr>
<tr>
<td>student</td>
<td>- employer</td>
</tr>
<tr>
<td>single</td>
<td>- married</td>
</tr>
<tr>
<td>live in same house</td>
<td>- live in dormitory</td>
</tr>
<tr>
<td>born citizens</td>
<td>- naturalized citizens</td>
</tr>
<tr>
<td>graduates from high school</td>
<td>- still in high school</td>
</tr>
<tr>
<td>under 5'8&quot;</td>
<td>- over 5'8&quot;</td>
</tr>
<tr>
<td>classmates</td>
<td>- teacher</td>
</tr>
<tr>
<td>dark hair, dark eyes</td>
<td>- gray hair, green eyes</td>
</tr>
<tr>
<td>under 30</td>
<td>- over 30</td>
</tr>
<tr>
<td>college education</td>
<td>- 8th grade education</td>
</tr>
<tr>
<td>over 6' and fair</td>
<td>- under 6' and dark</td>
</tr>
<tr>
<td>students</td>
<td>- housewife</td>
</tr>
<tr>
<td>from Ohio</td>
<td>- from W. Va.</td>
</tr>
<tr>
<td>Construct</td>
<td>(Subject's name)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>temperamental</td>
<td>constant</td>
</tr>
<tr>
<td>male friends</td>
<td>female friends</td>
</tr>
<tr>
<td>easy-going people</td>
<td>think they know a lot</td>
</tr>
<tr>
<td>teacher</td>
<td>student</td>
</tr>
<tr>
<td>same home town</td>
<td>different home town</td>
</tr>
<tr>
<td>came from same state</td>
<td>came from Illinois</td>
</tr>
<tr>
<td>good friends</td>
<td>not very friendly</td>
</tr>
<tr>
<td>like sports</td>
<td>dislike sports</td>
</tr>
<tr>
<td>problems at home</td>
<td>not problems at home</td>
</tr>
<tr>
<td>easy-going and take things in stride</td>
<td>constantly worrying</td>
</tr>
<tr>
<td>quiet</td>
<td>has a lot to say</td>
</tr>
<tr>
<td>sensible and level-headed</td>
<td>doesn't know himself why he does things</td>
</tr>
<tr>
<td>personality</td>
<td>little personality</td>
</tr>
<tr>
<td>charm</td>
<td>little charm</td>
</tr>
<tr>
<td>not businessmen</td>
<td>businessmen</td>
</tr>
</tbody>
</table>
# TABLE VII

Sample Construct List:
Structured Group Constructs

<table>
<thead>
<tr>
<th>Constructs used to describe:</th>
<th>(Subject's name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>engaged or married*</td>
<td>- unattached and unengaged</td>
</tr>
<tr>
<td>brown hair</td>
<td>- blond hair</td>
</tr>
<tr>
<td>out of high school</td>
<td>- in high school</td>
</tr>
<tr>
<td>go to same church</td>
<td>- go to different church</td>
</tr>
<tr>
<td>not in school</td>
<td>- in school</td>
</tr>
<tr>
<td>classmates</td>
<td>- long time friend</td>
</tr>
<tr>
<td>college acquaintance</td>
<td>- teachers</td>
</tr>
<tr>
<td>under 5'10&quot;</td>
<td>- over 5'10&quot;</td>
</tr>
<tr>
<td>dark hair and eyes</td>
<td>- light hair and blue eyes</td>
</tr>
<tr>
<td>married</td>
<td>- single</td>
</tr>
<tr>
<td>in college of education</td>
<td>- in college of engineering</td>
</tr>
<tr>
<td>classmates</td>
<td>- brother</td>
</tr>
<tr>
<td>girl acquaintances</td>
<td>- good friend</td>
</tr>
<tr>
<td>parents</td>
<td>- not related</td>
</tr>
<tr>
<td>high school teacher</td>
<td>- student</td>
</tr>
</tbody>
</table>

* The underlined pole of the construct represents the alternative of the dichotomy that was specifically applied to the subject whose name appears at the head of the list.
APPENDIX E

Explanation and Instructions:
Discussion Period

Questionnaire:
Personal Form

Questionnaire:
Prediction Form
"During World War II psychologists were experimenting with different ways of selecting espionage agents. They found that agents who understood each other were more successful, and that agents who were allowed to pick their own partners tended to do better. In this experiment we are combining these findings and testing both at once.

Now, assume that you are all candidates for secret missions. Also, assume that you have all been screened, so that you all have the necessary ability and training for the mission. There are three persons at each table, but only two of you from each table will be going on the mission together.

The mission will last several weeks—during that time the two of you will have to rely upon your understanding of each other, and your ability to know how each other will react to various situations in order to survive.

Since you will pick one of the other people at your table as a partner for the mission, it is important that you try to get to understand their outlook as well as you can in the short time you will have to get acquainted.

You will be given certain information about each of the other people at your table to give you some idea about them before you begin your discussion. This
information was taken from the tests you filled out several days ago. What we have done is make lists of the constructs you used on the test—you will be given a list for each of the other people at your table. By studying these lists, you should get some ideas about the people you are sitting with."

(The two kinds of construct lists were demonstrated, and the subjects were permitted to ask questions about them.)

"After studying the lists of constructs, you will have about fifteen minutes for a group discussion. The topic for your discussion will be a vacation the three of you might take together. Assume that you have as much money as you need. The vacation can be of any length, and you may plan to do anything that the three of you would like to do. Only you must all have reached agreement by the time the discussion period ends.

Each of you should use the discussion period to learn as much as you can about the other people at your table. Between the construct lists and the discussion you should learn quite a bit about their outlook—the sort of people they are. After the discussion you will be asked to pick one of the two people you have just been talking to as a partner for the espionage mission. In addition, you will be asked to predict certain things about each of them.
Are there any questions?

Okay. First, introduce yourselves, so that you all know each other's names...now, you will have several minutes to study the lists of constructs."

(The subjects were given five minutes to study both lists. Any questions they raised were answered individually.)

"Now, put the lists aside and begin your discussion. Remember, while you are planning your vacation, observe your partners; try to understand their outlooks as well as you can."
QUESTIONNAIRE
(Personal Form)

Read each of the statements below. If you agree with the statement, (that is, if it is true about you), put a plus sign in the space in front of the statement.

If you disagree with the statement, put a zero in the space in front of the statement.

+ or 0

____ 1. I would like to be a scientist.

____ 2. I am a good mixer.

____ 3. My feelings are easily hurt.

____ 4. I am usually frank with other people.

____ 5. I like to read mechanics magazines.

____ 6. I have a lot of personality.

____ 7. I often feel very bad about other people's troubles.

____ 8. Most of the time I would rather stay home evenings than go out with friends.

____ 9. I like to boast about my achievements.

____ 10. I find it easy to drop a friend.

____ 11. I have no patience with people who argue with me about things that I know more about than they do.

____ 12. I would like to be a school teacher.

____ 13. It is hard for me to act natural when I am with new people.

____ 14. I would like to be an artist.
15. When with a group of people I usually do what the others want rather than make suggestions.

16. I really care more about people than I show.

17. I am well-poised in social contacts.

18. I try not to think about my problems.

19. I like to try to persuade people to do things.

20. I like to have people tell me their troubles.

21. Sometimes I put on a false front.

22. I like to tell others about my experiences.

23. I understand myself.

24. I would like to be a doctor.

25. I often try to analyze my feelings about things.

26. If given the chance, I would make a good leader.

27. I don't really like most of the people I know.

28. I am talkative.

29. I am a rather nervous person.

30. I am slow in making decisions.

31. I am very self-confident.

32. I prefer to keep my feelings to myself.

33. I get very embarrassed if I say the wrong thing when I am with others.

34. I often study the motives of other people carefully.

35. I try to be witty and clever.

36. I almost never feel embarrassed about anything.

37. I usually tell the truth regardless of how others may take it.
38. I always have a ready answer for things people say.

39. I am a likable person.
Your name ........................

QUESTIONNAIRE
(Prediction Form)

___ ___ 1. I would like to be a scientist.
___ ___ 2. I am a good mixer.
___ ___ 3. My feelings are easily hurt.
___ ___ 4. I am usually very frank with other people.
___ ___ 5. I like to read mechanics magazines.
___ ___ 6. I have a lot of personality.
___ ___ 7. I often feel very bad about other people's troubles.
___ ___ 8. Most of the time I would rather stay home evenings than go out with friends.
___ ___ 9. I like to boast about my achievements.
___ ___ 10. I find it easy to drop a friend.
___ ___ 11. I have no patience with people who argue with me about things that I know more about than they do.
___ ___ 12. I would like to be a school teacher.
___ ___ 13. It is hard for me to act natural when I am with new people.
___ ___ 14. I would like to be an artist.
___ ___ 15. When with a group of people I usually do what the others want rather than make suggestions.
___ ___ 16. I really care more about people than I show.
___ ___ 17. I am well-poised in social contacts.
18. I try not to think about my problems.

19. I like to try to persuade people to do things.

20. I like to have people tell me their troubles.

21. Sometimes I put on a false front.

22. I like to tell others about my experiences.

23. I understand myself.

24. I would like to be a doctor.

25. I often try to analyze my feelings about things.

26. If given the chance, I would make a good leader.

27. I don't really like most of the people I know.

28. I am talkative.

29. I am a rather nervous person.

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32. I prefer to keep my feelings to myself.

33. I get very embarrassed if I say the wrong thing when I am with others.

34. I often study the motives of other people carefully.

35. I try to be witty and clever.

36. I almost never feel embarrassed about anything.

37. I usually tell the truth regardless of how others may take it.
38. I always have a ready answer for things people say.

39. I am a likable person.

My choice for a partner is ...
APPENDIX F

Master Code Sheet for IBM cards
### TABLE VIII

**Master Code Sheet for IBM cards**

<table>
<thead>
<tr>
<th>Column</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Course section and time of meeting</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Trio number of which this subject was a member</td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td>This subject's number</td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>Number of partner for whom Personal Constructs were given</td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>Number of partner for whom Group Constructs were given</td>
</tr>
<tr>
<td>11</td>
<td>Male, female, or mixed trio</td>
</tr>
<tr>
<td>12</td>
<td>Structured or Unstructured Group Constructs given to subject</td>
</tr>
<tr>
<td>13 &amp; 14</td>
<td>Number of partner preferred by subject</td>
</tr>
<tr>
<td>15</td>
<td>Given Personal or Group Constructs for preferred partner</td>
</tr>
<tr>
<td>16</td>
<td>Subject's questionnaire responses or predictions</td>
</tr>
<tr>
<td>17</td>
<td>Questionnaire responses of preferred or rejected partner</td>
</tr>
<tr>
<td>18</td>
<td>(Spacer)</td>
</tr>
<tr>
<td>19 to 57</td>
<td>Questionnaire responses</td>
</tr>
<tr>
<td>58</td>
<td>(Spacer)</td>
</tr>
<tr>
<td>59</td>
<td>Subject's sex</td>
</tr>
<tr>
<td>60</td>
<td>Subject's race</td>
</tr>
<tr>
<td>61</td>
<td>Subject's college rank</td>
</tr>
<tr>
<td>62</td>
<td>Subject's age</td>
</tr>
</tbody>
</table>
TABLE VIII (continued)

<table>
<thead>
<tr>
<th>Column</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Anticipated grade</td>
</tr>
<tr>
<td>64</td>
<td>Actual grade</td>
</tr>
<tr>
<td>65</td>
<td>Type of constructs characteristically used by subject</td>
</tr>
<tr>
<td>66</td>
<td>(Spacer)</td>
</tr>
<tr>
<td>67</td>
<td>Partner predicted more accurately: Personal or Group Constructs</td>
</tr>
<tr>
<td>68 &amp; 69</td>
<td>Correct predictions given Personal Constructs</td>
</tr>
<tr>
<td>70 &amp; 71</td>
<td>Correct predictions given Group Constructs</td>
</tr>
<tr>
<td>72 &amp; 73</td>
<td>Total correct predictions</td>
</tr>
<tr>
<td>74 &amp; 75</td>
<td>Correct predictions of subject by partner given his Personal Constructs</td>
</tr>
<tr>
<td>76 &amp; 77</td>
<td>Correct predictions of subject by partner given his Group Constructs</td>
</tr>
<tr>
<td>78</td>
<td>Subject predicted more accurately: Personal or Group Constructs</td>
</tr>
<tr>
<td>79 &amp; 80</td>
<td>Difference between predictions: Personal or Group Constructs</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY
Bibliography


68. Winslow, C. N. A study of the extent of agreement between friends' opinions and their ability to estimate the opinions of each other. J. soc. Psychol., 1937, 8, 433-442.

I, Donald Ellsworth Payne, was born in Bethlehem, Pennsylvania, March 2, 1930. I received my secondary school education in the public schools of Bethlehem. My undergraduate training was obtained at Lehigh University, from which I received the degree Bachelor of Arts in 1952. I secured my graduate training at the Ohio State University, from which I received the degree Master of Arts in 1954. While in residence at the Ohio State University, I held the position of graduate assistant during the year 1952-53. During the period from 1953 to 1955, I served as a Clinical Psychology Trainee in the Veteran's Administration Hospital in Chillicothe, Ohio, for approximately one year. During the year 1955-56 I held a United States Public Health Service Fellowship while completing the requirements for the degree Doctor of Philosophy.