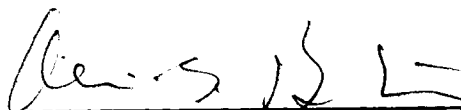


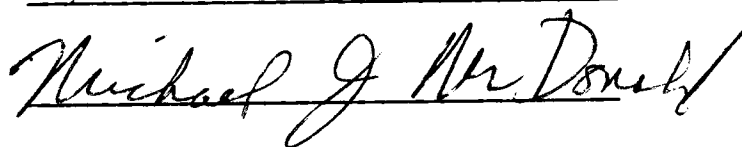
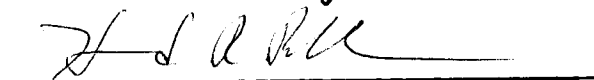
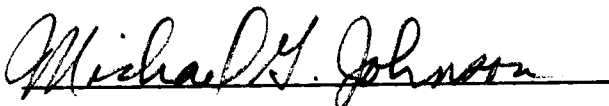
To the Graduate Council:

I am submitting herewith a dissertation written by Charles Steven Jones entitled "Congruence of Manifest Content Among Three Projective Fantasy Productions." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.



Alvin G. Burstein, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Provost
and Dean of The Graduate School

CONGRUENCE OF MANIFEST CONTENT
AMONG THREE PROJECTIVE FANTASY PRODUCTIONS

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Charles Steven Jones

August 1986

ACKNOWLEDGEMENTS

In the course of dissertation work, a number of people have assisted me generously. I am particularly appreciative of my chairman, Dr. Alvin Burstein, and my committee members, Dr. Howard Pollio, Dr. Michael Johnson, and Dr. Michael McDonald.

I also want to add a special note of thanks to the members of my car pool, Laurel Goodrich, Merle Bragdon, and Joyce Cartor, for important moments of encouragement. Extra kudos should attend Joyce for her backing during this project. Finally, thanks to Della Hann for an extremely valuable suggestion at the end of this project.

Whatever errors remain in this work are, of course, solely my responsibility.

ABSTRACT

This study examined patterns of similarity and difference in the manifest content of three types of projective fantasy productions: Early Memories, Dreams, and Van Lennep's Four Picture Test, a picture-story test in the TAT tradition. Data were collected from twenty-six volunteers from the College Scholars Program at the University of Tennessee, a flexibly structure alternative undergraduate program for academically capable individuals. Review of extant scoring systems indicated the need for a more extensive, detailed approach. The instrument developed employs a series of continuous dimensions reflecting the variability of subjects' representation of three domains: Surroundings, Others, and Self.

Examination of correlational and other hypothesis testing procedures suggested that dreams and early memories yielded patterns of greater similarity to one another, along the dimensions measured by these scales, than either did to the Van Lennep Four Picture Test protocols. Though dreams presented a generally more primitive picture of the representational world than early memories, profiles of mean scores on the dimensions paralleled one another more than either paralleled the Van Lennep Test. Patterns of similarity and difference of scores comprising

domains were similar between dreams and early memories but divergent between these fantasy productions and the Van Lennep Stories. Also, the new scale exhibited substantial efficacy in delineating differences among the domains measured and among the eleven subscale dimensions measured. This suggests the potential fruitfulness of broadening the study of "object" representation--i.e., the representation of others--to include the study of representation of self and of inanimate features of the surroundings as well.

TABLE OF CONTENTS

CHAPTER	PAGE
GENERAL INTRODUCTION	1
I. LITERATURE REVIEW	7
Introduction	7
Historical Antecedents: The Case Study Orientation	8
Comparative Research Studies	19
Diagnostic-Taxonomic Research Studies: Raising the Criterion Problem	22
Clearer Definitions: Addressing the Criterion Issue	31
Scoring Systems	34
Summary and Statement of the Problem	44
II. METHODOLOGY	50
Introduction	50
Fantasy Productions: Van Lennep's Four-Picture Story Test	50
Fantasy Productions: Early Memories and Dreams	53
Pilot Studies	54
The Scales	58
Domain I: Representation of Physical Surroundings	61
Domain II: Representation of Others	62
Domain III: Representation of Self-- First Efforts	64

Domain III: Representation of the Self--	
Final Form	66
Reliability	68
Subjects	71
Procedures	72
III. RESULTS	74
Introduction	74
Associational Statistics	74
Examination of Mean Scores	82
IV. DISCUSSION	90
Introduction	90
The Congruence Issue	90
Utility of the Distinctions Comprising the Present Scales: Domains	93
Utility of the Distinctions Comprising the Present Scales: Dimensions	97
Further Patterns Among the Fantasy Productions	101
Summary	107
BIBLIOGRAPHY	109
APPENDICES	122
APPENDIX A. SURROUNDINGS/OTHERS/SELF REPRESENTATION SCALES	123
APPENDIX B. INTERCORRELATIONS AMONG THE ELEVEN SCALES ACROSS EARLY MEMORIES (EM), DREAMS (D), AND VAN LENNEP STORIES (VL)	133
APPENDIX C. VAN LENNEP'S FOUR PICTURE TEST . . .	135
VITA	138

LIST OF TABLES

TABLE		PAGE
II-1.	Source of One Point Disagreements on Rescoring a Single Production for Each Subject	70
III-1.	Intercorrelations Among the Eleven Scales Within Early Memories (EM), Dreams (D), and Van Lennep Stories (VL) . .	75
III-2.	Intercorrelations Among Respective Dimensions for Pairings of Early Memories, Dreams, and Van Lennep Stories	81
III-3.	Dimension Score Means for Each Fantasy Production	83
III-4.	Analysis of Variance of Dimensions Across Productions	85

LIST OF FIGURES

FIGURE		PAGE
II-1	Components of the Surroundings/ Others/Self Representation Scales	61
III-1	The Associational Relationship Among the Eleven Dimensions of the Surroundings/Others/Self Representation Scales	78
III-2	Mean Dimension Scores for Each Fantasy Production with Indication of Pertinent Domains	87

GENERAL INTRODUCTION

The conception of human activity explicit in Rapaport's projective hypothesis (Rapaport, Gill and Schafer, 1968) is relevant to much of clinical psychology. He argues that any form of human behavior reveals one's personality. Hence, one can discern features of others' personalities based on knowledge of their past actions, on the "static" features with which they surround themselves, for instance, their clothing or furnishings for their homes, on their characteristic movements and gestures, and on their thoughts and fantasies.

Wolf and Precker (1951), following Bellack's (1944) lead, provide some useful distinctions within this wide range of behavior by differentiating adaptation, expression, and projection. Adaptation refers to behavior determined by the situation or the material with which one works. From this perspective, one would expect a subject to do something very different with a set of TAT cards than with paints and an easel largely because the response set implicit in each activity is different. The adaptation factor taps the stimulus demand in a given task. Expression refers to one's "style of response," that is, the relatively consistent patterns one exhibits in organizing one's activity. This refers to such features of behavior as movements, gestures, rhythm, speed, approach

to tasks, choice of clothing, and arrangement of one's office. Projection refers to the unconscious ascription of qualities and characteristics, originating within oneself, to features of the world. Projection involves organizing perceptions of the world in light of one's personal efforts toward resolving unconscious conflicts. From a psychoanalytic perspective, one carries on this activity as a continual process of forming unconscious compromises. Furthermore, this process entails one's coordinating defense mechanisms and other adaptive abilities to mediate the conflictual relations between the exigencies of everyday living, on the one hand, and the unconsciously associated genetic significance of impulses, on the other.

Explicit in this theoretical orientation toward perception and activity is the idea of divided consciousness. As indicated above, the processes of mediating internal conflict and of organizing perceptions are unconscious activities. That means, in Freud's (1924/1972) translated words, they are "inaccessible" to the awareness of the individual "at that moment."

Given this state of unconscious operations and unconscious significances, comprehending personality involves an interpretive decoding process for mapping the subject's productions onto sets of theoretically-based inferential

hypotheses about meanings of the various productions. Furthermore, the interpretive focus can emphasize either the manifest or the latent content of these productions. Manifest content refers to the material--e.g., dream, memory, statement--in the form it is presented. Latent content refers to the unconscious significance to the material as presented; the meaning "unconscious at the moment" of the material's presentation.

There developed, with Freud, an emphasis on latent content as the important source for understanding one's personality. Later--as Erikson (1949/1954) points out--with the emergence of projective tests in the late forties and early fifties, a shift occurred, according manifest content a more significant role in psychoanalytic thinking. With this shift, the assumption became,

"any segment of overt behavior reflects, as it were, the whole store: one might say psychoanalysis has given new depth to the surface, thus building the basis for a more inclusive general psychology of man" (Erikson, 1949/1954, p. 139).

Thus, the analysis of manifest content of fantasy productions, like dreams and early memories, acquired greater legitimacy as a source for understanding personality.

Employing another set of important distinctions, Murray (1951) differentiated projection in projective fantasy productions into two forms: supplementary projection and complementary projection. Supplementary pro-

jection refers to the projection of "self-constituents," that is, the ascription of one's own tendencies--both recognized and unrecognized--to others. Thus, the hero of a TAT story is traditionally construed as possessing the storyteller's attributes (e.g., Stein, 1948). This form of projection in fantasy productions offers information about a subject's self representation.

Complementary projection refers to the projection of "figure-constituents," that is the projection of complementary others into one's world. Complementary projection is clearly relevant to the more specialized psychoanalytic concept of transference. The idea could also be taken as relevant to the observation that lead Winnicott (1965) to comment that there are no infants without mothers--that is, people exist in a matrix of relationships. Complementarity, then, refers to the fashion by which one constitutes a perceptual world of others to match one's internal, largely unconscious, world of earliest object relationships. "Earliest" is emphasized here because the earliest experiences of others are seen as laying down the primordial templates around which one later projectively organizes one's perception of others in the present. The past organizations dictate one's present expectations of the world and, therefore, dictate the range of possible perceptions. This variety of projection clearly offers a

source of information about representation of others in a subject's fantasy productions.

Psychodynamic psychologists axiomatically employ the above collection of distinctions in their gathering of material to diagnose descriptively and to make treatment decisions. In an effort to develop a comprehensive picture of the patient's world, the diagnostician organizes some combination of assessment measures into a battery thereby affording an opportunity to contrast hypotheses generated by one measure against those implicit in another. Embedded in this check-and-balance system is the implication that these samples of behavior will exhibit consistencies within an individual--with the exception of some sampling error--and that these consistencies represent one's "personality." Thus, fantasy from one source should structurally match fantasy from another, given that the common denominator between them is the same individual producing both.

A psychodynamic assessment repertory typically includes formal projective tests (e.g., Rorschach, Thematic Apperception Test, Human Figure and Kinetic Family Drawings, Van Lennep's Four-Picture Test), features emphasized in initial interviews (e.g., history, early memories), and material emerging for ongoing clinical appraisal (e.g., free association, new recollections, dreams).

All three kinds of fantasy productions have appeal as samples of patient personality because of their potential inferential richness and because of the ease of acquiring such material. The issue awaiting further exploration concerns the degree of similarity among projective fantasy productions. This dissertation will explore this issue of congruence using, as representatives of fantasy productions: early memories, dream reports, and Van Lennep's Four-Picture Test, a storytelling test in the TAT tradition.

CHAPTER I

LITERATURE REVIEW

1. INTRODUCTION

This chapter primarily examines the early memory and dream literature with some reference to the Thematic Apperception Test, a picture-story test analogous in function to the Van Lennep Four Picture Test. This emphasis was selected because no English-language studies were found using Van Lennep's test in a fashion relevant to this study despite the test's evident applicability to personality evaluation.

The pertinent literature falls into two categories. The first samples the work of the founding contributors to dynamic psychology who employ clinical observations as their primary sources for building theory applicable to projective fantasy productions (use of the term "fantasy productions" implicitly includes those used in this study, i.e., early memories, dreams, and story-projective tests). The second, a review of relevant research studies, comprises most of the rest of the chapter. A few of these studies attempt comparison of fantasy productions. Most, however, relate fantasy productions to some criterion feature of the subject population (e.g., a diagnosis).

Difficulties deriving from the choice of that criterial referent will also be examined.

Two additional issues will round out this chapter. First, the scoring systems researchers have applied to fantasy productions are reviewed in order to provide a foundation for understanding the evolution of the rating scale employed in the present study. Finally, the questions to be explored in this study will be detailed.

2. HISTORICAL ANTECEDENTS: THE CASE STUDY ORIENTATION

Freud (1900/1965) was certainly not the first to comment on dreams as important features of experience; the Old Testament, for instance, tells of Joseph interpreting the Pharaoh's dream and Hesiod, in the Theogony, categorizes "Sleep and the race of dreams" as parthenogenic children of Night. Yet, employing the analysis of his own dream--the Irma dream--Freud built a new psychology based on the systematic examination of dreams and other symbolic productions. He developed a method for working through these productions' various modes of disguise, to reveal the dreamer's unconscious conflictual world. The dream is as follows:

A large hall--numerous guests, whom we were receiving--among them was Irma. I at once took her on one side, as though to answer her letter, and to reproach her for not having accepted my "solution" yet. I said to her: "If you still get pains, it is really only your own fault." She replied: "If you

only knew what pains I've got now in my throat, stomach, and abdomen--it's choking me." I was alarmed and looked at her. She looked pale and puffy. I thought to myself that after all I must be missing some organic trouble. I took her to the window and looked down her throat, and she showed signs of recalcitrance, like women with artificial dentures. I thought to myself that there was really no need for her to do that. She then opened her mouth properly and on the right I found a big white patch; at another place I saw extensive whitish grey scabs upon some remarkable curly structures which were evidently modelled on the turbinal bones of the nose. I at once called in Dr. M., and he repeated the examination and confirmed it. . . . Dr. M. looked quite different from usual; he was very pale, he walked with a limp and his chin was clean-shaven. . . . My friend Otto was now standing beside her as well, and my friend Leopold was percussing her through her bodice and saying: "She has a dull area low down on the left." He also indicated that a portion of the skin on the left shoulder was infiltrated. (I noticed this, just as he did, in spite of her dress). . . . M. said: "There's no doubt it's an infection, but no matter; dysentery will supervene and the toxin will be eliminated." . . . We were directly aware, too, of the origin of her infection. Not long before, when she was feeling unwell, my friend Otto had given her an injection of a preparation of . . . propyls . . . propionic acid . . . trimethylamin (and I saw before me the formula for this printed in heavy type). . . . Injections of that sort ought not to been made so thoughtlessly. . . . And probably the syringe had not been clean (Freud, 1900/1965 pp. 139-140).

Among other things, Freud discusses the dream as representing his difficulties with women unwilling to accept his treatment solutions, his wish to avenge himself on Otto for critical remarks about the imperfect cure of Irma, and his displacement of the blame for this imperfection on another.

Most intriguingly, Erikson (1954) argues that the Irma dream both displays the theorist and fits his theory

more thoroughly than even Freud realized since it arose from a wish to dream a prototypic dream through which to exemplify his ideas about dreaming and its relationship to psychoanalysis.

Unconscious processes entailed in remembering are also a keystone of psychoanalysis. Freud viewed passage through the Oedipal stage as establishing a "repression barrier" leaving only "screen memories" remaining. Freud saw these as derivative productions rather than "true memories." That is, he saw these memories as upsurges of unconscious material--equivalent to dreams, fantasy, parapraxes, or neurotic symptoms. As such, they are disguised by condensations, symbolization, and displacement, thereby, expressing the original drive or object of memory in a disguised form.

Adler also lists the investigation of "day and night dreams" and earliest recollections as central to understanding personality. Both dreams and memories unconsciously express one's "style of life." Dreams, from Adler's perspective, provide an imaginary path to attaining goals a person has set, when the life style implicit in those goals comes into conflict with reality. In that sense they are "forward looking," problem solving, and "emotion stirring" (Ansbacher and Ansbacher, 1956).

Adler viewed early recollections as interpretations

of experience that, like dreams, must accord with one's general view of life. They become a personal myth around which to organize present experience (Ansbacher and Ansbacher, 1956, p. 361). From this position, Adler views these productions as preserved by present attitudes. This view is distinguished from Freud's position that early experience, even if repressed or disguised, determine the development of the personality (Bruhn and Last, 1982). Given this position, early memories--and dreams--require decoding because one keeps hidden from oneself anything potentially disruptive to one's sense of self-consistent personality--i.e., of life style. Thus, for Adler, mental life also is divided, though, from a concern about reification, he avoided the terminology "conscious" and "unconscious."

In concert with Freud, the personality and intentions of the theorist intertwines with his theory. Progoff points out that Adler explicitly drew this correspondence as "the accord existing between the facts of my childhood and the views I expressed in my studies of Organ Inferiority," noting further Adler's earliest recollection is of,

sitting on a bench, bandaged up on account of rickets, with my healthy elder brother sitting opposite me. He could run, jump, and move about quite effortlessly, while for me, movement of any sort was a strain and an effort" (Progoff, 1956, pp. 75-77).

Three observations are worth making at this point.

First, Adlerians seem to have magnified the differences between Freud's and Adler's views of early memories. As Bruhn and Last (1982) point out, in addition to the disguise function Adlerians so often emphasize as a flaw in the interpretation of early memories, Freud also provides analogies suggesting a belief in the relatedness of early memories to current attitudes. For instance, in his analysis of Leonardo Da Vinci's earliest memory, Freud introduces the idea of the rewriting of one's personal history--i.e., early recollections--to fit with one's current world view as being comparable to a society reformulating the organization of it's historical events to fit with "contemporary ideas" (1910/1957).

Second, the discussion so far has dealt with retrospectively discerned parallels among data. That is, all these evaluators--Erikson, with the Irma dream, and Adler, with his early memories, and Freud, with the Da Vinci material--relate fantasy productions to extant occurrences in the lives of the individuals authoring the fantasies. Certainly psychologists do postdictive appraisals of the significance of material people present; diagnosis, however, is primarily predictive. Two criteria determine the comparability of the predictive and postdictive process. First, they will be comparable to the extent that person-

ality is stable and the environments reasonably confirmable. Second, they will be comparable to the extent one has a sufficiently sensitive, powerful theoretical instrument for mapping the samples of personality available in fantasy productions onto later, "real-life" actions.

Third, the most frequently mentioned historical figure in the dream research literature is Freud--as are varying combinations of Freud and Adler in the early memory literature. In part this procedure acknowledges pioneering efforts. It may also distract readers from noting the ubiquity of personal and theoretical commentary on these fantasy productions by other important psychodynamic theoreticians. A sampling of some representative thinkers follows.

Jung accords high status to fantasy in his psychology. He demotes sexual drives from their psychoanalytic position of centrality and diverges dramatically from the Adlerian's attenuated, often pejorative, version of myth as an aid to understanding individual personality. In very abridged form, Jung's analysis of fantasy juxtapose one's evolving understanding of one's personal myth against the universal archetypes providing the roots of consciousness for all people across all time. For instance, he tells the story of a "hard-boiled rationalist" who, when he:

came to consult me for the first time, [was] in such a state of panic that not only he himself but I also felt the wind coming over from the side of the lunatic asylum! As he told me of his experiences in detail he mentioned a particularly impressive dream. I got up and fetched an ancient volume from my bookshelf and showed it to him, asking: "You see the date? Just about four hundred years old. Now watch!" I opened the book at the place where there was a curious woodcut, representing his dream almost literally. "You see," I said, "your dream is no secret. You are not shocked by a pathological insult and separated from mankind by an inexplicable psychosis. You are merely ignorant of certain experiences well within human knowledge and understanding." It was worth seeing the relief which came over him. He had seen with his own eyes the documentary evidence for his own sanity (Jung, 1958).

For Jung, early memories parallel dreams, with both expressing one's personal myth. He reflects this attitude in an reflective comment on his memories:

I can only make direct statements, only "tell stories." Whether or not the stories are "true" is not the problem. The only question is whether what I tell is my fable, my truth [italics Jung's] (Jung, 1961).

His stories (memories) tell of "inner experiences." He regards the "outer experiences," like the meetings with famous people as "accidental" and only significant to the extent that they coincided with important developmental occurrences during his life. Consistent with this perspective, he starts his own story with earliest memories. He relates a "hazy impression" of a "fine, warm summer day, the sky blue, and golden sunlight darting through green leaves . . . [him with] a sense of indescribable well-being." He describes being "perched in a high chair and

spooning up warm milk with bits of broken bread in it, [the milk having] a pleasant taste and a characteristic smell." He describes an aunt showing him the "Alps bathed in glowing sunset reds" and he describes sneaking to a forbidden washhouse, to peek at the body of a man killed going over a falls, finding the blood and water trickling down the slope "extraordinarily interesting."

In this progression of memories, the reader can follow a child--through the memories of an adult--first enjoying a sensuous, but undifferentiated, immersion in the world, then gradually differentiating things and people through vision, taste, and smell. Also discernable are the presence of a vivid, curiosity-laden, fascination with exploring, a major feature of Jung's personality persisting throughout his life.

The existential-phenomenological position argues for the bracketing of conscious preconceptions. Emphasizing bracketing enables experience, i.e., "being-in-the-world," to become present without theoretical encumbrance (Giorgi, 1970). The phenomenologist,

wants to observe in the way one usually observes. He has an unshakable faith in the everyday observation of objects, of the body, of the people around him and of time, because the answers to stated questions are based on the results of this sort of observation . . . [while distrusting] theoretical and objective observations . . . the kind of observations made by the physicist" (Van den Berg, 1972, p. 77).

With no clearcut fountainhead, comparable to Freud

for psychoanalysis, emerging for this orientation (Valle and King, 1978), positions of two representative thinkers, Van den Berg and Boss will be briefly referenced.

Van den Berg (1975) eschews the idea of recollection as a "return to fixed engrammata. The past is what was, as it is appearing now." He later continues,

Our recollections have a motive. It is this motive that decides the nature of the recollection: nice, delicious, pleasant, disappointing or worrying. . . . The motive decides the past" (p. 82 - 84).

Exploring the realm of dreams, Boss (1977) dismisses the neurophysiological research on dream states and views contemptuously the psychoanalytic approach. Dreaming, for him, is simply "a unique mode of human existence" in that waking and dreaming life are "different," with neither reducible to the other; each is complementary to the other. Waking experience contributes greater freedom and richness while dream experience contributes depth as the harbinger of issues at hand, the "leading indicator of psychic developments about to emerge."

Thus, despite differences from psychoanalysis in approach to theory, approach to data gathering, view of the existence of a determinable, causal past, and orientation toward interpretation, these phenomenological thinkers see memories and dreams in a fashion compatible with the projective hypothesis. Fantasy productions

indicate motives, ways the individual is organizing perceptions, and emergent personality issues.

Fairbairn (1952), a representative of the English Object Relations orientation, views dreams,

not as wish-fulfillments, but dramatizations or 'shorts' (in the cinematographic sense) of situations existing in inner reality (p. 99).

It is from the figures populating this play that Fairbairn crystallized his conceptualization of the endopsychic figures--components of the ego--representing the internal object relational figures of the individual's endopsychic situation. Fairbairn defines the interior as conceptually more complex than Freud's tripartite structure, seeing his organization as "underlying" Freud's ego, id, and superego. Briefly, one's Central Ego experiences the mother as both good and bad object or, more accurately from Fairbairn's point of view, as "satisfying object" and "unsatisfying object," with the significance of the latter being that it "frustrates," on the one hand, and "tempts and allures," on the other. One internalizes this latter unsatisfying object, in an effort to contend with it, splitting it into the needed, exciting object and the frustrating, rejecting object. Both of these internal objects are then repressed, yielding a complex set of unconsciously experienced components of the ego that maintain aggressive and libidinal ties to one another. These

relationships among internal objects that are represented by figures in dreams and fantasies. Similarly, the figures of early memories and re-emerging repressed memories are purveyors of the status of one's relationship to internal objects, and these relationships change as therapy progresses.

Other views could be presented. For instance, Fenichel (1945) writes of the ego being "economically relieved to find" screen experiences thus allowing for the simultaneous acknowledgement and denial of some unpleasant fact. Angyal (1965), from a holistic, Gestalt perspective, argues that dreams are a simultaneous expression of the derivatives of traumatic (e.g., helplessness, self doubt) and healthy (e.g., confidence, order, autonomy) developmental experiences. Fromm (1951) talks of dreams as "any kind of mental activity occurring under the conditions of sleep" in which we express the lowest and most irrational as well as the highest and most valuable of ourselves. Greenson (1958/1978) elaborates the idea of screen memories into screen defenses, screen identity, and other screen functions. Guntrip (1969) elaborates on Fairbairn's ideas of object relations representations in dreams and memories and Winnicott (1958, 1971) explores these from a child's perspective. Others (e.g., Jones, 1970/1978 with dreams and Olson, 1979, with early mem-

ories) have collated various positions on these materials in much more detail than is appropriate here.

Even the brief summaries presented above illustrate the ubiquity of concerns with fantasy productions. The issue here is less what these psychotherapist-theorists had to say about the fantasies and how the viewpoints differed than it is that they had something to say. These writers are psychotherapists who have seen patients daily and set about establishing comprehensive frameworks for organizing what they have seen in their consulting rooms, including observations both of patients and of themselves. Within the diverse frameworks these individuals established to explain these observations, fantasy productions are regarded as salient and productive data.

3. COMPARATIVE RESEARCH STUDIES

There are a few adequately designed studies concerned with the relationship among projective fantasy productions. For example, Lieberman (1957) compared the correspondence between early memories and a test battery consisting of the Wechsler-Bellevue, Rorschach, Bender-Gestalt, and House-Tree-Person drawings. Clinical reports based on memories and based on the rest of the battery were written independently of each other. These reports were compared against a list of descriptive personality

characteristics. Lieberman found significant similarities in amount of material obtained and greater agreement than disagreement on the descriptive characteristics. The sample size was small but she concluded that early memories offered an important sample of the kind of data one might obtain from more time consuming batteries.

Hedvig (1963) found greater stability in early memories than in TAT stories, based on differences in susceptibility to experimental influence both of success-failure and friendliness-hostility. Tobin and Etigson's (1968) study of major life stress on the earliest memory contrasts with Hedvig's finding. Comparing the early memories of people before and after institutionalized in homes for the aged, they found an increase in themes of loss.

Kadis and Greene (1952) compared TAT stories with TAT stories plus early memories with regard to efficacy in matching teacher ratings of student conduct on dimensions of approach and authority. Performance using both measures was superior to use of the TAT alone, though, unfortunately, these authors provided no comparison to efficacy of early memory alone.

Robbins and Tanck (1978) examined the relationship between dream recall and early memories. They found a significant positive relationship between dream recall and

memory of events from ages four through six. They explained this as a result of general memory, of some general personality tendency, or of openness to experience.

Unfortunately these studies tell us very little about the relationship among kinds of fantasy material. At most they suggest a general stability in such productions that is susceptible to influence of some current stressful events and they suggest that early memories add information when combined with other projective tests. Also, there is no counterpart to Kadis and Green's study indicating whether any alternative fantasy production would have produced the same increment in improved predictive performance.

A more important--and well designed--study comparing fantasy productions is that of Krohn (1972) and Krohn and Mayman (1974). Krohn developed and applied a scale of object representation to dreams, early memories, Rorschach protocols, and therapist appraisals of twenty-four subjects. Then, comparing all four tabulations to ratings on the Luborsky Health-Sickness rating scale, they found significant correlations between scores across the entire range, with dreams and early memory exhibiting correlations of .30, .49, and .62 for lowest, highest, and modal dream scores. In contrasting dreams and early memories to Rorschach results, they comment,

By contrast, the Object Representation Scale registers, when applied to dreams and early memories, a surer index of level of object representation. These findings indicate that the Object Representation Scale applied to dreams and early memories reflects more about a fundamental pattern of object representation than it does about a general level of psychopathology (Krohn and Mayman, 1974, p.459).

Thus, an individual's orientational expectations of others appear in these fantasy productions in a consistent fashion, discernable to the appropriate measurement technique. Krohn and Mayman's study supports the proposition of congruence among fantasy productions. However, some difficulties exist with this scale, an issue to be explored later when scaling systems are discussed.

4. DIAGNOSTIC-TAXONOMIC RESEARCH STUDIES:

RAISING THE CRITERION PROBLEM

The convergence of fantasy productions also can be explored, from a more indirect vantage point, using diagnosis as the "criterion" measure. Since identifiable types of people comprise the groups, the argument goes, each criterially defined group should produce consistent, characteristic types of fantasy productions. These types can then be used to differentiate membership.

Furthermore, if the fantasies are congruent with one another, the patterns that show up in one form (e.g., dreams) should also be salient in another (e.g., early

memories). Most research on the projective method employs this criterial approach.

The studies reviewed differed in levels of distinction and variety of diagnostic categories: neurotic vs psychotic (Friedman, 1951; Lieberman, 1957), borderline vs neurotic outpatients (Levy, 1965), schizophrenics vs psychotically depressed (Friedman and Schiffman, 1962), schizophrenics vs depressives (Kramer, 1968), paranoid schizophrenia vs hysterical character (Langs, Rothenberg, Fishman, and Reiser, 1960), schizophrenia (Kant, 1942; Noble, 1950), Depression (Beck, 1967), Depressives vs anxious vs obsessive compulsive vs Gastrointestinal problems vs normals (Jackson and Sechrest, 1962), hysterical character vs obsessive compulsive vs narcissistic (Langs, 1965), and normals versus juvenile delinquents (Thatcher, 1944; Plottke, 1949).

Despite methodological problems, examination of this body of studies is instructive with regard to researching fantasy productions. Levy (1965), using early memories, combined the emotional dimensions, "givingness," "mastery," and "mutuality," along with a content component, outcome, and the degree of activity-passivity, into a measure of relative ego integration in an outpatient population. Borderline diagnosis was often associated with rigidity in ego stance.

Friedman (1950) compared early memories of 100 psychiatric patients, seeking differences between psychotics and neurotics. He concluded that EMs of psychotics manifest less frequent and less positive social interaction, fear of loss of self, illness themes indicating neglect and confusion, and death themes that are more bizarre and lacking in human qualities of loss and despair.

Ferguson (1964) asked Adlerian, Freudian, and "eclectic" clinicians to diagnose psychosis, neurosis and normalcy, finding they could match early memories to Adlerian "life-style summaries" but could not match diagnosis.

Langs, et al. (1960) compared first memories of hysterics and paranoid schizophrenics, concluding hysterics showed more action, were grossly traumatic, with people attacking and hostile, and were rich in thematic content with references to body, clothing, appearance, rejection and moral issues. The hysterics' memories were more homogenous than were those produced by schizophrenics. The schizophrenic group showed less destruction and damage, showed themes of happy occasions, presented roles of receiving both harm and care, and were relatively barren thematically with few direct references to body organs.

Langs (1965) found consistency in matching four diag-

noses with analyses of EMs. Obsessive-compulsive and inhibited obscessive compulsive early recollections conveyed themes of fearing control loss and problems with aggression. Early memories produced by hysterics indicated both heterosexual concerns and activity. Narcissistic EMs showed concerns with separation and loss.

Comparing his 1965 study with a later study of his within the same research project, this time of dreams (a thread of commonality noted by Olson, 1979), Langs (1966) concluded similarities existed between dreams and memories. The hysteric parallels included references to the body and activity, higher frequency of traumatic content, themes of punishment, references to illness and damage and indications of voyeuristic trends. Schizophrenic parallels include greater distance from reality with the individual more frequently the recipient of harm. The dreams had more themes of being overwhelmed than did the memories.

Friedman and Schiffman (1962) elicited early recollections from schizophrenics and psychotically depressed patients and had psychologically naive secretarial workers identify membership in the two groups using a list of hypothesized identifying characteristics generated from earlier research. The contents posited to differentiate schizophrenics from psychotically depressed patients were

absence of positive affects versus presence of positive affects; unmitigated terror versus tragic negative affects like sadness, if any; concern with bodily harm other than that caused by illness or aging versus concern with illness and aging but not other bodily harm; and absence of persons or, alternatively, relationships that are at best negative or neutral versus a strong, generalized desire to be emotionally close to others; and, finally, the presence of work and/or achievement orientation in the depressives. Using these criteria, judges were able to recognize depressives but not schizophrenics.

With regard to dream research, Kant (1942) was one of the earliest to systematically examine dreams of schizophrenics for patterns that could be used as diagnostic indicators or characteristic features. He found no "typical" schizophrenic dream, though he noted an "alien, otherworldly, bizarre" quality to these dreams. Noble (1950), concurred adding that primitive statements of the problem were sometimes evident. Kramer (1968), comparing dreams of schizophrenics and depressives found, in schizophrenic dreams, presence of strangers, thinly disguised or undefended drives, and trouble differentiating dreams from actual occurrences at times. Depressive dreams had more family members present.

Beck (1967) found the dreams of depressives to be

masochistic in tone entailing either a "passive" form, in which the individual is deformed or an "active" form in which the individual is being persecuted or deprived or frustrated--i.e., has some sort of painful experience being visited upon him.

Jackson and Sechrest (1962), comparing early memories of members of several diagnostic categories, concluded that depressives show themes of abandonment, patients exhibiting anxiety show themes of fear, obsessive-compulsive patients show more sexual themes, gastrointestinal patients show more themes of gastrointestinal distress and--along with normals--themes of accidents, illness, and trauma; in addition, normals show more themes of pleasure.

In a study of "juvenile delinquency," Thatcher (1944) concluded personality characteristics consistent with delinquency were discernable in early memories. Plottke (1949) studied "normal" vs "delinquent" girls's early memories, though the placement in a "Catholic institution for re-education" might also have implications for the results. The memories of delinquent girls showed more parental abuse through deception, were more active, pessimistic, and included more people but less emotion.

Review of this research reveals a series of general issues. An obvious problem is that, except for schizo-

phrenia, little overlap occurs among populations studied. For schizophrenia, there is some agreement about lack of similarity in schizophrenic dreams except for a trend toward an alien, otherworldly quality. There also is some similarity in Lang's work between early memories and dreams of schizophrenics. In addition, the basis for selecting the particular group is not always apparent. This makes it difficult to compare results from particular diagnostic entities both within a fantasy production, e.g., early memory studies to early memory studies, and across productions i.e., early memory studies to dream studies.

Second, these are studies using "diagnostic entities" as validation criteria, a choice implying some faith in the reliability of categorization at that level. There are, of course, studies addressing this issue (Schmidt and Fonda, 1956; Kreitman, 1961; Beck, Ward, Mendelson, Mock, and Erbaugh, 1962). This review will only touch on Spitzer and Fleiss (1974) since they summarize and reanalyze the reliability of psychiatric diagnoses in these and three other major studies of diagnoses. Their reanalysis was motivated by an interest in using some common measurement of agreement concerning the nominal categories of diagnosis employing a correction for chance agreement. Their results indicated:

There are no diagnostic categories for which reliability is uniformly high. Reliability appears to be only satisfactory for three categories: mental deficiency, organic brain syndrome (but not its subtypes), and alcoholism. The level of reliability is no better than fair for psychosis and schizophrenia and is poor for the remaining categories (p. 344).

These conclusions raise serious questions about the similarity of diagnostic groupings across studies and even appropriately designating membership within studies.

Third, in a study of the relationship between diagnosis and symptomatology, Zigler and Phillips (1961) found that "homogeneity," i.e., the uniformity of behavior subsumed within categories (quoting King, 1954) was not great. Though they found,

a certain degree of relationship . . . between symptom manifestation and diagnosis . . . the most striking finding of the present study is that the magnitude of these relationships is generally so small that membership in a particular diagnostic group conveys only minimal information about the symptomatology of the patient (p. 73).

Thus, even if one groups according to some selected feature and assumes reliable groupings, there are other highly salient features that become pronounced when one focuses on individuals as the unit of analysis. That is, when all the possible sources of variability are taken into account, individuals may be more different from one another than similar, despite having been selected as belonging to some group base on diagnosis.

Fourth, the studies concern populations more than

individuals. Thus, they may not have directly examined the pattern of relationship between given productions within individuals. Certainly the study of groups is a time-honored approach in psychology, but the ultimate aim--at least from a psychotherapeutic standpoint--is to understand the personality of a particular individual. Doing so enables the psychoanalytic psychotherapist, systematically yet sensitively, to anticipate and recognize such important features of treatment as transference and countertransference and to anticipate the particular ways in which an individual might undermine interpersonal relationships. The point is that it is important for research patterns to have direct applicability to the psychotherapeutic enterprise.

The situation is reminiscent of a criticism by Neisser (1982) who points to flaws in the cognitive study of memory from the point of view of cognition. He sees the results as disappointing. He writes,

At first, it seemed that we just had too many facts and not enough theory. There have been more memory experiments than anyone can count, enough to discourage even the most intrepid maker of systems. Yet without a theoretical framework all facts remain uncoordinated and uninteresting. Eventually, I realized that no theory can be expected to integrate an essentially arbitrary set of data. We have been accumulating the wrong kind of knowledge. Although we have found out a lot about performance in specific laboratory tasks, we do not know nearly enough about the phenomena that motivate the study of memory in the first place. Consequently, theories of memory are either so closely bound to particular experiments

that they are uninteresting, or so vague that they are intellectually unsatisfying.

This suggests the importance of employing a research structure with direct implications for theoretical application, an issue touched on in the next section and elaborated more fully with respect to choosing an appropriate scale for this study.

5. CLEARER DEFINITIONS: ADDRESSING THE CRITERION ISSUE

Another group of well-designed studies used less ambiguous behaviors as criteria.

Most recently--and more criterially precise than previous research in the area--Bruhn and Davidow (1983) studied a group of 15 delinquent males, all convicted of at least one property offense, using a coding system derived from early memories of delinquents. Delinquents recall injuries to themselves, usually to the head, with secondary gains from responses of family members. They recall rulebreaking with no consequences either with parents not present or with parents interposing themselves between the action and its consequences. They also show poorer judgement when alone and show expectations of being victimized. Clinicians, using Bruhn and Davidow's screening system, performed better than clinicians using clinical judgement, successfully identifying 80% of the delinquents and 100% of the non-delinquents.

Monahan (1983) studied early memories of fifty-nine hospitalized children and adolescents who had attempted suicide, seriously threatened to do so, or who were used as non-suicidal controls. Based on his own scoring system, he found both suicidal groups give higher numbers of EMs. He also found that attempters almost always represent themselves with another person and do so more than the other two groups (contrary to his hypothesis expecting indications of alienation). Finally, talkers represent receiving care from their fathers more often than the others.

As mentioned previously, Krohn and Mayman (1974) generated an Object Representation Scale for dreams and used it for developing ratings of dreams, early memories, Rorschach responses, and therapist-supervisor appraisals of patients. They used the latter score as one criterion measure and also a score on a continuously scaled health-sickness rating scale. The results are more concerned with internal consistency than with particular descriptive characteristics of a particular set of patients and, therefore, will be discussed later.

Last (1979) and Last and Bruhn (1983) examined the psychodiagnostic applicability of earliest memories to children. Directly addressing the problem of validity and reliability of the criterion instrument, Last selected

Achenbach's (1978) Child Behavior Check List to generate groupings of well-adjusted, mildly-maladjusted, and severely-maladjusted children. Applying a scoring system collating the best from several previous early memory scales, he differentiated degree of adjustment in children at a better level than clinicians using clinical judgement alone (mean hit rates of 49% vs 37%).

These studies are mentioned to point out two approaches to providing a firm criterial basis against which to examine the descriptive or predictive utility of projective fantasy productions. The approaches can be distinguished as a "screening" approach and a "continuous scale" approach.

The juvenile delinquency and suicidal activity studies screen by defining a precise criterial activity and then studying the people characterized by that activity. At best, results of such research lead to pragmatic applications to a highly specified population, for instance, to the development of actuarially predictive screening instruments. More problematically, these results do not readily map onto broader theories of personality. One thus acquires a collection of sounder "facts" based on more limited relationships, but with no conceptual framework unifying these facts. This situation is reminiscent of

the one that stirred Neisser's criticism of cognitive psychology.

An alternative approach, that of Krohn and Mayman and of Last and Bruhn, exemplifies a reappraisal of the pathology-to-health question in terms of a continuous progression along a scale. Last and Bruhn employed scales of "adjustment" whereas Krohn and Mayman employed scales of "health-sickness." Conceivably, one could determine a diagnosis from positions on their continua, although a conventional diagnostic determination is not their major concern. Rather, they attempt, more realistically, to "locate" individuals on a spectrum that is both representative of the broad range of possible pathology and that is adequate in acknowledging the nuances differentiating individuals. By treating "adjustment" or "health-sickness" as a dimension, it is possible to relate all individuals to one another, thereby facilitating comprehensive theoretical comparison.

6. SCORING SYSTEMS

The examination of criteria used in research reviewed so far has shown two trends. First, it has shown the evolution of an increased precision in the categories employed for differentiating group membership when nominal criteria are chosen for this purpose. Second, as an alter-

native to nominal criteria for determining group membership, the use of continua has developed as a positive step toward theory building. Next examined are the procedures used for reducing individual fantasy productions into a form suitable for comparison with the criteria.

The most frequently used and least formally structured approach is the clinical approach. A diagnostician or psychotherapist, reviewing fantasy productions, develops inferential conclusions without articulating a concrete procedure consistently employed from case to case. This does not mean inferences are unsophisticated; it simply means the procedure is unique to the experience of the beholder, hence, inaccessible to an observer.

For instance, Mayman (1968) wrote of psychoanalytic inferences about character structure from dreams and early memories, based on a knowledge of developmental issues. Mosak, an Adlerian, writes of early memories as parallel to "headlines" about one's life, an approach similar to Olson's (1979) "Bottom Line Technique," which involves filling in the blanks in the series of statements:

I am: (self concept). The world is: (world view).
Therefore: _____.

Olson's technique, in turn, parallels the story sequence analysis Arnold (1962) advocates for determining motivation and predicting achievement with the TAT. Finally, from a more general vantage point, Plewa (1935) writes of

early memories from an "allegorical" perspective as presenting the "leitmotif" of the individual's "apperception of life's problems."

Relatively informally structured clinical approaches offer an orientation to summarizing material for the practicing psychotherapist with respect to one specific individual, often while having much information in addition to the particular fantasy production. Alternately, one can organize one's views of patient material using these productions as powerful metaphors for "sensitizing" oneself to dawning issues.

The clinical approach relies primarily on intuition to determine the meaning of the fantasy production for the individual. Intuition, in this context, refers to a largely unconscious process of tapping forgotten memories and associated emotional experiences, recognizing the parameters of like experiences for the patient. This approach, of course, is susceptible both to poorly based conclusions and to overestimations of understanding as well as to interpersonally-perceptive giftedness on the part of the examiner. The problem, therefore, is its variability.

The sign approach is the next, more formalized, orientation to reducing fantasy productions. This most common approach to researching fantasy productions correlates

a set of nominal categories with factors of interest. For example, Langs et al. (1960) developed a thirty-seven item scale including, for example: age in memory, clarity of fantasy, mood, sensory modalities, locale and setting, motion, concern with appearances of people, themes referring to body parts, damage-destruction aspect, logic and connectedness of sequence, contact with reality, use of symbols, current social functioning.

Hall and Van de Castle (1966) approached dreams exclusively through content analysis. They classified the components of 1000 dreams, developing norms on the presence of characters, social interactions, activities, achievement outcomes, environmental press, emotions, and descriptive elements. They also generated a list of 1170 objects mentioned in the dreams along with their frequencies of occurrence.

Bruhn and Davidow (1983), eschewing apriori determined scales, developed a category system from the memories of delinquents. The categories included Injury (causes, to head, parental involvement, illness, to others), Rulebreaking (with and without sanctions), Self versus Others (alone, interest in others), Mastery (failed, successful), Victimization (self, others).

The following scale will be presented as a highly elaborate example of this format. Manaster and Perryman

(1973) developed a scoring system involving Characters (mother, father, siblings, other family members, non-family members, group, animals, number of characters), Themes (birth of a sibling, death, illness/ injury, punishment, misdeeds, givingness, mastery, mutuality, attention-getting, new or unfamiliar situations causing excitement, fear or anxiety provoking or threatening situation, open hostility, other, number of themes), Concern with Detail (visual, auditory, motor), Setting (school, hospital/doctor's office, inside the home, outside in the subject's neighborhood, traveling, inside the home of a non-family member, outside and away from family home or neighborhood, unclear, others, number of settings), Active-Passive, Control (internal with subject accepting responsibility, external with subject disassociating from any consequences or outcomes), and Affect (positive, negative, neutral).

This selective review exemplifies the varieties of nominal scales, all generated from long lists of signs whose presence or absence is scored. The shortcomings of this approach are similarly to those of using tightly defined behaviors as nominal criteria. There is generally no explicit way to weight the significance of the different signs, hence, this approach typically lacks a means for mapping of the results onto a general theory.

Exemplifying an alternative to the nominal sign approach is Blatt's work on the study of object representation in projective productions (Blatt and Lerner, 1983). Blatt regards his research as focusing on "structural" dimensions. His psychoanalytic position also is influenced strongly by the cognitive developmental thinking of Piaget (1954) and Werner (1948). Though he describes his work as applicable to dreams and memories, most of his efforts have concerned the Rorschach, spontaneous descriptions of important others, and the TAT (Blatt, and Lerner, 1983a). A portion of his system rates, on five-point scales, a series of twelve personal qualities: affectionate, ambitious, benevolent, cold-warm, degree of constructive involvement, intellectual, judgmental, negative-positive ideal, nurturant, punitive, successful, weak-strong. He then factor analytically incorporates these quality scores into a nurturance factor and a striving factor.

A second portion of his system rates "conceptual level" along a cognition-based continuous scale progressing from Sensorimotor-Preoperational through Concrete-Perceptual, Iconic External and Iconic Internal, to Conceptual Representational (Blatt, Chevron, Quinlan, Wein, 1981). This shift to a continuous scale, is representationally tied to a theory of cognitive development, with

one end of the continuum representing primitivity and the other end representing mature development.

Krohn and Mayman's (1974) work exemplifies another alternative to the nominal sign approach and is more directly pertinent to the current study. Whereas Blatt views his work as focusing on "structure" of object representation, he views Krohn and Mayman as more focused on "theme and content" (Blatt and Lerner, 1983a). The distinction is somewhat misleading, however, since Blatt's scales also focus, implicitly, on personal qualitative content and Krohn and Mayman's scale also focuses, implicitly, on the structure of object differentiation.

As mentioned earlier, Krohn and Mayman's scale measures level of object representation in the manifest content of dreams and projective tests. The theoretical basis for their work rests in the early object relations theorists, both British (Klein, Fairbairn, Guntrip, Winnicott) and American (Kohut and Kernberg). It also includes a primary emphasis on Kernberg's (1966) view of personality structure as comprised of a "configuration of differentially 'metabolized' internalizations" of subject-object-affect packets. They also draw on previous work with a psychoanalytically-based scale for early memories by Mayman and Ryan (1972) and on a period of immersion in

the data. In describing this latter period of "sifting through the dream data," Krohn writes of how,

an intriguing dimension arose: marked differences were found in the humanness, differentiation, and warmth of different patient's dreams. There were striking differences in the richness versus primitivity of portrayals of people and environments across different patients (Hatcher and Krohn, 1980, p. 303).

Thus, using this framework, one can assess developmental levels of representational differentiation and elaboration. At the primitive end of the spectrum, one expects the experience of self and/or other to be either "highly idealized and perfect or empty and persecutory." In advancing developmentally, one accrues more fully differentiated recognition and appreciation of the roles and positions of others. In conjunction with the developing capacity to comprehend greater subtlety in the variations among relationships, one also develops capacities to modulate one's own affective experience and personal expectations. At the more "mature" end of development, others and self "become richer, more varied, more consistent, and more congruent with what objects are really like" (p. 448).

Employing this scale to dreams, early memories, Rorschach, and therapist appraisals of the twenty-four subjects--and comparing all three to ratings on the Luborsky Health-Sickness rating scale--Krohn (1972) and Krohn and Mayman (1974) report significant correlations between

scores across the entire range of data. They comment, in summary,

The fundamental conclusion to be drawn from this study is that level of object representation appears to be a salient, consistent, researchable personality dimension that expresses itself through a relatively diverse set of psychological avenues ranging from a realm as private as dream life to one as interpersonal as psychotherapy. Moreover, it is not a redundant construct synonymous with level of psychopathology or severity of symptomatology (Krohn and Mayman, 1974, p. 464).

A shortcoming with Krohn's unidimensional scale (possibly indirectly acknowledged through a provision for secondary scorings), is the presupposition that the relationship of the various descriptors at any level of the scale are unequivocally established and, therefore, cannot vary independently. That is, particular qualities characterizing represented objects are taken to vary directly with each other, disregarding the possibility that different features of a fantasy may vary differentially. Thus, for instance, if the setting is vague and diffuse, Krohn assumes that individuals portrayed--or what stand for individuals--are also undifferentiated. When this is not the case in the raw data, summary statements generated from unidimensional scales bury important variations.

Also pertinent to the measurement of object representation in fantasy productions is a subscale derived by Last (1981), from Mayman's (1973) unpublished object representation scale for early memories, in the process of

designing his own Comprehensive Early Memory Scoring System. His object representational sub-categories included: Perception of Others, Perception of Self, Perception of the Environment, Individual Distinctiveness and Degree of Interpersonal Contact. In addition, he separately includes a section for scoring nominal category material such as that designated in the early memory scales reviewed above (e.g., Mannaster-Perryman, 1974) thereby developing a hybrid measure. This is clearly a sophisticated effort, unfortunately the object representational section is insufficiently detailed for the purposes of the present exploration and leaves out features phenomenological analysis indicates as important.

A significant aspect of the Blatt, the Krohn and Mayman, and the Last positions is the assumption of continuous dimensions of object representation. The resulting ordinal scales have the advantage of locating an individual along a dimension, the location of which carries with it an explicit pattern of complex characteristics. To know the number on the continuum means to implicitly have much information available about the individual from a psychoanalytically-derived, object-representational perspective.

7. SUMMARY AND STATEMENT OF THE PROBLEM

The projective hypothesis holds a venerable position in the history of clinical psychology. Psychodynamically-oriented clinicians use fantasy productions such as dreams, early memories, and projective story tests for describing and predicting both in assessment and treatment. In the process, they employ diverse methods for appraising and organizing projective productions, including varying combinations of clinical inference and actuarial rigor. A familiar debate arises in weighing these variations and, though the arguments will not be detailed here, two anecdotes by Meehl provide a pithy summary of the relevant issues.

Commenting on the power of the psychoanalytic case observations, Meehl (1978) remarks:

There is not a single experiment reported in my 23-volume set of the standard edition of Freud nor is there a t-test. But I would take Freud's clinical observations over most people's t-tests anytime (p. 817).

In contrast, Meehl (1954) also tells the story of a very sensitive clinician who, having administered many batteries comprised of a Wechsler-Bellevue Intelligence Test and another test of particular interest to him, made the statement that he thought he could effectively estimate IQ's using his favorite test.

He had "noticed" that on the whole the correla-

tion seemed "pretty good." The [computed] correlation between the IQ of a group of cases and this clinician's guesses from his favorite test was .04 (p. 28).

The exploration of the case-study and the research literature shows that both approaches offer assets and liabilities to be taken into account in exploring the question of congruence among fantasy productions.

Furthermore, each of the projective fantasy productions has many proponents who endorse its use as a diagnostic instrument. Saul, Snyder, and Sheppard (1956), argue for the equivalence of two fantasy productions when they write, in a statement later echoed by others (e.g., Langs, 1966):

'Earliest memories' are of the same nature and structure as dreams, being selected and distorted and perhaps even fabricated from hearsay by the same forces which shape the dream; and they are used, as are day residues in dreams, to serve the basic forces of the personality. . . . Being less influenced by reactions to daily life than current dreams, they reveal the nuclear emotional constellation even more directly. As the balance of forces in the nucleus of the personality shifts and changes, because of life experience or analytic treatment, new memories may appear which fit better. Because of their power to reveal the basic dynamics, the first memories are important theoretically and practically. They are a guide to the childhood motivational patterns which remain prominent, and hence to the therapeutic problem, and to how these patterns will be handled and worked out in life and in the transference. They are indispensable to the psychoanalytic diagnostic interview (p. 236).

A potentially contrary position is espoused by Bruhn and Schiffman (1982), who argue that some fantasy produc-

tions provide sufficiently differing species of data that it is methodologically inappropriate to take a scoring system generated for one and use it on the other in predicting some independent variable.

The use of the TAT, due to its structured nature and its stimulus pull (e.g., Henry, 1956), can be compared with asking a subject, "What is your favorite type of ice cream?" In contrast, the use of EMs [early memories] can be compared with asking a subject, "What is your favorite food?" Two subjects may both report, "chocolate ice cream," but the degree to which these choices are preferred may differ radically (265).

Given the ubiquitous use of early memories, fantasy stories, and dreams in psychodynamically-based appraisal of personality, it seems worthwhile to explore implications crystalized by these quotes and examine the degree of congruence among these measures. Do dreams differ from early memories or other fantasies? Can their degree of correspondence or difference be measured? If psychoanalytic psychotherapist A acquires a dream report during an initial interview will he or she draw the same inferential picture of the individual as psychotherapist B would with an early memory or as psychotherapist C who acquired fantasy material in the form of a story? Or, because one could attribute differences to theoretical orientations, would psychotherapist A draw the same clinical picture from a dream as from a memory or a story, like Van Lennep's Four Picture Test?

The literature, with a couple of exceptions, does not directly address the issue of equivalence and those who have approached it indirectly were generally problematic in their choice of criterion behaviors for distinguishing groups. Interesting issues about scoring systems emerged. Exploration of the question of equivalence among fantasy productions requires a scoring system for comparing the data from each production. An examination of distinctions between nominal and continuous scales concluded that a multidimensional, continuous scale provides distinct advantages for the examining congruence among the fantasy productions included in the current study. Designating ordinal scales implicitly relates individuals to one another by degree rather than simply by presence or absence of some supposed characteristic feature. Also, the richness and representational variety of individual experience can be more adequately tapped by using several dimensions. Thus a multidimensional continuous scale provides a means for fine grained comparison of equivalence among the selected fantasy productions of this study.

The study of object representation (e.g., Krohn, 1972; Krohn and Mayman, 1974; Blatt, 1974; Blatt and Lerner, 1983a; Last, 1981) as a useful, researchable construct around which to organize a set of scales was

introduced. The choice of a psychoanalytically based, object representational approach arose from both its demonstrability as a researchable feature of fantasy productions and its promise for providing a powerful descriptive framework. It fulfills the need for an "experience near" language for describing the perceptual world of personality that many psychologists and psychoanalytic clinicians have called for or provided (e.g., Barker, 1965; Guntrip, 1961; Giorgi, 1970; Mayman, 1968, 1970; Schaffer, 1976; Kohut, 1977). It also provides a solid basis for drawing theoretical implications regarding the fantasy productions to which it is applied.

The previous approaches to object-representational scale presented were problematic in several ways. They were either too nominal in affective representation (Blatt, 1981) or too mono-dimensional in representing the world (Krohn and Mayman, 1974) or, when more flexible in terms of representation, too brief for maximum descriptive application (Last, 1981). The alternative is to design another scale, based in part on the critique above of previous scales, a topic addressed in the latter portion of the next chapter.

Given the development of a new set of scales, a secondary question for exploration emerges. The new scales provide a greater number of rating categories for

the purpose of yielding greater descriptive precision than the nominal and unidimensional scales previously used. Does the new scale successfully differentiate features of the object representational world depicted in these fantasy productions that were not differentiated by previous scales (e.g., Krohn, 1974)? That is, do the features scored by this scale hold together as useful distinctions or do the features ultimately merge together in an undifferentiable, unidimensional fashion after all?

In summary, the purposes of the present study are twofold:

(1) Are the three fantasy productions (early memories, dreams, and Van Lennep Four Picture Stories) congruent to one another. That is, does the representation of a subject's world, as depicted in the manifest content of these three fantasies, produce the same scores on the set of scales developed for this study?

(2) Does the set of scales developed for this study offer greater discriminating power in terms of differentially describing the subject's representational world than previous unidimensional scales?

CHAPTER II

METHODOLOGY

1. INTRODUCTION

This chapter first describes the three fantasy productions used in the present study: Van Lennep's Four-Picture Test, early memories and dream material. The second section describes pilot work undertaken with these fantasy materials, an important step leading to the development of the scales ultimately used to rate materials for the major analysis. The third section describes the scales developed for this study, including some comments about their evolution. The fourth section describes the subjects and the procedure used in the major analysis.

2. FANTASY PRODUCTIONS: VAN LENNEP'S

FOUR-PICTURE STORY TEST

Van Lennep's Four-Picture test is a story telling projective test in the tradition of such techniques as the Thematic Apperception Test, the Childrens' Apperception Test, the Tasks of Emotional Development Test, and the Make A Picture Story Test (e.g., Anderson, 1951).

The test originated in 1930 in response to experiments using the ideas of G. A. Roemer, a student of Rorschach (Van Lennep, 1948, 1951). Roemer had developed

a test using a photographic montage of pictures as a stimulus. Van Lennep was dissatisfied with its haphazard array and commissioned painting of four scenes portraying particular interpersonal situations. The artist's assignment called for producing a degree of specificity sufficient to depict situations accompanied by a degree of ambiguity sufficient to allow a variety of dynamics to unfold in the subject's fantasies.

In designing test stimuli, Van Lennep chose a different tack from the TAT. Whereas the TAT covers a broad field of subject fantasy employing many pictures, each requiring a story, the FPT uses only four relatively vague depictions of situations cast into a single story to achieve its polyvalency. Also, whereas the TAT is achromatic, the FPT is chromatic. Van Lennep viewed color as enhancing the cards' affective value and appeal in a way a black-and-white picture test, like the TAT does not. Since the same range of colors was used in all four scenes, color could provide a means for unifying the disparate situations presented in the cards thereby lightening the intellectual task of organizing them into a single, cohesive story.

The test consists of four cards, placed together in a specified array. The subject's task is to write a story in which all four scenes appear. The situation depicted

on Card I is of being together with another person, in this case with one person standing and pointing while the other sits. Card II depicts being alone in a private area. The scene is of a bedroom--a personal area--but the bed has been painted sufficiently ambiguously to allow one or more or no people to be lying in it. The third picture depicts being socially alone or rejected. The scene is of someone standing by a lamp post--a public arena--by himself in the rain. The fourth picture depicts being together with many others in a group. The scene shows a group of people sitting around a tennis match, thereby affording variations on themes of participating and on-looking.

To administer the test, the examiner gives the following directions:

In a moment I am going to show you four pictures laid out like this. (Subjects are then shown a diagram of a rectangle divided into four parts, depicting the arrangement of the cards). I'll give you a minute to look at them and then I'll take them away and ask you to write a story in which each of the pictures appears as a scene or event. You can start with any picture and end with any picture, but be sure to include them all. Make it a real story with a hero and a plot; a story with a beginning, a middle, and an end.

Do you have any questions?

At this point any questions are answered, the pictures are laid out, the subject is given sixty seconds to look at them, and is then provided a private place to write the story.

General advantages to the test include an inexhaustible array of possible stories, the possibility of applying projective hypotheses to materials generated, the explicit linking of disparate events rather than separate productions to separate stimuli, the requirement the subject respond to systematically varied social situations, and the limited time necessary for administration in that the subject can write the story without the examiner's presence.

Of some relevance to the choice of the Four Picture Test is the disheartening results Blatt (1985) reports regarding his efforts to measure object representation on the TAT. Though he did not provide details about the difficulties, it seems possible that the TAT's large array of stimuli and disparate stories might confuse efforts to determine a unified picture of a subject's object relational status. If so, the Four Picture Test arguably might be more suitable for such analyses.

3. FANTASY PRODUCTIONS: EARLY MEMORIES AND DREAMS

The questions asked of subjects with regard to their early memories were:

I'd like you to go back in your memory and describe in detail the earliest incident you can recall.

Is there anything else you can tell me about the incident?

What part stands out most vividly as you recall the incident.

The questions asked of subjects with regard to their dreams were:

Tell me a dream you've had -- not an ambition, but a dream while sleeping -- in as much detail as you can.

What else can you tell me about it?

What part stands out most vividly as you recall the dream?

The idea of querying for vividness was drawn from an early memory inquiry recommended by Olson (1979). This question orients the interviewer to the subject's most figural representation while minimally biasing the report toward greater articulation than the subject volunteers.

The same questions were asked for both pilot studies (see below) and for the major study, although there were some other differences between the two also exist. In pilot studies, subjects were asked to write responses to the questions. In the major study, subjects were asked these questions in the context of a longer interview and their responses were recorded on audio tape and later transcribed.

4. PILOT STUDIES

Initial efforts attempted to match an individual's early memory report with his or her dream report and with his or her Van Lennep story. The first pilot study used

fantasy productions (early memories, dreams, and Four Picture Stories) from four undergraduate volunteers who were seeking extra credit for an introductory psychology course. After receiving scrambled productions, three graduate students in clinical psychology independently tried to reorganize the productions into their original combinations. Two people matched everything appropriately except for switching the dreams of two subjects; the third rater made three mismatching errors. The collective results suggest three points:

First, these raters approached the tasks with no formal training in the use of these fantasy productions. Thus, their success suggests that some common, discernable threads do run through dreams, early memories, and Van Lennep stories.

Second, all three had trouble with the same dream. The feature that was difficult to deal with involved the the depiction, in both a dream and an early memory, of a powerfully troubling emotional experience associated with a playground slide. In the early memory, a mean older brother was pushing the protesting subject down the slide, into a huge mud puddle at the bottom. In the dream, the subject was cascading down a slide, across a razor blade and into a pool of alcohol. The problem was that, despite the salience of the slide, the pool, and being at the

mercy of forces outside oneself, the productions were from different people. Common features--despite similar content and similar salience--do not guarantee matches.

Third, the raters spontaneously employed approaches that matched the usual methods employed by researchers in the area of projective fantasy research. That is, they invented the same sorts of methods for organizing the fantasy production material as those described above in the literature review section. Two raters used a generally intuitive approach, one backing it up with knowledge of qualities of responses from Rorschach interpretation while the other looked to demographic signs to confirm or disconfirm hypotheses. The third rater used a psychoanalytically-based approach, diagnostically characterizing relationships as monadic, dyadic, or triadic and supplementing these determinations with features that either appeared to be clearly symbolic or that struck him, intuitively, as being important to the subject.

The problems with attempting to link a specific Four Picture Test with a specific dream and memory became apparent in a second pilot study. In this study, fifteen individually-produced sets of dreams, memories, and Van Lennep stories were acquired from volunteers. The three types of fantasies were segregated and then "scrambled." The task was to match each individual fantasy production

to its respective mates. Ideal results would have been for each individual's dream, memory, and story to be grouped together. The larger array of fantasies, however, generated an enormous number of possibilities with no effective means to determine which features were most important in linking respective mates. The "slide" problem reported for the first study was multiplied many times over.

Without a higher-order set of organizing principles, trying to answer the question, "Given this dream, what should I look for in an early memory or story out there?" quickly leads one into a morass of rapidly overwhelming possibilities. Often it is difficult to determine the appropriate level of abstraction to pursue in matching productions. In addition, another increase in complexity occurs when a subject is inconsistent. For instance, in the realm of salient relationships, one male subject described a playful, entertaining exchange with a warm, nurturing, responsive mother in one production and then wrote a harrowing story about a cold, malignant, depriving, demanding, retributive mother deliberately attempting to starve her son, in the second production. Given both productions, one can, postdictively, generate an adequate explanation balancing these manifestly incom-

patible productions. From a predictive position, however, such an inconsistency is not easy to anticipate.

Three conclusions became apparent from analyzing both pilot studies: first, that linking the three types of fantasy productions on an intuitive basis was not feasible; second, that the scales described in the literature review would not adequately serve the current purposes and, therefore, third, it would be desirable to develop a more suitable series of categories or scales for dealing with the variability within this variety of projective productions. The development of these scales is the topic of the next section.

5. THE SCALES

Experiences derived from the pilot studies made it clear that the determination of congruence among fantasy productions required a systematic framework against which dreams, early memories, and Van Lennep stories could be contrasted. A yardstick of analysis was necessary. As discussed in the literature review above, three basic approaches have been taken to examining and re-organizing fantasy data for the purpose of generating descriptive and predictive statements about individuals: clinical inference, sign approaches using nominal scales, and continuous scales. Each offers strengths and difficulties. The clin-

ical approach fits the daily activity of the psychotherapist who generates and confirms or discards hypotheses in response to the flow case material. An outside observer, however, has limited access to the inferential decisions being made. Sign approaches offer the potential for generating screening devices but reflect only discontinuous, all-or-none features of an individual's world, and thereby offer no structure for relating individuals within some more comprehensive theoretical framework. Continuous scales provide a means to relate people across a range of degrees of presence or absence of some feature; they, however, run the danger of confounding factors that might better be represented separately.

Efforts were geared toward developing a set of scales that represented salient features of individuals' worlds in a fashion discriminatively descriptive of a single individual while comprehensively and systematically representative of the array of possibilities emerging across individuals. This was tackled by conceptually analyzing scales others have used and by phenomenologically examining data produced during pilot work.

As mentioned in the literature review, the sign-approach scales (e.g., Manaster-Perryman, 1974; Langs, 1960) consider such features as: individuals present, other animate characters present, settings in which events

occurred, features attributable to oneself in the production, activities one undertook in response to conflicts or events in the production, qualities and effects attributable to activities that took place by the characters, and affective experience).

It seemed important to incorporate such features into any scale developed. Also, as described in the literature review, the scales were to incorporate Krohn's (1974) continuous scale format while addressing the limitations of his unidimensional approach by developing a more sensitive multidimensional technique. Additional consideration was paid the object representation approaches of Blatt (1976), Mayman (1977), and Last (1983) along with the work of Werner (1948) on perceptual-cognitive acuity.

Finally, phenomenological analysis of fantasy productions in pilot studies provided a background against which to consider contributions from all the above sources. This analysis also provided the final categorical structure for the scales.

The scales developed consists of three major categories, called domains: Representation of Surroundings, Representation of Others, and Representation of Self. Each of these, in turn, is divided into a series of subcategorical dimensions described by five-point Likert-like continuous scales. Figure II-1 will be included at this

point to clarify and summarize the vocabulary used to designate features of this study.

DOMAIN			
D I M E N S I O N S	Surroundings	Others	Self
	Discreteness	Discreteness	Discreteness
	Toning	Toning	Toning
	Valence	Valence	
			Potency
			Closeness
			Satisfaction

Figure II-1. Components of the Surroundings/Others/Self Representation Scales

Domain I: Representation of Physical Surroundings

Representation of Physical Surroundings is comprised of the inanimate features of the world of the fantasy production. Its dimensions are called: Discreteness, Sensual-Emotional Toning, and Valence of Surroundings.

Discreteness is intended as a primarily cognitive-perceptual measure aimed at representing the salience and differentiation of aspects of the environment including

location, props, and time. This scale ranges from a point at which the surroundings are not even mentioned to a very complexly differentiated world in which aspects of the setting are precisely delineated and simultaneous observations of comparison and contrast are occurring with regard to those features.

Sensual-Emotional Toning is a dimension intended to indicate the way in which one discriminates and, thereby, inhabits the surroundings. Its scale runs from peripheral, with the setting not salient, to a kind of detailing of features in which the distal senses of vision and audition are most prominent. From there it moves to a point of engagement of the proximal senses of taste, touch, smell and/or emotionally embedded references to the surroundings themselves (e.g., a furious storm) and, finally, to a vibrantly toned version of the world. This dimension is an indication of the vividness with which the subject invests fantasy productions.

Valence of Surroundings is a dimension of malevalence, violence, and deprivation versus fertility, responsiveness, and benevalence in Representation of the Surroundings.

Domain II: Representation of Others

Representation of Others employs the same three dimensions applied to the Representation of Surroundings

domain except, in this case, applying them to animate presences in the fantasy productions.

Discreteness is a cognitive-perceptual dimension of the salience and discriminativity of others as they present themselves in the fantasies. The scale runs from a level devoid of living characters, to a level of vaguely differentiated beings characterized primarily by the roles they fill, to a sense of internal variability and complex differentiation in which people clearly evidence individually distinguishable internal lives of their own.

Sensual-emotional Toning is a measure of vividness attributable to others in the fantasy. It runs from peripheral presences through use of distal senses. It then moves on to proximal senses and multi-dimensional affectivity to a level of passionate, vibrant emotional richness.

Valence to Relationships, like with Surroundings, runs from malevolent, violent, murderous, malignant presences to nurturant, warm, responsive others. This is differentiated from malevolence in the environment because it is clearly possible to, for example, represent an idyllic beach scene in which people do violent acts or, in contrast, a dangerous situation in which people save or protect one another.

Domain III: Representation of the Self--First Efforts

This domain had a more complex evolution than did the other two. The original idea for examining the self domain derived from an interest in Kohut's (1977, 1984) descriptions of narcissism. From a thematic analysis (Jones, 1984) of Kohut's works, four major descriptors of self function and their associated adjectival descriptors were abstracted: Cohesiveness, Openness, Potency, and Vitality.

Cohesiveness refers to the establishment of a sense of centrality, cohesiveness, and coherence to one's identity versus indications of dissolution, dissipation, insubstantiality, or diffusion with regard to one's sense of identity. This dimension would be scored based on references in subjects' statements reflecting experiences of, for instance, feeling confirmed, solid, substantial, stable, intact, and anchored versus feeling shattered, fragmented, in pieces, disintegrating, amorphous, cloudy, and disarrayed.

Openness refers to references to one's sense of availability to or responsiveness either to the world or to others based on indications of one's flexibility and mobility versus one's inflexibility, and immobility. This dimension would, for instance, be scored based on a subject's references to warmth, depth, and aliveness versus

frozenness, coldness, flatness, and any sense that one must keep one's boundaries rigidly and impermeably established for fear of being overwhelmed.

Potency refers to references to one's sense of presence and to one's sense of having an impact on the world. Indicators for this dimension, for instance, would include references to formidability, confidence, power, and ineffectualness.

Vitality refers to one's sense of being "fueled," that is, of having a reservoir of sustenance available for oneself that derives from oneself or that is readily accessible to one. Example indicators of this dimension would include references to ambitiousness, perseverance, productivity, curiosity, sense of worth, and capacity for self-compensation when others fail empathically versus depletion, lethargy, apathy, emptiness, yearning for reassurance, or frantic activity.

Though these dimensions offered some promise, two problems arose in applying them. First, they were not readily explicit in all of the fantasy productions collected and, second, scoring them, at times, required too high a degree of inference. For these reasons, they were not used in the present analysis; instead more immediately scoreable dimensions were generated from the data. These following dimensions cover some of the ground sug-

gested by the Kohut's approach, but could be more readily and reliably scored for all the productions.

Domain III: Representation Of The Self--Final Form

Representation of Self is comprised of five dimensions: Discreteness, Sensual-Emotional Toning, Potency-Presence-Impact, Interpersonal Closeness, and Satisfaction-Fulfillment.

Discreteness and Sensual-Emotional Toning have already been described in relation to the previous two domains and operate analogously in this one. Their inclusion occurred late in the development of the scales with the realization that some people did not present themselves in anything but an inferential fashion in their fantasy productions whereas others contributed fantasies almost exclusively focused upon themselves.

Potency-Presence-Impact, as the name implies, refers to the sense of powerlessness versus effectiveness with which an individual invests his or her "self" in the fantasy. It is intended to measure how much an individual is a victim of circumstances as opposed to a formidable presence who initiates activity.

Interpersonal Closeness arose from the observation that some subjects depicted "self" as isolated from people, only interacting with facets of the environment. Other productions portrayed individuals who watched from a

distance; still others sought contact, whereas others were clearly and unambiguously involved with people. Such a positioning of oneself, presumably, has direct implications for one's inclination toward distant or close relationships with others.

The final dimension of Representation of Self is Satisfaction-Fulfillment. This scale is intended as an analog to valence. Whereas the Valence dimensions rate Malevalence versus benevalence of the world and others--both being external or publicly observable qualities, Satisfaction-Fulfillment provides a measure of the apparent experience of the Valence from an internal or private perspective in response to the events that occur during the fantasy. It ranges from the hero/self being killed or longing for death to gratification and complete fulfillment.

The scales separates domains, and dimensions within these domains, in sufficiently explicit fashion as to allow the rater a broad range of possible constellations for characterizing the representational worlds of individuals' fantasies without requiring the rater to employ a high degree of inference. The five-point scales move in a logical, developmentally-founded, and clear progression that affords the rater clear-cut sorting factors within which to score subjects' fantasy productions.

6. RELIABILITY

Reliability of the present scales was determined through an inter-rater reliability procedure and an intra-rater procedure.

For the inter-rater reliability procedure, a graduate student in clinical psychology, unfamiliar with the purpose of this research, was provided protocols from four individual subjects. These protocols included an early memory, a dream, and a Van Lennep Four Picture Test. Thus, twelve fantasy productions were rated on each of the eleven dimensions. This rater was then given a rating form and asked to rate the protocols based on the descriptions provided for positions on each of the dimensions. This was done without additional discussion. These results were compared to those of this researcher. In terms of percent agreement, 70% of the scores were identical and 99.2% were within one point of one another (note: the scales number five units). In a discussion of disagreements after the comparison, differences were readily reconcilable.

The second reliability procedure involved a two month follow-up re-rating of subject protocols by the author. One example of either an early memory, a dream or a Van Lennep Story was randomly selected for each subject to provide an equal number of each type from each of the

twenty-six subjects. Given the number of subjects, single-subject allocation of productions resulted in nine early memories, nine dreams, and eight Van Lennep stories. This procedure allows an assessment of the overall stability of an individual's ratings and an assessment of differences between productions and between dimensions.

Table II-I presents the results of this reliability comparison. In this table, each value indicates the number of times exact agreement failed to occur on the rating of a fantasy production on a particular dimension. For example, the number "2" for Discreteness (of Surroundings) under the Early Memory heading indicates that comparisons of early ratings and later ratings showed differences in ratings occurred twice for the nine early memories. These are labelled "one-point disagreements" because, with the single exception shown by the asterisk, the re-ratings were either identical or within one scale point of each other.

The rating disagreements that occurred were generally distributed evenly across all three fantasy productions and ten of eleven dimensions. Toning of Self presented the most difficulty with a mean of three one-point deviations per fantasy production as compared with a total of about one to two per dimension for each of the other ten dimensions.

TABLE II-1. Source of One-Point Disagreements On Rescoring A Single Production For Each Subject.

Source	EARLY MEMORIES	DREAMS	VAN LENNEP STORIES	Total
I. SURROUNDINGS				
Discreteness	2	0	3	5
Toning	1	3	1	5
Valence	1	1	3	5
II. OTHERS				
Discreteness	1	2	1	4
Toning	1	2	2	5
Valence	0	2	2	4
III. SELF				
Discreteness	2	1	1	4
Toning	4	2	3	9
Potency	3	2	1	6
Closeness	2	2	1	5
Satisfaction	1	1*	2	4
	18	18	20	56

* One two-point discrepancy occurred for this rating.

Reliabilities in rescoring the productions were as follows. For early memories, 82% were identical and 99% were within one point. For dreams, 80% were identical and 100% were within one point. For the Van Lennep stories, 77.2% were identical and 100% were within one point. Overall, the re-rating reliability was: 80% identical scores and 99.6% within one point on the scale. These results were deemed sufficiently high to justify proceeding with this study using the values produced by a single highly trained rater.

7. SUBJECTS

The data for the final study was gathered as part of a larger, ongoing project studying characteristics of members of the College Scholars program, an alternative to the basic undergraduate educational track at the University of Tennessee, that allows specially selected, academically talent students to have maximum flexibility in designing their own curriculum. Subjects's ages ranged from nineteen to twenty two; fourteen were male and thirteen were female. All participants were volunteers who expressed an interest after receiving a letter and a follow up call explaining the testing and interviewing procedures, the fact that two sessions of two to three hours in length were to be scheduled at their convenience,

and that an optional follow-up session to discuss the general implications of our findings would be available. The first twenty-seven subjects whose protocols were available for examination were included in the present study. Of these, one was subsequently dropped because his interview tape was inaudible. The availability of the subjects does not indicate a selection-motivation factor since their inclusion in the study was determined by interviewers arranging appointments from population subsets assigned to them. In practice this process was highly dependent on who answered or failed to answer the phone at the time the interviewer was arranging appointments.

8. PROCEDURES

The examiner and subject met twice over a two to seven day period. The first session involved filling out demographic information, taking either the Personality Research Form (PRF) or the Tellegen Differential Personality Questionnaire (DPQ), writing a story to the Van Lenep Four Picture Test, followed by taking the test not taken earlier (i.e., either the DPQ or the PRF). The second session involved the administration of the Rorschach, an audiotaped interview, and the Cornell Index.

An early memory report and a dream report were col-

lected during the interview. A series of questions about perceived styles of approaching the world were asked with the requests for dream and memory reports occurred uniformly at the same point at the end of the interview. The written Van Lennep stories and the section of the audio-tapes with the dreams and memories and were then transcribed and randomized so no identification other than a code on the back of each page for later sorting purposes distinguished the identities of subjects. The typed materials were then rated on the object representation scales developed for this study.

CHAPTER III

RESULTS

1. INTRODUCTION

The results will be presented in two sections. The first section presents associational statistics. These will be used to describe patterns among subscale dimensions as well as among the three fantasy productions. The second section will also examine these patterns, but will do so in terms of an analysis of the means of the various subscale scores.

2. ASSOCIATIONAL STATISTICS

The correlation matrix (Table III-1) presents inter-correlations between pairs of the eleven dimensions rated for each fantasy production. Thus, for example, the dimension "Discreteness of Surroundings," rated for early memories (EM), was correlated with all the other dimensions rated for early memories. The same was done for all the dimensions rated for dreams (D) and also for all the dimensions rated for Van Lennep Stories (VL). The resulting correlations provide a means for determining the relationships among the dimensions.

Examination of these correlations reveals twelve "triadic clusters," that is twelve sets of correlations in

TABLE III-1. Intercorrelations Among the Eleven Scales Within Early Memories (EM), Dreams (D), and Van Lennep Stories (VL).

VARIABLES	Surroundings			Others			Self				
	A	B	C	A1	B1	C1	A2	B2	D	E	F
I. Surroundings											
A. DISCRETENESS											
EM	—	.63*	.13	.31	.04	.18	.49*	.41*	.28	.02	.34
D		.66*	.32	.09	.08	.12	.21	.45*	.36	.12	.28
VL		.70*	.22	.36	.49*	.11	.33	.52*	.44*	.48*	.24
B. TONING											
EM		—	-.24	.25	.10	.09	.57*	.69*	.03	.00	.01
D			.11	-.08	-.03	.12	.17	.23	.32	-.04	.23
VL			.09	.50*	.62*	.19	.54*	.64*	.46*	.57*	.42*
C. VALENCE											
EM			—	.25	.06	.40*	.00	-.18	.55*	.24	.64*
D				.24	.03	.48*	.28	.50*	.46*	.28	.77*
VL				.16	.29	.54*	.06	.13	.57*	.27	.57*
II. Others											
A1. DISCRETENESS											
EM				—	.69*	.54*	.37	.32	.37	.54*	.44*
D					.77*	.17	.48*	.42*	.38	.80*	.38
VL					.70*	.24	.13	.50*	.49*	.55*	.34
B1. TONING											
EM					—	.43*	.34	.13	.24	.62*	.22
D						-.16	.27	.32	.30	.67*	.15
VL						.40*	.23	.59*	.64*	.72*	.55*
C1. VALENCE											
EM						—	.25	.26	.68*	.67*	.79*
D							.30	.08	.29	.30	.71*
VL							.08	.00	.69*	.38	.79*
III. Self											
A2. DISCRETENESS											
EM							—	.82*	.25	.17	.17
D								.61*	.23	.34	.32
VL								.63*	.16	.08	.19
B2. TONING											
EM								—	.12	.12	.13
D									.27	.40*	.40*
VL									.28	.37	.19
D. POTENCY											
EM									—	.38	.76*
D										.31	.64*
VL										.55*	.77*
E. DISTANCE											
EM										—	.48*
D											.45*
VL											.61*
F. SATISFACTION											
EM											—
D											
VL											

* Significant at .05 ($r > .39$)

which all three fantasy productions simultaneously exhibit significant correlations (i.e., greater than .39) between two dimensions. An example of such a triadic cluster occurs at the beginning of Table III-1 between Discreteness of Surroundings and Toning of Surroundings. The correlation for these two dimensions for early memories is .63, for dreams is .66, and for the Van Lennep Stories is .70.

Triadic correlations occur between Discreteness of Surroundings and Toning of Surroundings, Discreteness of Surroundings and Toning of Self, Toning of Self and Discreteness of Self. Dyadic clusters, i.e. two of the three fantasy productions simultaneously exhibit significant correlations, occur between Toning of Surroundings and both Discreteness and Toning of Self. Discreteness and Toning of Others exhibit a triadic cluster with one another but show little relationship to Discreteness and Toning of Surroundings with only one of six correlations between the two dimensions for the three fantasy productions showing significance. There are also some indications of association between the Discreteness and Toning dimensions of Others and the Discreteness and Toning dimensions of Self, though there are no triadic clusters.

Triadic clusters of significant correlations occur between the Self dimensions, Satisfaction and Closeness.

Closeness, in turn, exhibits triadic clustering with both Discreteness and Toning of Others. Satisfaction also exhibits triadic clustering with Valence of Surroundings, Valence of Others, and Potency of Self. Valence of Surroundings is triadically correlated with Valence of Others and Potency of Self. Potency of Self is also dyadically correlated with Valence of Others.

The arrangement of clusters of significant correlational clusters just summarized suggests a structure linking the eleven dimensions. This structure depicted in Figure III-1. Two major divisions emerge. The first may be described as a "Discriminative-Clarity" component comprised of the Discreteness and Toning dimensions for Surroundings and Self. The second division is more complex and seems best defined by the single, pivotal dimension of Satisfaction. Satisfaction, in turn, may be split into two sets of dimensions. The first may be termed an "Appraisal" set consisting of three dimensions: Valence of Surroundings, Valence of Others, and Potency of Self. The second may be called an "Engagement" set consisting of three dimensions: Discreteness and Toning of Others and Closeness, a Self dimension.

A second approach to analyzing the data in Table III-1 consists of counting the number of significant correlations occurring within each of the three fantasy

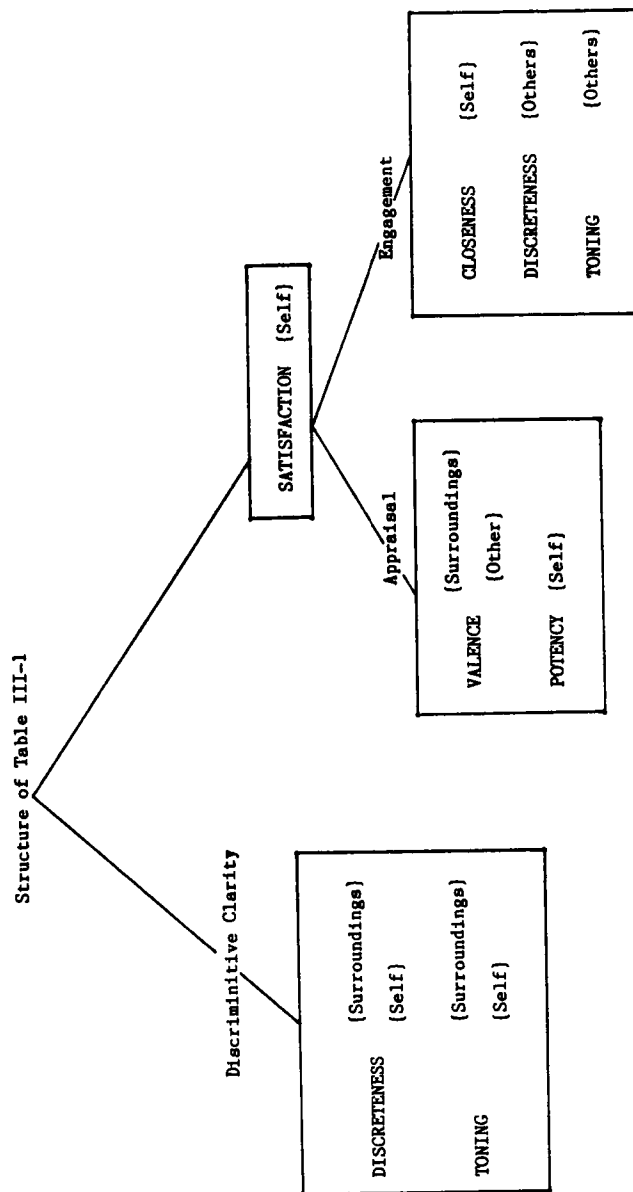


Figure III-1. The Associational Relationship Among the Eleven Dimensions of the Surroundings/Others/Self Representation Scales.

Note: Dimensions are in capital letters. Domains are bracketed.

productions. This value provides a rough index of whether the representational world of the particular fantasy production was uniform or varied. For example, if Discreteness of Surroundings for the early memory were to correlate significantly with all of the other dimensions, there would seem to be much more general similarity of things being depicted in early memories than if Discreteness of Surroundings correlated with nothing else; in this case something very unique would be represented. In terms of this tally of significant correlations, the Van Lennep stories, with thirty, has the most. Early memories were found to provide twenty significant correlations and Dreams contributed seventeen.

A final analysis of this table, tallying the fantasy production with the highest correlation in each of the fifty-six sets of intercorrelations in Table III-1 (page 75), reveals the Van Lennep Story produces the highest with twenty-seven, followed by Early Memories with sixteen and Dreams with thirteen. Coupling this pattern with the significant correlations tally above places the Van Lennep Test in the lead both times. This may imply that the Van Lennep Test offers a more homogenized presentation of the subject's world than the other two fantasy productions since its scores on the dimensions are more frequently and

more highly associated than for the other two fantasy productions.

Table III-2 presents another correlation matrix in which the respective dimensions for pairs of the three fantasy measures were correlated. Thus, the first line in the table indicates the correlation between the Discreteness of Surroundings scores for early memories and dreams ($r=.06$), for early memories and Van Lennep Stories ($r=.03$), and for dreams and Van Lennep Stories ($r=-.18$). This procedure was repeated, yielding eleven rows of correlations, one for each dimension, and three columns, one for each fantasy production. (A table including all the inter-correlations can be found in the appendix section).

By examining the columns, one can determine the frequency of significant correlations between each pairing of fantasy productions. Each column is composed of eleven correlations. Thus, at a .05 level of significance, one might expect less than one significant correlation to occur by chance for each set of correlations ($11 \times .05 = .55$).

An accounting of Table III-2 reveals no significant correlations between early memories and Van Lennep stories. It also shows dreams and Van Lennep stories produced one significant correlation. Finally, it reveals three significant correlations (with a fourth closely approaching significance) between early memories and dreams.

TABLE III-2. Intercorrelations Among Respective Dimensions for Pairings of Early Memories, Dreams, and Van Lennep Stories.

Source	EARLY MEMORY and DREAM	EARLY MEMORY and VAN LENNEP STORY	DREAM and VAN LENNEP STORY
I. SURROUNDINGS			
Discreteness	.06	.03	-.18
Toning	-.20	-.14	-.13
Valence	.09	.06	.06
II. OTHERS			
Discreteness	.49*	.07	.24
Toning	.02	-.03	.26
Valence	.22	.10	-.06
III. SELF			
Discreteness	.24	.11	-.11
Toning	.37	-.26	-.43*
Potency	.47*	-.15	-.21
Closeness	.14	.27	-.15
Satisfaction	.49*	.12	-.14

* Significant at .05 ($r = .39$ or greater).

This pattern suggests that the early memory and dream productions are more similar to one another than either is to Van Lennep's Story Test. Furthermore, the single significant correlation between dreams and the Van Lennep Test is a negative correlation ($\underline{r} = -.43$ for Toning of Self), lending additional support to the view that the Van Lennep Test differs from the other two productions in some substantial fashion.

In regard to the significant early memory and dream correlations, the Discreteness of Others ($\underline{r} = .49$) correlation is of special interest. This correlation lends confirmation to the positions of Krohn and Mayman (1974), of Blatt (e.g., 1983b), and of Last (e.g., 1970). All of these authors refer to the salience of Object Representation--in this context referring exclusively to "Other Representation"--as a viable, researchable construct. In addition, Potency for Self (.47) and Satisfaction (.49) show up as significantly correlated, and Toning for Self ($\underline{r} = .37$), closely approaches significance.

3. EXAMINATION OF MEAN SCORES

Mean dimension scores for each fantasy production were computed; these are presented in Table III-3. The mean dimension scores in this table are designated by the name of the dimension on the left and fall under the

TABLE III-3. Dimension Score Means For Each Fantasy Production.

Source	EARLY MEMORIES	DREAMS	VAN LENNEP STORIES	Mean
I. SURROUNDINGS				
Discreteness	3.50	2.77	2.81	3.02
Toning	2.69	2.38	2.77	2.62
Valence	<u>3.00</u>	<u>2.85</u>	<u>2.77</u>	<u>2.87</u>
Mean	3.06	2.67	2.78	2.83
II. OTHERS				
Discreteness	2.34	2.15	2.69	2.40
Toning	2.19	2.15	2.88	2.41
Valence	<u>3.35</u>	<u>2.77</u>	<u>2.81</u>	<u>2.97</u>
Mean	2.63	2.36	2.79	2.59
III. SELF				
Discreteness	2.88	2.96	3.77	3.20
Toning	2.96	2.92	3.62	3.17
Potency	2.96	3.08	3.19	3.08
Closeness	3.12	2.81	2.96	2.96
Satisfaction	<u>3.04</u>	<u>2.88</u>	<u>2.77</u>	<u>2.90</u>
Mean	2.99	2.93	3.26	3.06
	—	—	—	—
Mean	2.91	2.70	3.00	2.87

Note: Dimensions are scored on a 5-point scale with a score of 1 indicating less of the dimension and a score of 5 indicating more.

appropriate column for the respective fantasy productions. Domain means--means of the dimensions comprising each domain--have also been computed and are found below each set of dimensions. The label "Means" denotes the grand means (means of means) found along the fourth column and along the bottom of the table.

Examination of this table reveals that overall means of the productions are not substantially different. Differences, however, begin to emerge between fantasy productions at the level of domains, that is between representations of Surroundings, Others, and Self for each of the three productions (ranging from 2.36 to 3.26). Differences also emerge between dimensions at the level of row means (ranging from 2.40 to 3.20) and appear even more substantial at the level of the individual dimensions with mean scores for each fantasy production ranging from 2.15 to 3.77.

An analysis of variance (Table III-4) was computed over these values to test the significance of these differences. Subjects were treated as random effects and were used for determining the error terms for both fixed effects: Productions (early memories, dreams, Van Lennep Stories) and Dimensions (the eleven subscales).

Differences among the three fantasy production means were not significant ($F=2.449$, df 2/50, $p>10$). The main

TABLE III-4
ANALYSIS OF VARIANCE OF DIMENSIONS ACROSS PRODUCTIONS

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Subjects (S)	25	127.2739	5.09095	
Dimensions (D)	10	61.3706	6.13706	13.4772***
Error (SD)	250	113.8417	.45537	
Productions (P)	2	13.60373	6.80186	2.4490
Error (SP)	50	136.0932	2.72186	
DP	20	39.3706	1.96853	3.5456***
Error (SDP)	500	277.5986	.55520	

* $p < .05$
 ** $p < .01$
 *** $p < .001$

effect of Dimensions and the Dimensions x Production Interaction were both highly significant ($F = 13.4772$, $df = 10/250$, $p < .001$; $F = 3.5456$, $df = 20/500$, $p < .001$).

To facilitate examination of significant effects, the dimension means for each of the three fantasy productions were graphed in Figure III-2 in the form of a series of profiles. The profiles depict the domains by using lines (keyed to differentiate fantasy productions) to connect component dimensions. Spaces are used to separate individual domains.

Examination of Figure III-2 reveals a general similarity of pattern between the early memory and the dream profiles; that is, the peaks and valleys vary consistently with one another even though the dream scores are generally lower than the early memory scores. This contrasts noticeably with the substantial dissimilarity of pattern between those profiles and that produced by the Van Lennepe scores.

By determining the median point for each set of three scores occurring on a dimension, one can note those scores that deviate most. For instance, visual inspection of the first dimension, Discreteness of Surroundings, the Van Lennepe score holds the median position near the dream score with the early memory score--the deviating score, in

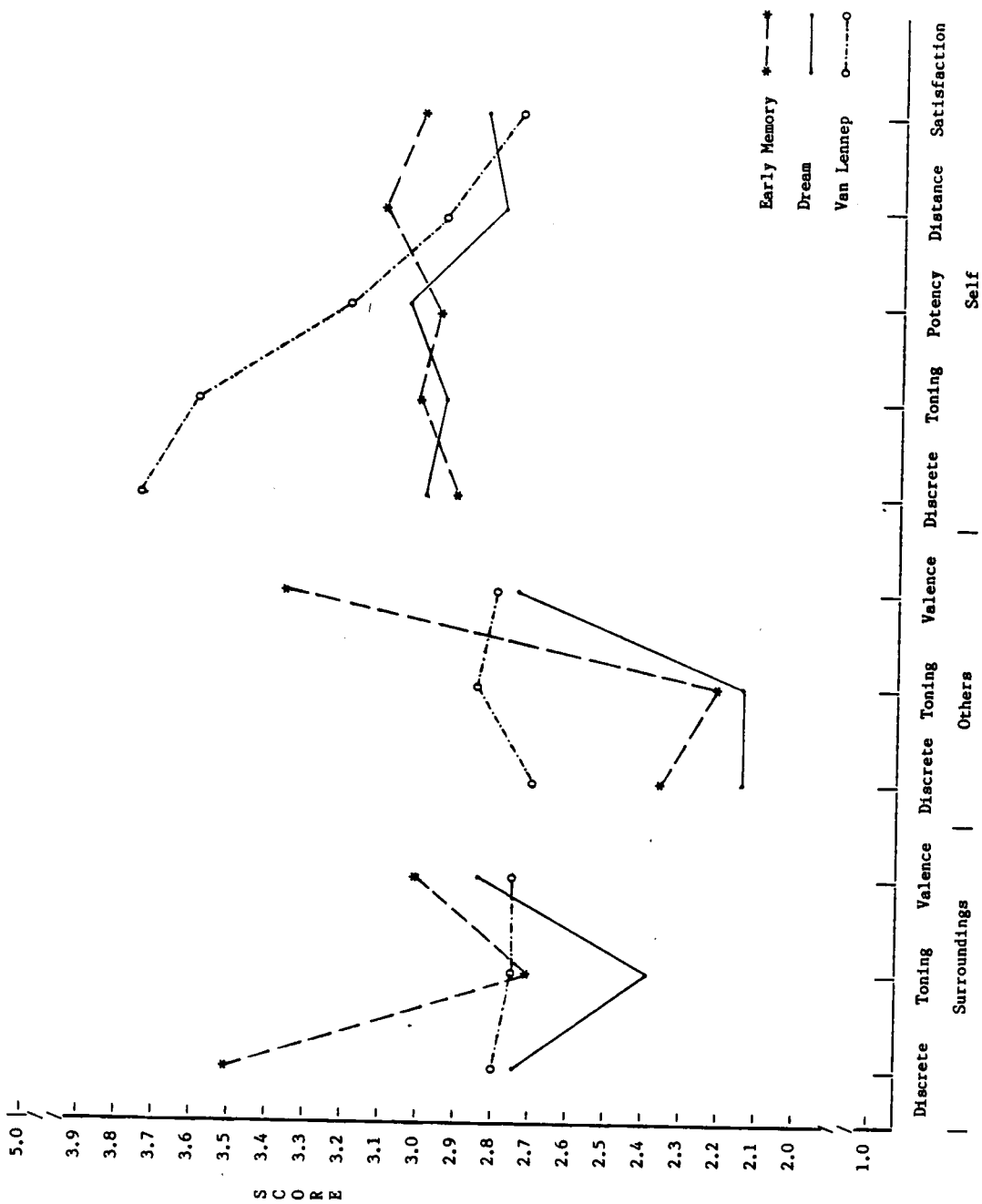


Figure III-2. Mean dimension scores for each fantasy production with indication of pertinent domains.

this case--substantially removed. (From Table III-3, page 84, their respective means are 2.81, 2.77, and 3.50).

A census of these substantially deviating scores reveals the following pattern: Dreams yield one deviating score (Toning of Surroundings), early memories two deviating scores (Discreteness of Surroundings and Valence of Others), and the Van Lennep Stories five deviating scores (Discreteness and Toning of Others; Discreteness, Toning, and Potency of Self). This finding again argues for greater similarity between dreams and early memories and greater dissimilarity between each of these productions and the stories.

As mentioned above, the graph in Figure III was also drawn to compare domains. Of particular interest in this regard are the patterns of homogeneity occurring within domains for each of the three fantasy productions. That is, for any given domain, e.g., Others, the profile of the dimensions can either be smooth or it can have peaks and valleys. A smooth profile would indicate little variability among scores in the domain. A jagged profile would indicate more substantial variability within the domain.

Examination of Figure III-2 indicates that the patterns of heterogeneity and homogeneity--peaks and valley versus flat areas--of domains for early memories match

those of dreams. The Van Lennep Stories, on the other hand, once again differ from the other two. For dreams and early memories, the dimensions comprising the domains Surroundings and Others show relative heterogeneity, that is, the scores vary substantially. On the other hand, the dimensions comprising the Self domain are relatively homogenous for both fantasy productions. The Van Lennep Stories show the opposite pattern. The dimensions comprising the domains Surroundings and Others are relatively homogenous. On the other hand, the dimensions comprising the domain Self are relatively heterogenous.

CHAPTER IV

DISCUSSION

1. INTRODUCTION

The discussion consists of three major parts: first, it examines trends in the data related to general patterns of congruence among the three fantasy productions; second, it examines the discriminative capacities of the scales used to evaluate these productions; and, third, employing distinctions raised in the discussion of scale features, it offers some final observations on some particular patterns of similarities and differences among the three fantasy productions.

2. THE CONGRUENCE ISSUE

The congruence issue concerns the degree of equivalence in manifest content among the three fantasy productions: dreams, early memories, and Van Lennep's Four Picture Story Test. Based on analysis of these fantasy productions employing the scale generated for this study, the findings on this issue are mixed. That is, early memories and dreams showed patterns of greater similarity to each other than either showed to the Van Lennep Four Picture Stories. Though correlational values were moderate, they suggested a commonality in terms of

the clarity of depiction of three dimensions for early memories and dreams: Discreteness in the domain, Representation of Others, and both Potency and Satisfaction in the domain, Representation of Self.

The determination of Discreteness in Representation of Others as a salient common feature in these productions confirms findings of other research (e.g., Krohn, 1972; Last, 1970; Blatt, 1983b) that object representation is a salient, valid, researchable construct. The Potency and Satisfaction dimensions, attributable to the domain Representation of Self, are dimensions introduced by this scale, therefore, they have not been discussed in the prior research.

Results produced by examination of the dimension score means further confirmed and broadened the above mentioned results. Graphic representation of results indicated a pattern of parallel shifts in each respective dimension score for early memories and dreams. That is, the profile for each production had similar peaks and valleys, moving from dimension to dimension, and generally corresponded to one another despite differences in the absolute level of the scores.

This finding suggests two conclusions: First it suggests a parallel relationship between early memories and dreams along the various dimensions. Second, since

the scores for dreams were generally lower on the various dimensions than were the scores for early memories, it suggests the dreams present a more primitive picture of one's representational world than do early memories.

It is also clear from the data that Van Lennep Stories are most divergent of this group of three productions. That is, comparisons made between the Van Lennep Stories and the other two productions yielded no apparent relationship with respect to the patterns yielded by ratings on the dimensions. Based on both the correlational and the analysis of variance results, the Van Lennep Stories showed very substantial patterns of "non-similarity" to the other two fantasy productions. Subjects seem to do something different in writing these stories than in telling an early memory or a dream.

The pattern of similarity between dreams and memories confirms the projective hypothesis: namely, that the major issues of one's personality--particularly the conflictual components--will permeate productions such as these having very low stimulus demand. There is apparently a similarity in "adaptational" requirements (in the sense of stimulus demand attributable to a task) since both productions arise strictly from one's fantasy activity in the context of the residue of experience: day

residue, for dreams, and an equivalent "past" residue, for early memories.

One could also understand the primitivity shift of dreams with respect to level of regression--i.e., primitivity--of ego function in which the production emerged. That is, dreams are produced during sleep when one does not exercise normal perceptual controls whereas early memories are generated during a state in which such perceptual controls are being exercised: the waking state. Thus, these projective fantasy productions arise from the same unconscious sources, but are "filtered" through different ego states--different levels of secondary revision--on their way to a final, consciously experienced, form.

3. UTILITY OF THE DISTINCTIONS COMPRISING THE PRESENT SCALES: DOMAINS

A second issue of interest concerns the utility of the Surroundings/ Others/ Self Representation Scales as instruments for distinguishing important representational features of fantasy productions. This was demonstrated and the relevant observations are examined in reference to domains in this section and in reference to dimensions in the following section.

Very clear differences arise among the three domains defined by the present scales: Representation of Surroundings, Representation of Others, and Representation of Self. This is especially important in light of the trend in previous scales (e.g., Krohn, 1974) to provide a unidimensional determination of subjects' achievement of object representation.

In contrast, results of the present research demonstrate that the domains--Surroundings, Other, and Self--consistently differ from one another and, therefore, merit differential ratings. Certainly these differences warrant further research to clarify their implications.

This finding also suggests that Murray's (1951) view of "complementary projection." calls for elaboration. The results of this study suggest one could legitimately and fruitfully expanded his idea of projection of "figure constituents," i.e., the projection of complementary others into ones world. The idea could be expanded to include a "surroundings constituency," defined as the projection of complementary inanimate features of the world, including situational structures, that are derived from one's primordial expectational templates. A similar argument applies to expanding Murray's view of "supplementary projection," that is, the projection of one's own tendencies others, to include ascription of

those tendencies onto the inanimate features of the surroundings.

Issues of distinguishing supplementary from complementary projection aside, it would be useful to differentiate between an individual who unconsciously invests the inanimate matrix of surroundings with undifferentiated malevolence and one who invests it with a sense of responsiveness and opportunity. Such a distinction appears to be of greater value given the demonstrable differences between the unconsciously invested perceptual structuring of Surroundings, Others, and Self.

More directly applicable to distinguishing supplementary from complementary projection, is the observation that Representation of Self emerges as a domain clearly distinguishable from Representation of Others. Again the implication is for a much richer descriptive flexibility available for characterizing the unconscious life of patients.

Speculatively, these results imply that it may be worthwhile to investigate the possibility of conceptualizing development occurring differentially along the domains. That is, people may develop differentially greater or lesser sensitivities to their inanimate surroundings, their relationships to others, and their orien-

tation toward themselves. It is certainly not difficult to think of instances in which people focus much more extensively on one of these factors than on another. Similarly, one can readily imagine experiences in an individual's past in which he or she learned to fear and/or avoid one of these features or alternately, learned to emphasize it. The idea here is that one might be relatively more equipped to contend with issues pertinent to one domain than another: Some people have greater awareness of and sensitivity to things, some have greater awareness of and sensitivity to others, some have greater awareness of and sensitivity to themselves.

A second speculative feature--actually an extension of the last point--concerns the possibility that individuals, by virtue of the vicissitudes of their developmental experiences, may develop greater evocative memory capacity in one domain over the others. The opposite of evocative capacity, for these purposes, might be termed "embeddedness" (after Kegan, 1982). From the perspective of embeddedness, one simply re-lives the same experiences repeatedly and remains stuck in a relatively primitive state of life in which new experiences cannot have an effect and, therefore, cannot lead to change.

From the perspective of evocative memory, one can recognize, remember, and reconstruct new events that take

place and can do so in the current terms afforded by the events. The individual with a capacity for evocative memory in one particular area is not the slave of past schemata and only destined for continual (compulsive) repetition, but, rather, is capable of seeing and, therefore, learning from new experiences in a domain. This is an issue of clear-sighted flexibility versus rigid obliviousness to the possibilities afforded by shifts in a domain. For example, some people are receptive to noticing and learning from nuances in new interpersonal relationships yet are oblivious to features of their surroundings. Clearly an ability in one domain does not immunize one from conflict in the area, although it does define realms of relative capability.

4. UTILITY OF THE DISTINCTIONS COMPRISING THE PRESENT SCALES: DIMENSIONS

Examination of the clusters of significant correlations yielded a structure of dimensions that appear to hold together (See Figure III-1, page 78). The structure is comprised of two initial divisions: one that was called a Discriminative Clarity component and one that was defined by the dimension Satisfaction. The Satisfaction line could be further subdivided into two sets of dimen-

sions. The first was called an Appraisal set, and the second was called an Engagement set.

The characteristics these dimensions were designed to rate is relevant to understanding this possible associational structure.

Discreteness and Toning were intended to provide related but different measures of one's representation of Surroundings, Others, and Self. Discreteness indicates the varying degree of salience in terms of differentiation of the domain. Toning indicates salience in terms of the vividness of emotional and sensory experience, the lower stages of which were defined as a distal, cognitively based description relatively void of affect. Thus, both represent a discriminating function. The difference is primarily in what is figural. For Discreteness the issue is drawing lines between things to distinguish them. For Toning the issue is elaborating with descriptive, sensory, and emotional features, usually--but not always--after the lines have been drawn. As anticipated, Discreteness and Toning were significantly correlated--though not identical with one another--across all three domains (EM = .63, .69, .82; D = .66, .77, .61; VL = .70, .70, .63 for the respective domains: Surroundings, Other, Self). As the structure indicates, the correlations are sufficiently substantial to hold these two dimensions together

within a domain. The domains, however, did not hold together uniformly with the domain Others being structurally separate from the domains Surroundings and Self. This suggests some fundamental difference in the representational process for these domains.

The second structural line, as was pointed out, is defined by the Satisfaction dimension. This entails a rating along a continuum running from lethal, noxious, impinging experiences thru tantalizing deprivation, thinly veneered contentment, basic need gratification, enjoyment, and fulfillment.

Based on the correlational structure attributable to these subscale ratings, the Satisfaction component may be comprised of two sorts of perceptions. The first--the Appraisal component--collates the two Valence dimension and the Potency dimension. The implication is that the positive and negative qualities represented in the Surroundings and Others domains of the fantasies may be in a direct way related to one's representation of one's sense of having a solid, impactful presence in the world of things and others.

The other feature comprising the substructure of Satisfaction is the "Engagement" set of dimensions. This set is comprised of the Discreteness and Toning features of the Others domain which, as discussed above, is an

expectable pairing. The third associated element is the Interpersonal Closeness dimension rated under the Self domain. This dimension runs along a continuum from isolation through distant watchfulness, ambivilant distance, parallel activity, to creative exchange. Essentially, this dimension describes a quality of human involvement based on the distance one maintains in depicted relationships.

An important implication of the correlational structure described above is the possible implication of the elements' independence from one another. That is, the "Appraisal" component may operate substantially independently from the "Discriminative Clarity" attributable to Surroundings and Others and noticeably independently from the third component, the "Engagement" component. Similarly, the "Engagement" component may operate substantially independently from the "Discriminative Clarity" component. The scale may be picking up distinguishable, independently operating characteristics of representation in fantasy production. This is especially important in light of others' (e.g., Krohn and Mayman, 1974) failures to differentiate between levels of differential representation across these dimensions and domains.

5. FURTHER PATTERNS AMONG THE FANTASY PRODUCTIONS

As mentioned earlier, differences between the early memory and dream scores and the Van Lennep scores suggest differences in adaptational requirements for the two sorts of productions. Five such differences in adaptational requirements seem evident.

First, one obvious difference in the tasks involves the requirements entailed in vocally reporting an experience versus writing a cohesive story. It is also possible that a subject's dreams and memories are practiced productions, elaborated by previous reflection. In contrast with the former, the Van Lennep Stories require a spontaneous response. In particular, this subject pool of gifted, articulate individuals might be expected to exhibit differences in elaborative capacity. This is especially true given their presumably significant exposure to literature with its myriad varieties of descriptive elaboration and substantial formal training in written expression. There is evidence supporting this contention for particular dimensions on the Van Lennep Story Test, although the trend toward elevation of scores above the other two fantasy productions does not hold true across the board. Relative to the scores on other dimensions, substantial elevations occur for Discreteness and Toning scores for both

Representation of Others and Representation of Self. Such elevations do not occur for elaboration of the Surroundings. This suggests the subjects use their articulateness to describe and characterize people moreso in stories than in the dreams and early memories, but that they do not use this ability in delineating the inanimate surroundings.

Second, it appears the projective nature of the various fantasy productions are not susceptible to the obvious intellectual gifts of the subject pool. These abilities did not "immunize" subjects to primitive representations in their fantasy productions. Few "fives" were scored on the scales and those individuals scoring high on some measures generally did not score at this level uniformly across the various dimensions. This substantiates the expectation, implicit in the projective hypothesis, of unconscious primitive processes underlying personality becoming transparent in projective productions. In performing these tasks, the conflictual structure of one's unconscious life is still susceptible to the vicissitudes of primitive object representation.

Third, implications for depiction of Representation of Self differ between the early memory-dream tasks and the Van Lennep Story task. Early Memories and Dreams explicitly entail experiencing oneself in some explicitly

defineable relation to others and to the surroundings. One has a role in these fantasy productions, even if simply that of detached observer. And even such observer-selves possess qualities, thoughts, and emotional experiences. For instance, one can be annoyed at oneself for not participating in an event or relieved to be out of the fray; one can be frightened at the response of others or thrilled to have effectively worked out a solution to a conflict. One's presence is substantially defined by unconscious motivations in relation to the structure implicit in the fantasy production. Thus, one simply is in a dream or early memory.

In the Van Lennep story, however, a subject generally writes stories that are only implicitly about oneself. One usually does not start out a story "I was talking to my boss." One usually starts out the story, "John was talking to his boss." The task calls for descriptions of others and of situations but not of self. The rater must infer a "self" from the story based on assumptions about "supplementary projection" of self constituents in reading characteristics of the "hero" and from inferences about unconscious processes of the subject from such derivatives as arrangement of the story's the structure, the quality of the outcome, and the affect underlying the descriptions.

Fourth, Van Lennep's Story Test differs from both dreams and early memories in requirements for direct Representation of Others. The test requires subjects to incorporate pictures depicting social situations into their stories. Neither dreams nor early memories require such inclusion of others; one can easily depict a world of inanimate objects in which others are only inferentially relevant.

Fifth, an additional difference among productions emerged from examining the patterns of dimensions describing each domain. This observation might further contribute to understanding the differences between the story and the other two measures in terms of adaptive demands.

As described above, there is substantial variability in the scores of the dimensions taking the scores of all the fantasy productions as a whole. There are, however, patterns of relative homogeneity of dimensions within domains characteristic of specific productions. For early memories and dreams, the scores on the dimensions comprising Representation of Self are relatively homogenous--that is, roughly the same. In contrast, scores on the dimensions comprising Representation of Surroundings were relatively heterogenous as were those on the dimensions comprising Representation of Others. The opposite is true

for the Van Lennep stories. Homogeneity characterizes all dimensions comprising both Representation of Surroundings and Representation of Others with heterogeneity characterizing the scores of the dimensions of Representation of Self. These differences may have implications for scoring fantasy productions and generating inferential conclusions from them since, collectively, these trends suggest subjects construe the derivatives of unconscious conflicts differently in writing stories than in recalling and describing dreams and early memories.

Traditionally, in scoring the features of a story test, one selects a "hero" and then contrasts that hero to all the others who populate the world of the story (e.g., Stein, 1948). One looks for the most salient character and interpolates a "self." Consistent with this traditional organization of the data, the most clearcut deviations from homogeneity in the Van Lennep Stories--and, by far, the highest scores--involved the dimensions "Discreteness" and "Toning" of Self. In keeping with the adaptive requirements of the task, a salient "hero" is generated. As mentioned earlier in this discussion, and as suggested by these results, this "hero" is not necessarily represented the same way a "self" is represented in either dreams or early memories. In fact, this array of observations supports the previous contention

that the subject introduces unconscious derivatives into the domains of a story in a fashion different from what he or she does when immersed personally as a character in the fantasy productions, as one is in the dreams and early memories. In the stories, the writer produces a kind of bifurcation between hero and not-hero, in which finer distinctions, more clearly apparent in the other fantasy productions, seem to be generally blurred.

Perhaps these patterns of similarities and differences between dreams/early memories and Van Lennep Stories will stimulate further examination of these and other projective instruments. Clearly more could be done in terms of using the present set of scales and the orientation implied in them for differentiating varieties of representation and their implications, including the possibility of mapping areas of personality unique to any particular testing instrument.

Finally, given differences within the array of productions for individuals, a discretionary note is in order. One should be cautious as to one's inferences about the world of a particular subject. The evidence clearly indicates that any single instance of a fantasy production, e.g., a single dream, does not offer enough information to establish the level of sophistication of an individual's object representation development.

This study examined manifest content of fantasy productions. Certainly, as a broader alternative, a very legitimate facet of clinical activity not examined in this study, concerns the issue of establishing a comprehension of a patient's private world from the latent content of fantasy productions. Competent psychotherapists have assimilated an enormously sophisticated and sensitive framework for organizing observations about people. Furthermore, given a therapist who knows many patients with sufficient thoroughness, it is perfectly reasonable to anticipate that practitioner might be able to generate a reliable predictive framework from a brief sample of a subject's fantasy production. This study, however, suggests exercising care in making great leaps from individual samples of such data.

6. SUMMARY

Dreams and early memories are more similar to one another, in terms of manifest content measured on scales generated for this study, than either are to Van Lennep's Four Picture Story Test protocols. Important specific correlations between dreams and early memories included Discreteness, in the domain, Representation of Others, and both Potency and Satisfaction in the domain, Representation of Self. Dreams, while paralleling the

profile of early memories along the dimensions rated, present more primitive portrayals of internal life.

The scales developed for this study proved to be of substantial utility for distinguishing important representational features of these fantasy productions that previous scales did not distinguish. The domains, Representation of Surroundings, Representation of Others, and Representation of Self were clearly differentiable from one another. Similarly, the dimensions--the eleven subscales--varied substantially and, therefore, merit differential scorings.

Differences between the early memory-dream combination and the Van Lennep Stories indicated differences in adaptive requirements. These differences also indicate some differential employment of subjects' articulateness in the stories, the incapacity of substantial intellectual gifts to immunize one from the vicissitudes of primitive object representation. In addition, there were differences between the memory-dream combination and the Van Lennep Stories in terms of heterogeneity in the depiction of Self and Others and Surroundings in reference to the two different sorts of productions.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Ackerknecht, L. K. (1976). New aspects of early recollections (ERs) as a diagnostic and therapeutic device. Individual Psychologist, 13(2), 44-54.
- Adelson, J. (1959). Creativity and the dream. Merrill-Palmer Quarterly, 5(2), 92-97.
- Ansbacher, H. L. (1947). Adler's place today in the psychology of memory. Journal of Personality, 15, 197-207.
- Ansbacher H. L. & Ansbacher, R. R., (Eds.), (1964). The individual psychology of Alfred Adler. New York: Harper and Row. (Originally published 1956).
- Adler, A. (1937). The significance of early recollections. International Journal of Individual Psychology, 3, 283-287.
- Anderson, H. H. (1951). Human behavior and personality growth. In H. H. Anderson & G. L. Anderson (Eds.), An introduction to projective techniques (pp. 3-25). Englewood Cliffs, New Jersey: Prentice-Hall.
- Angyal, A. (1965). Neurosis and treatment: A holistic theory. New York: John Wiley and Sons.
- Arnold, M. B. (1962). Story Sequence Analysis. New York, NY: Columbia University Press.
- Barker, R. G. (1965). Explorations in ecological psychology. American Psychologist, 20, 1-14.
- Beck, A. (1967). Patterns in dreams of depressed patients. In A. Beck (Ed.), Depression (pp. 208-217). New York: Harper and Row.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E. & Erbaugh, J. K. (1962). Reliability of psychiatric diagnoses: 2. A study of consistency of clinical judgments and ratings. American Journal of Psychiatry, 119, 351-357.
- Bellak, L. (1944). The concept of projection. Psychiatry, 7, 353-370.

- Blatt, S. J. (1985). Letter accompanying: Blatt, S. J., Chevron, E. S., Quinlan, D. M., & Wein, S. (1981). The assessment of qualitative and structural dimensions of object representations. Unpublished manuscript. (Available from: Sidney Blatt, 25 Park Street, New Haven, CT 06519).
- Blatt, S. J. (1974). Levels of object representation in anaclitic and introjective depression. Psychoanalytic Studies of the Child, 29, 107-157.
- Blatt, S. J., Brenneis, C. B., & Schimek, J. G. (1976). A developmental analysis of the concept of the object on the Rorschach. Unpublished manuscript. (Available from: Sidney Blatt, 25 Park Street, New Haven, CT 06519).
- Blatt, S. J., Chevron, E. S., Quinlan, D. M., & Wein, S. (1981). The assessment of qualitative and structural dimensions of object representations. Unpublished manuscript. (Available from: Sidney Blatt, 25 Park Street, New Haven, CT 06519).
- Blatt, S. J. & Lerner, H. (1983a). Investigations in the psychoanalytic theory of object relations and object representations. In Masling, J. (Ed.), Empirical studies of psychoanalytical theories (Vol. 1, pp. 189-249). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Blatt, S. J. & Lerner, H. (1983b). The psychological assessment of object representation. Journal of Personality Assessment, 47(1), 7-28.
- Blatt, S. J. & Ritzler, B. A. (1974). Thought disorder and boundary disturbances in psychosis. Journal of Consulting and Clinical Psychology, 42(3), 370-381.
- Boss, M. (1977). "I dreamt last night...": A new approach to the revelations of dreaming and its use in psychotherapy. (S. Conway, Trans.). New York: Gardner Press.
- Brodsky, P. (1952). The diagnostic importance of early memories. American Journal of Psychotherapy, 6, 484-493.
- Bruhn, A. R. & Davidow, S. (1983). Earliest memories and the dynamics of delinquency. Journal of Personality Assessment, 47(5), 476-482.

- Bruhn, A. R. & Last, J. (1982). Earliest childhood memories: four theoretical perspectives. Journal of Personality Assessment, 46(2), 119-127.
- Bruhn, A. R. & Schiffman, H. (1982). Invalid assumptions and methodological difficulties in early memory research. Journal of Personality Assessment, 46(3), 265-267.
- Burnell, G. M. & Solomon, G. F. (1964). Early memories and ego function. Archives of General Psychiatry, 11, 556-567.
- Burstein, A. G. & Loucks, S. (1980). A Comprehensive Scoring Manual for Rorschach's Test. Unpublished manuscript. (Available from: A. Burstein & S. Loucks, Psychology Department, University of Tennessee, Knoxville, TN 37916).
- Cartwright, R., Seeman, J. & Grummon, D. TAT Interpersonal Relationships Project Rating Scale. Unpublished manuscript.
- Chess, S. (1951). Utilization of childhood memories in psychoanalytic therapy. Journal of Child Psychiatry, 1, 187-198.
- Eisenstein, V. W. & Ryerson, R. (1951). Psychodynamic significance of the first conscious memory. Bulletin of the Menninger Clinic, 15, 213-220.
- Erikson, E. H. (1954). The dream specimen of psychoanalysis. In R. P. Knight & C. R. Friedman (eds.), Psychoanalytic Psychiatry and Psychology, New York, NY: International Universities Press, pp. 131-170.
- Exener, J. E. (1974). The Rorschach: A Comprehensive System (Vol. 1). New York, NY: John Wiley & Sons.
- Fairbairn, W. R. D. (1952). Psychoanalytic studies of the personality. Boston: Routledge & Kegan Paul.
- Feichtinger, F. (1943). Early recollections in neurotic disturbances. Individual Psychology Bulletin, 3, 44-50.
- Fenichel, O. (1945). The psychoanalytic theory of neurosis. New York: W. W. Norton.

- Ferguson, E. D. (1963). The use of early recollections for assessing life style and diagnosing psychopathology. Journal of Projective Techniquese and Personality Assessment, 28, 403-412.
- Freud, S. (1972). A general introduction to psychoanalysis. (J. Riviere, Trans.). New York: Pocket Books. (Original work published 1924).
- Freud, S. (1950). Screen memories. In J. Strachey (Ed. and Trans). Collected papers (Vol. 5). London: Hogarth Press. (Original work published 1899).
- Freud, S. (1965). The Interpretation of Dreams. (J. Strachey, Ed. and Trans.). New York, NY: Avon Press. (Original work published 1900).
- Friedman, J. (1951). Early childhood memories of mental patients. Journal of Child Psychiatry, 2, 266-269.
- Friedman, J. & Schiffman, H. (1962). Early recollections of schizophrenics and depressed patients. Journal of Individual Psychology, 18(1), 57-61.
- Fromm, E. (1951). The forgotten language: An introduction to the understanding of dreams, fairy tales, and myths. New York: Grove Press.
- Giorgi, A. (1970). Psychology as a human science: A phenomenologically based approach. New York: Harper and Row.
- Greenberg, R. & Pearlman, C. (1975). A psychoanalytic-dream continuum: The source and function of dreams. International Review of Psychoanalysis, 2(4), 441-448.
- Greenberg, R. & Pearlman, C. (1978). If Freud only knew: A reconsideration of psychoanalytic dream theory. The International Review of Psychoanalysis, 5(1), 71-75.
- Greenson, R. R. (1978). On screen defenses, screen hunger, and screen identity. In R. R. Greenson (Ed.), Explorations in psychoanalysis, (pp. 111-133). New York: International Universities Press. (Original work published 1958).
- Guntrip, H. (1961). Personality structure and human interaction: The developing synthesis of psychodynamic theory. New York: International Universities Press.

- Guntrip, H. (1969). Schizoid phenomena, object relations and the self. New York: International Universities Press.
- Harder, D. W. (1979). The assessment of ambitious-narcissistic character style with three projective tests: the early memories, TAT, and Rorschach. Journal of Personality Assessment, 43(1), 23-32.
- Hatcher, R. L. & Krohn, A. (1980). Level of object representation and capacity for intensive psychotherapy in neurotics and borderlines. In J. S. Kewer, H. D. Lerner, P. M. Lerner, A. Sugarman (Eds.), Borderline phenomena and the Rorschach test (pp. 299-320). New York: International Universities Press.
- Hall, C. S. (1966). The meaning of dreams. New York: McGraw-Hill. (Original work published 1953).
- Hall, C. S. & Van De Castle, R. L. (1966). The Content Analysis of Dreams. New York, NY: Appleton-Century-Crofts.
- Hedvig, E. B. (1963). Stability of early recollections and thematic apperception stories. Journal of Individual psychology, 19, 49-54.
- Hedvig, E. B. (1965). Children's early recollections as a basis for diagnosis. Journal of Individual Psychology, 21, 187-188.
- Henry, W. E. (1973). The analysis of fantasy: The thematic apperception technique in the study of personality. Huntington, N.Y.: Robert E. Krieger Publishing.
- Holt, R. R. (1961). The nature of TAT stories as cognitive products: a psychoanalytic approach. In J. Kagan & G. S. Lesser (eds.), Contemporary Issues in Thematic Apperceptive Methods. Springfield, IL: Charles Thomas.
- Jackson, M. & Sechrest, L. (1962) Early recollections in four diagnostic groups. Journal of Individual Psychology, 18, 52-56.
- Jennrich, R. I. (1979). Letting BMDP8V tell us something about randomized blocks, repeated measures and split-plots. (Report No. 34). California: UCLA Health Sciences Computing Facility.

- Jones, C. S. (1984). Training manual for thematizing interview protocols phenomenologically. (Available from Author or Howard Pollio, Psychology Department, University of Tennessee, Knoxville, TN., 37916).
- Jones, R. M. (1978) The new psychology of dreaming. New York: Pelican Books. (Originally published 1970).
- Jung, C. G. (1958). Psyche and Symbol. (V. S. De Laszlo, Ed.). New York: Doubleday.
- Jung, C. G. (1961). Memories, dreams, reflections. (A. Jaffe, Ed., R. Winston & C. Winston, Trans.). New York: Vintage Books.
- Kadis, A. L., Greene, J. S., & Freedman, N. (1952). Early childhood recollections -- an integrative technique of personality test data. American Journal of Individual Psychology, 10, 31-42.
- Kadis, A. L. & Lazarsfeld, S. (1948). The respective roles of "earliest recollections" and "images." The American Journal of Psychotherapy, 2, 250-255.
- Kahana, R. J., Weiland, I. H., Snyder, B. & Rosenbaum, M. (1953). The value of early memories in psychotherapy. The Psychiatric Quarterly, 27(1), 72-82.
- Kant, O. (1942). Dreams of schizophrenic patients. The Journal of Nervous and Mental Disease, 95, 335-347.
- Kegan, R. (1982). The evolving self. Massachusetts: Harvard University Press.
- Keppel, G. (1973). Design and analysis: A researcher's handbook. New Jersey: Prentice-Hall.
- Kernberg, O. (1966). Structural derivatives of object relationships. International Journal of Psycho-Analysis, 47, 236-253.
- King, G. (1954). Research with neuropsychiatric samples. Journal of Psychology, 38, 383-387.
- Kohut, H. (A. Goldberg & P. Stepansky, eds.) (1984). How Does Analysis Cure? Chicago, IL: The University of Chicago Press.
- Kohut, H. (1977). The Restoration of the Self. New York: International Universities Press.

- Kramer, M. (1968). An exploration of the manifest dream in schizophrenic and depressed patients. Psychophysiology, 5(2), 221-232.
- Krohn, A. (1972). Levels of object representations in the manifest dreams and projective tests. Unpublished doctoral dissertation.
- Krohn, A. (1974). Object-representation scale for dreams. Unpublished manuscript.
- Krohn, A. & Gutmann, D. (1971). Changes in mastery style with age: A study of Navajo dreams. Psychiatry, 34, 289-300.
- Krohn, A. & Mayman, M. (1974). Object representations in dreams and projective tests. Bulletin of the Menninger Clinic, 445-466.
- Kreitman, N. (1961). The reliability of psychiatric diagnosis. Journal of Mental Science, 107, 876-886.
- Langs, R. J. (1965). First Memories and characterologic diagnosis. The Journal of Nervous and Mental Disease, 141(3), 318-320.
- Langs, R. J. (1966). Manifest dreams from three clinical groups. Archives of General Psychiatry, 14, 634-643.
- Langs, R. J., Rothenberg, M. B., Fishman, J. R. & Reiser, M. F. (1960). A method for clinical and theoretical study of the earliest memory. Archives of General Psychiatry, 3, 523-534.
- Last, J. M. & Bruhn, A. R. (1983). The psychodiagnostic value of children's earliest memories. Journal of Personality Assessment, 47(6), 597-603.
- Last, J. M. (1981). The psychodiagnostic value of children's early memories. Unpublished doctoral dissertation, University of Michigan.
- Last, J. M. (1983). Comprehensive early memory scoring system manual. Unpublished manuscript. (Available from: Jeffrey Last, Mount Carmel Mercy Hospital, 6071 W. Outer Dr., Detroit, MI 48235).
- Levy, J. (1965). Early memories: Theoretical aspects and application. Journal of Projective Techniques. 29(3), 281-291.

- Levy, J. & Grigg, K. A. (1962). Early memories: Thematic-configurational analysis. Archives of General Psychiatry, 7, 57-69.
- Lieberman, M. (1957). Childhood memories as a projective technique. Journal of Projective Techniques and Personality Assessment, 21, 32-36.
- Manaster, G.J. & Perryman, T.B. (1974). Manaster-Perryman Manifest content early recollection scoring manual. In H. Olson (Ed.), Early Recollections: Their Use in Diagnosis and Psychotherapy (pp. 347-351). Springfield, IL: Charles Thomas.
- Mayman, M. (1967). Object-representations and object-relationships in Rorschach responses. Journal of Projective Techniques and Personality Assessment, 31(4), 17-24.
- Mayman, M. (1968). Early memories and character structure. Journal of Projective Techniques and Personality Assessment, 32, 303-316.
- Mayman, M. (1970). Levels of object representation and object relationships in early memories. Unpublished.
- Mayman, M. (1972). Early memories test. Unpublished manuscript.
- Mayman, M. (1977). Self -- other relationship representations in early memories. Unpublished manuscript.
- Mayman, M. & Farris, M. (1960). Early memories as expressions of relationship paradigms. American Journal of Orthopsychiatry, 30, 507-520.
- Mayman, M. & Ryan, E. (1972). Level and quality of object relationships: A scale applicable to overt behavior and to projective test data. Unpublished manuscript. University of Michigan.
- McCarter, R. E., Schiffman, H. M. & Tomkins, S. S. (1961) Early recollections as predictors of Tomkins-Horn picture arrangement test performance. Journal of Individual Psychology, 19(2), 177-180.
- Meehl, R. E. (1978). Theoretical risks and tabular asterisks: Sir Karl, sir Ronald, and the slow progress of soft psychology. Journal of Consulting and Clinical Psychology, 46(4), 806-834.

- Meehl, R. E. (1954). Clinical versus statistical prediction: A theoretical analysis and a review of the evidence. Minneapolis: University of Minnesota Press.
- Monahan, R. T. (1980). Monahan early memories test. Unpublished manuscript. (Available from: Richard T. Monahan, McLean Hospital, 115 Mill Street, Belmont, MA 02178).
- Monahan, R. T. (1983). Suicidal children's and adolescent's responses to early memories test. Journal of Personality Assessment, 47(3), 258-264.
- Murray, H. A. (1943). Thematic Apperception Test Manual.
- Murray, H. A. (1951). Foreword. In H. H. Anderson & G. L. Anderson (Eds.), An introduction to projective techniques (pp. xi-xiv). Englewood Cliffs, New Jersey: Prentice-Hall.
- Mosak, H. H. (1965). Predicting the relationship to the psychotherapist from early recollections. Journal of Individual Psychology, 21(1), 77-81.
- Mosak, H. H. & Kopp, R. R. (1973). The early recollections of Adler, Freud, and Jung. Journal of Individual Psychology, 24(2), 157-166.
- Neisser, U. (Ed.). (1982). Memory observed: Remembering in natural contexts. San Francisco: W. H. Freeman.
- Noble, D. (1950). A study of dreams in schizophrenia and allied states. American Journal of Psychiatry, 107, 612-616.
- Olson, H. A. (1979). Early recollections: Their use in diagnosis and psychotherapy. Springfield, IL: Charles Thomas.
- Olson, H. A. (1979). Techniques of interpretation. In H. A. Olson (ed.) Early Recollections: Their Use in Diagnosis and Psychotherapy, pp. 69-82. Springfield, IL: Charles Thomas.
- Olson, H. A. (1979). To score or not to score. In H. Olson (Ed.), Early Recollections: Their Use in Diagnosis and Psychotherapy (pp. 156-159). Springfield, IL: Charles Thomas.

- Orgler, H. (1952-53). Comparative study of two first recollections. American Journal of Individual Psychology, 10, 27-30.
- Papanek, H. (1972). The use of early recollections in psychotherapy. Journal of Individual Psychology, 28(2), 169-176.
- Piaget, J. (1954) The construction of reality in the child. New York: Basic Books.
- Plewa, F. (1935). The meaning of childhood recollections. International Journal of Individual Psychology, 1, 88-101.
- Plottke, P. (1949). First memories of "normal" and of "delinquent" girls. Individual Psychology Bulletin, 7, 15-20.
- Progoff, I. (1973). The death and rebirth of psychology: An integrative evaluation of Freud, Adler, Jung and Rank and the impact of their insights on modern psychology. New York: McGraw-Hill. (Original work published 1956).
- Rapaport, D., Gill, M. M., & Schafer, R. (1968). Diagnostic psychological testing. (rev. ed.). R. R. Holt (ed.). New York: International Universities Press.
- Robbins, P. R. & Tanck, R. H. (1978). Early memories and dream recall. Journal of Clinical Psychology, 34(3), 729-731.
- Rom, P. (1965). Goethe's earliest recollection. Journal of Individual Psychology, 21, 189-193.
- Saul, L. J., Snyder, T. R. & Sheppard, E. (1956). On earliest memories. Psychoanalytic Quarterly, 26, 229-237.
- Schafer, R. (1960). Bodies in schizophrenic rorschach responses. Journal of Personality Assessment, 24, 267-281.
- Schafer, R. (1976). A new language for psychoanalysis. New Haven: Yale University Press.

- Schechter, N., Schmeidler, G. R. & Staal, M. (1965). Dream reports and creative tendencies in students of the arts, sciences, and engineering. Journal of Consulting Psychology, 29(5), 415-421.
- Schmidt, H. O. & Fonda, C. P. (1956). The reliability of psychiatric diagnosis: A new look. Journal of Abnormal Social Psychology, 52, 262-267.
- Spitzer, R. L. & Fleiss, J. L. (1974). British Journal of Psychiatry, 125, 341-347.
- Stein, M. I. (1948). The Thematic Apperception Test: An Introductory Manual for Its Clinical Use With Adult Males. Cambridge, MS: Addison-Wesley Press, Inc.
- Taylor, J. A. (1975). Early recollections as a projective technique: A review of some recent validation studies. International Journal of Individual Psychology, 31(1), 213-218.
- Thatcher, P. (1944). Early Recollection in a case of juvenile delinquency. In H. A. Olson (ed.) Early Recollections: Their Use in Diagnosis and Psychotherapy, pp. 304-306. Springfield, IL: Charles Thomas.
- Tobin, S. S. & Etigson, E. (1968). Effect of stress on earliest memory. Archives of General Psychiatry, 19, 435-444.
- Tolpin, M. & Kohut, H. (1980). The disorders of the self: the psychopathology of the first years of life. In S. I. Greenspan & G. H. Pollock (Eds.), The Course of Life: Psychoanalytic Contributions Toward Understanding Personality Development: Vol. 1. Infancy and Early Childhood. (pp. 125-142), NIMH.
- Urbina, S. P. (1981). Methodological issues in the quantitative analysis of dream content. Journal of Personality Assessment, 45(1), 71-78.
- Van den Berg, J. H. (1972). A different existence: Principles of phenomenological psychopathology. Pittsburgh: Duquesne University Press.
- Van den Berg, J. H. (1975). The changing nature of man: introduction to a historical psychology. (H. F. Croes, Trans.). New York: Dell Publishing. (Original work published 1961).

- Van Lennep, D. J. (1948). Manual: Four-Picture Test. Utrecht: Nederlandsche Stichting voor Psychotechniek. (Original test published in 1930).
- Van Lennep, D. J. (1951). The four picture test. In H. H. Anderson & G. L. Anderson (Eds.), An introduction to projective techniques (pp. 149-180). Englewood Cliffs, New Jersey: Prentice-Hall.
- Valle, R. S. & King, M. (Eds.) (1978). Existential-phenomenological alternatives for psychology. New York: Oxford University Press.
- Werner, H. (1948). Comparative psychology of mental development. New York: International Universities Press.
- Winnicott, D. W. (1958). Collected papers: Through Paediatrics, New York: Basic Books.
- Winnicott, D. W. (1965). The maturational processes and the facilitating environment. London: Hogarth.
- Winnicott, D. W. (1971). Playing and reality. New York: Basic Books.
- Willhite, R. G. (1979). "The Willhite": a creative extension of the early recollection process. In H. Olson (Ed.), Early Recollections: Their Use in Diagnosis and Psychotherapy. (pp. 108-130). Springfield, IL: Charles Thomas.
- Wolff, W. & Precker, J. A. Expressive Movement and the methods of experimental depth psychology. In H. H. Anderson & G. L. Anderson (Eds.), An introduction to projective techniques (pp. 457-497). Englewood Cliffs, New Jersey: Prentice-Hall.
- Wynne, R. D. & Schaffzin, B. (1965). A technique for the analysis of affect in early memories. Psychological Reports, 17, 933-934.
- Zigler, E. & Phillips, L. (1961). Psychiatric diagnosis and symptomatology. Journal of Abnormal and Social Psychology, 63(1), 69-75.

APPENDIXES

APPENDIX A

SURROUNDINGS, OTHERS, SELF REPRESENTATION SCALES

I. REPRESENTATION OF SURROUNDINGS

A. DISCRETENESS

1. Not differentiated. Surroundings (features of orientation: time, place, props in the environment) not mentioned. Not distinguished.
2. Vague. Places obscure, cloudy, shadowy, shifting; vague differentiation to background; very cursory designation of a setting, that is, references using one or two very generalized categories (e.g., "I was in a house somewhere"). Hazy, diffuse, not drawing distinctions in the world.
3. Orienting. One notes, reports one or a series of locations without adding qualities that would distinguish them as "unique," i.e., as different in substantial ways from similar places elsewhere. Some designations that briefly identify surroundings to the extent of locating them in reference to something or someone (e.g., "in my room;" "when we lived in Maine.") Sense that may have personal meaning the rater could infer but the subtleties necessary to make it distinctly explicit not presented.
4. Outlined. Some sense of boundaries to features of the surroundings are outlined by linear lists of characteristics that distinguish one (e.g., room, house) from another with emergence of particularly salient features. Clarity and distinctiveness are emerging. Aspects of the setting are becoming less exchangeable. (e.g., one cannot as readily substitute another state or room without introducing substantial change).
5. Complexly differentiated: More than one observation or operation is going on at the same time. Multiple connections among aspects of the setting; attention to precision in differentiating and relating components of the setting. There's a sense of an effort to integrate as well as describe. Discrete yet related; contrasted, referenced. Becomes more than a passing feature of experience. Becomes an exclusive focus; becomes the figural focus at some point. Clearly evoking a unique environment.

B. SENSUAL, EMOTIONAL TONING

1. Peripheral. The immediate setting is not salient. The surroundings are not figural so end up inferring surroundings from interactions of people. Either attention is elsewhere or subject not noticing surroundings leaving them intangible.
2. Superficial factual. Distal shallow. Observations based on visual and audition with little detail that would allow the reader to vicariously experience the surroundings. The description is not vitalized by emotion, texture, or sensuality. Mono-dimensional appraisals of features of the world (e.g., "beautiful" with no further qualifiers).
3. Detailed distal. Distally rich but emotionally and sensually on the surface. Visual or auditory experience emphasized in more detail (e.g., "a bright, greenish-yellow light tilted at a 30 degree angle"). There can be a "surfacy" emotional or sensual appraisal but with an effort toward infusing life (e.g., things are "awful" or "wonderful"--using several descriptors/a greater concentration of descriptors throughout the presentation).
4. Proximately involving; Proximal contact (touch, taste, smell) emphasized or more immediate emotional references (e.g., "icy, savory, angry, furious") attributed to aspects of the setting. Experientially descriptive richness emerging.
5. Captivating; adding an element of intensity; a broad range of emotion or sensuality infusing the entire presentation of the surroundings: vivid, passionate, vigorous, sensual, savory, vibrant, animated, imaginative, powerful (separate from the pleasantness of the world presented).

C. VALENCE TO SURROUNDINGS (User Friendliness)

1. Malevolent, malignant, brutal, very violent world. Nightmarish, evil; world as a bleak, stark, hostile, alien, bizarre place that is unsupportive of life. Violent death or mutilation. Killed, left destitute, serious accident.

2. Dark, stormy, cold, punitive, generally unresponsive place. Ugly, unfriendly with no available refuges or no access routes to safety or supplies--i.e., no where to go with a strong implication of a need for some such place. Find self in a bewildering situation. Desertion. aloneness, comfort lost, constrained, trapped, injured. Unstable, contradictory place. Possibly somewhat dangerous. Boring, repetitious. Props operate oddly or uncooperatively.
3. Mixture of positives and negatives, mostly in attenuated form. Mitigating opportunities (e.g., being chased but escape is available). One is surviving, winning some, not completely overwhelmed. World presents situations have to work hard to overcome or are contending with with some difficulty. (e.g., difficult competitions). Or neutralized world.
4. Necessary supplies are generally available or can be found. May be implications of still unresolved issues though in the context of "realistic" optimism. Light, warm, friendly, responsive.
5. World is a nurturing place; a creative, vitally responsive, welcoming, fertile environment supportive of and receptive to real-life success in relationships or to individuation.

II. REPRESENTATION OF OTHERS

A. DISCRETENESS

(as characters present themselves--not as inferred through the eyes of the hero).

1. Devoid of living, human-like qualities. No one in the world to relate to or become involved with.
2. Vague. Shallowly defined people or people-like characters (objects). The emphasis is on the externals exclusively, that is, on actions performed or appearances or social position or presence. Emphasize stereotypes, distant public figures, groups, only roles. Lines (boundaries) would draw to distinguish unique, recognizable individuals are hazy, diffuse. People are not "real," just names with no qualities differentiating them from others who could be "plugged into" their position.

3. External. People differentiated by primarily emphasizing parallel activity or external characteristics (i.e., appearances--what look like, do, say). There may be a sense of internal present though it is not delineated beyond a brief reference. (E.g., "he did this angrily"--but without any precise specification of internal operations, motivations, experience). (The highest category for scoring human-like animals).
4. Internal discreteness. Objects are clearly people. Differentiating to extent others have definite internal experiences emphasized. Sense are recognizing them based on that internal experience, though they operate in separate orbits. These individuals present their own internal lives.
5. Complex. Mutuality: both differentiation among others and integration into flexible relationships. Others clearly have internal worlds in which they participate with one another. (E.g., presence of reflective comments, humorous recognitions).

B. SENSUAL-EMOTIONAL TONING

1. Peripheral. Sense objects are peripheral or not present. Sense the subject is not participating in the constructed world of objects. Possibly a brief mention in passing, at most, but then nothing to infuse them with a vitality of their own.
2. Superficial factual--descriptive characteristics mainly of "doing and saying." Shallow employment of distal senses in interaction with others. At most get mono-dimensional appraisals of emotion or demeanor (e.g., "they liked him," "a cranky woman") with only one such characterization present. The description is not vitalized by emotion and texture and sensuality.
3. Detailed distal. Surfacy but effort toward infusing life. More detailed presentation through vision and hearing and, if sensory or emotion activity by participants present, there's a sense of it being stilted or shallow with some but little variety (e.g., "fun," "wonderful"). More than one mono-dimensional character as though adding affective qualities separately by adding whole characters to represent each. Mostly infer feelings.

4. Proximate. Emphasis in description on the proximal senses (taste, touch, smell); more immediate physical and emotional references. Multi-dimensional affectivity.
5. Captivating; adding a level of intensity to the immediacy. The people presented are vivid, passionate, vigorous, sensual, savory, vibrant, animated, imaginative, powerful (This does not mean that the world presented is a pleasant place to inhabit--it may be quite harrowing, depending on the valence).

C. VALENCE TO RELATIONSHIPS
(Nastiness--Niceness)

1. Malevolent, malignant, brutal, very violent beings. Nightmarish, evil; objects are bleak, stark, hostile, cold, alien, bizarre. Unsupportive of life. Death or mutilation. People killed by others or someone directly trying to kill someone.
2. Depriving, non-providing, oblivious, unavailable, punitive, generally unresponsive, hostile objects. Ugly, unfriendly with no one to provide safety or supplies--while a strong implication of a need for such. Find self in a bewildering relationship. Desertion, aloneness, comfort lost; one is constrained, trapped, injured by others. Unstable, highly contradictory or unpredictable, undependable objects. Exasperation. Non-presence.
3. Mixture of positives and negatives, mostly in attenuated form. Mitigating presences. One is surviving, winning some, not completely overwhelmed. Objects present relationship circumstances one has to work hard to overcome or are contending with with some difficulty. (e.g., difficult competitions). Neutralized. Support available but contingent.
4. Necessary supplies are generally available from objects. May be implications of still unresolved issues though in the context of "realistic" optimism or reasonable trust. Light, warm, friendly, responsive, dependable objects. Tinged benevolence--e.g., giving but worrying implied.
5. Objects are nurturing, benevolent, warm; they initiate good things, offer and provide for each other.

Relationships are creative, vitally responsive, welcoming, and realistically successful.

III. REPRESENTATION OF SELF

A. DISCRETENESS (emergence)

1. Absent or Vague. Self not distinguished--only a sense of "being" in a situation or with others without a clear localization of "state of being" or "presence" into a unitary "self." Or sense of diffusion about self. Vague presence, diffuse, hazy, unclear, undifferentiated.
2. External. Establish definition to self only by emphasis on the externals--appearance, activity, roles. Sense of orienting oneself within a location by the exterior or social trappings.
3. Shallow Internal. Actions and other external features still emphasized but differentiating self from others by some reference to one's own internal experiences. These are brief, hollow references and occur largely as reactions to events rather than as reactions to the interiors of oneself or others. More a sense of reporting internal experiences than "having" them.
4. Internal variability. Distinguishing identity on basis of one's own internal complexity. Get indications of internal struggles and conflicts, continual references to internal operations, intentionality, perception, reactivity. Emphasis is on differentiating internal experiences.
5. Mutuality. Add re-integration to the last level. Individual has established a separate identity and has also established a clear sense of self-involved-with others as discrete beings. Emphasis for this category, though, is on clear evocation of self as a unique and discrete entity.

B. SENSUAL-EMOTIONAL TONING

1. Peripheral. Sense self is peripheral or not present (i.e., self is not there in the fantasy) or not participating. Possibly a brief mention in passing, at

most, but then nothing to infuse self with any vitality.

2. Superficial factual--descriptive characteristics mainly of "doing and saying." Shallow employment of distal senses in interaction with others. At most get mono-dimensional appraisals of emotion or demeanor (e.g., "they liked me") with little such characterization present. The description is not vitalized by emotion and texture and sensuality.
3. Detailed distal. Surfacy but effort toward infusing life. More detailed presentation through vision and hearing and, if sensual or emotion toning present, sense of it being shallow with some, but little, variety (e.g., "fun," "wonderful"). Mostly infer feelings. Emphasize thinking, knowing.
4. Proximate. Description is arousing a clearer sense of being in one's shoes. More than a passing reference to proximate experiences--feelings or senses (taste, touch, smell) or proprioception. Subject is experiencing feelings rather than simply reporting them; is affectively multi-dimensional.
5. Captivating; adding a level of intensity to the immediacy. Experiences of oneself presented are vivid, passionate, vigorous, sensual, savory, vibrant, animated, imaginative, powerful (This does not mean that they are necessarily pleasant--that depends on the valence).

C. POTENCY/PRESENCE/IMPACT

1. Sense of immanent disintegration, death, or self as purely an object for others or at others' mercy. A pervasive sense of being empty, depleted, without fuel.
2. Sense of powerlessness or of being placed in the world and having things happen to or around one. Mostly being done to. Ineffectiveness. If one tries to act, the attempt is undermined or one's efforts have "unintentional" negative effects that lead to no constructive resolutions.
3. Sense of stalemate; detante; can hold off the forces --movement is possible but doesn't completely extricate one. Self may be dependent, grasping, or holding one's own under siege. Or mixture of positives and

negative--mixture of effectiveness and ineffectiveness; of successes and failures.

4. Exchange of initiative or sense of persistence being worthwhile and paying off at least in terms of basically gratifying needs. Can engage others to help. Emphasis on self doing things. General sense of being effectual--of doing and being in ways that others and the world responds to or that don't have punishing effects. Alternately, an emphasis on autonomy in achievement.
5. Sense of zest--separation and integration--in that one has own views yet takes others into account. Subject initiates activity that clearly addresses issues at hand. Active; powerful. A formidable presence--clearly someone to contend with yet operating from a perspective of mutuality. Vital, alive (e.g., determines outcome of actions, presents creativity, humorous observations, functions astutely).

D. INTERPERSONAL CLOSENESS

1. Isolated, insulated. No contact, isolation, rigid separateness: a sense of being indifferent and unaffected. If others are present, locates them on the distant periphery of awareness. Relating more to machines or non-human-like things than to people.
2. Removed, watching. Some interaction but with a sense it is occurring at an emotional distance. One is only observing things happen or is trying to flee internally; withdrawal is the predominant direction of subject's interpersonal movement. Or one operates from a position of emotional detachment (differentiate from #4 in that even with another, they are not coming to "know" one another more genuinely). Emphasis on non-personal activity.
3. Mixed stance. Ambivalent distance or sporadic involvement. Undesired distance. Someone may be present but the subject can't reach him/her or other is departing--both with implication one wants contact. Emphasis on basic need gratification, i.e., getting from the other.
4. Involved in some parallel capacity at the level of activity with a more constant level of exchange (i.e., attending to one another at a level that is more

physical or intellectual than emotional) for instance, a project involving the subject and someone else. (Not necessarily pleasant, but the exchange is continual).

5. Clearly and unambivalently engaged in relation to others or to the world around one at the level of emotional comprehension. Creative engagement. Also autonomous activity in which it's clear that one not reactive against others.

E. SATISFACTION/ FULFILLMENT

1. Primarily noxious experiences; worse than non-fulfilling since there's the implication of active impingement on self. One is left seriously damaged or impacted with no mitigating factors present. One dies after long deprivation or there is an implication the subject is going to be killed or longs for death.
2. One is left deprived and needy; tantalized and deserted; seriously disappointed, frustrated, angry, fearful, resigned, hurt; suspended far from intended goal.
3. May get the trappings of satisfaction but it's a thin veneer leaving one empty or hollow underneath. Physiological satisfactions without emotional component. Alternately, a mixture of satisfaction and dissatisfaction. Achievement accompanied by guilt.
4. Basic gratification of needs including a nod to the emotional side too. Enjoyment.
5. Thorough fulfillment; likely, but not necessarily, in sense of a give and take that occurs in a mutually satisfying human relationship; loving; understanding or achieving something that is individually important.

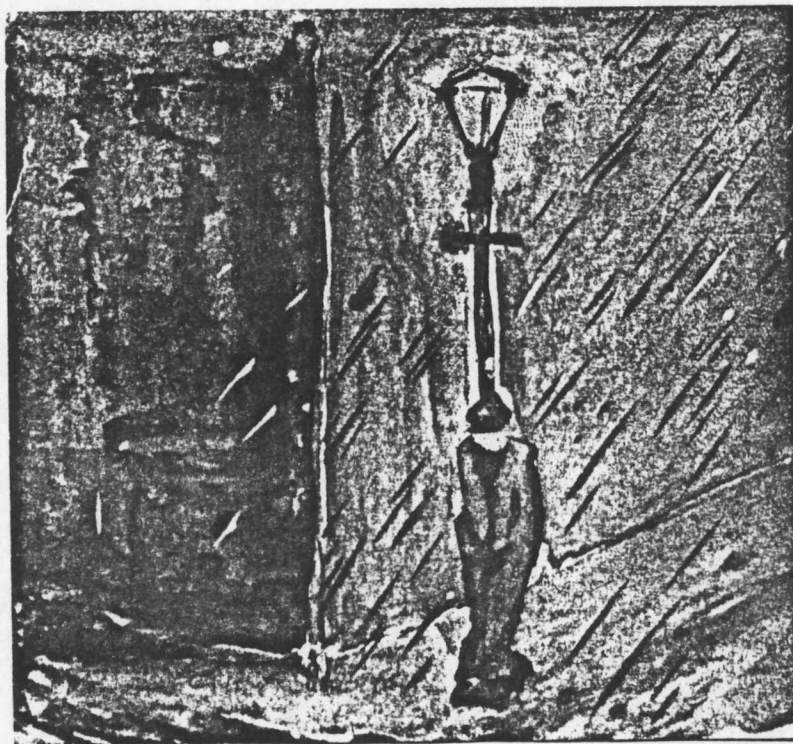
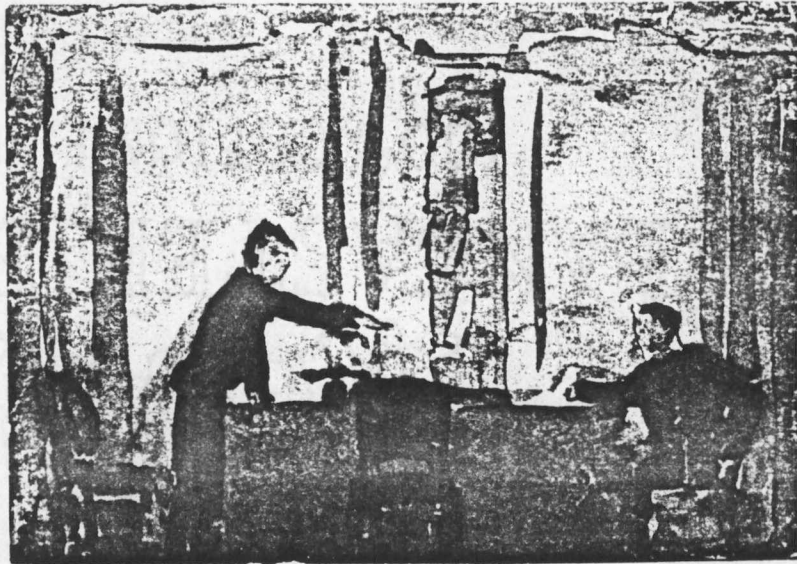
APPENDIX B

Intercorrelations Among the Eleven Scales Across Early Memories (EM), Dreams (D),
and Van Lennep Stories (VL)

VARIABLES	Surroundings			Others			Self				
	A	B	C	A1	B1	C1	A2	B2	D	E	F
I. Surroundings											
A. DISCRETENESS											
EM and D	.06	.00	.32	.24	.21	.00	.11	.21	.42*	-.02	.34
EM and VL	.03	.00	.00	-.09	-.12	.11	.00	-.17	.03	.21	.23
D and VL	-.18	-.02	.03	-.16	-.13	.13	.04	-.24	-.18	.04	-.05
B. TONING											
EM and D	.09	-.20	.32	.30	.01	.06	.09	.27	.20	.06	.14
EM and VL	-.12	-.14	.25	-.10	-.05	.13	-.07	-.26	.16	.04	.13
D and VL	-.25	-.13	-.16	-.26	-.28	-.27	.03	-.14	-.52*	-.04	-.28
C. VALENCE											
EM and D	.00	.09	.09	.38	.48*	.20	.34	-.10	.34	.36	.30
EM and VL	.19	.22	.06	.25	.22	.00	.17	.31	.00	.12	.08
D and VL	.06	.18	.06	.05	-.13	.30	.25	-.09	.19	.16	.12
II. Others											
A1. DISCRETENESS											
EM and D	.06	-.16	.38	.49*	.24	.54*	.36	.37	.30	.37	.59*
EM and VL	.31	.31	.01	.07	.00	.19	.01	-.04	.30	.11	.17
D and VL	.16	.26	-.07	.24	.23	-.01	.39*	.19	.26	.01	.09
B1. TONING											
EM and D	.23	-.06	.04	.09	.02	.28	.14	.22	.09	.05	.21
EM and VL	.19	.07	-.13	-.04	-.03	.06	-.32	-.17	.00	.02	-.10
D and VL	.09	.14	-.06	.28	.26	.15	.17	.10	.28	.07	.29
C1. VALENCE											
EM and D	.10	-.02	.31	.28	.30	.22	.24	.25	.34	.26	.43*
EM and VL	.19	.15	.07	.19	.06	.10	-.18	-.04	.06	.22	.14
D and VL	.04	.08	.10	-.06	-.28	-.06	.15	-.09	.01	-.21	-.28
III. Self											
A2. DISCRETENESS											
EM and D	.33	-.18	.20	.29	.12	.06	.24	.41*	.22	.05	.15
EM and VL	-.07	.01	.18	-.12	-.02	.37	.11	-.25	.15	.11	.29
D and VL	-.26	-.11	-.19	.18	-.07	-.06	-.11	-.16	-.08	.06	-.18
B2. TONING											
EM and D	.23	-.17	.25	.22	-.04	.18	.24	.37	.21	.03	.16
EM and VL	-.10	-.05	.42*	-.14	-.17	.29	.06	-.26	.17	.06	.26
D and VL	-.27	-.12	-.20	-.04	-.19	.24	-.04	-.43*	.02	.06	.11
D. POTENCY											
EM and D	.26	.11	.32	.36	.46*	.13	.32	.36	.47*	.49*	.51*
EM and VL	-.05	-.14	-.06	-.02	-.22	-.01	-.17	-.25	-.15	-.06	-.01
D and VL	.14	-.06	-.03	-.14	-.25	.06	.26	.04	-.21	-.11	-.17
E. DISTANCE											
EM and D	.06	-.08	.29	.12	.11	.29	.31	.26	.25	.14	.31
EM and VL	.27	.07	.18	.33	.16	.29	-.17	.06	.20	.27	.13
D and VL	.11	.21	-.05	.12	.06	-.04	.31	.05	.16	-.15	-.01
F. SATISFACTION											
EM and D	.12	.16	.29	.29	.36	.24	.32	.09	.51*	.21	.49*
EM and VL	.14	.05	.12	.13	.06	.06	-.14	.02	.03	.28	.12
D and VL	.06	.06	-.09	-.11	-.33	.02	.26	-.12	-.06	-.12	-.14

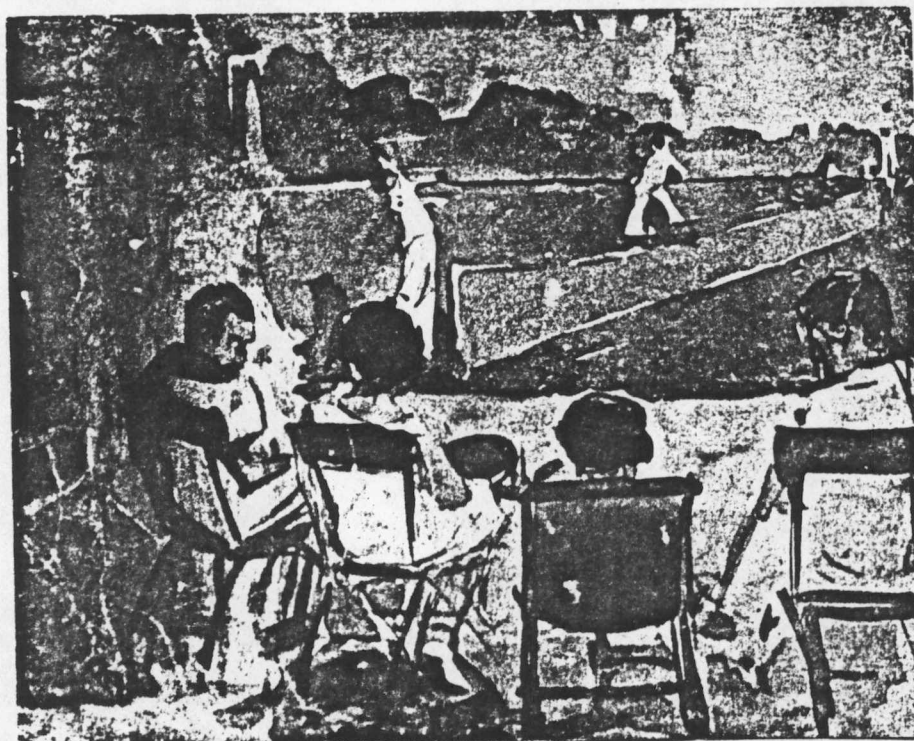
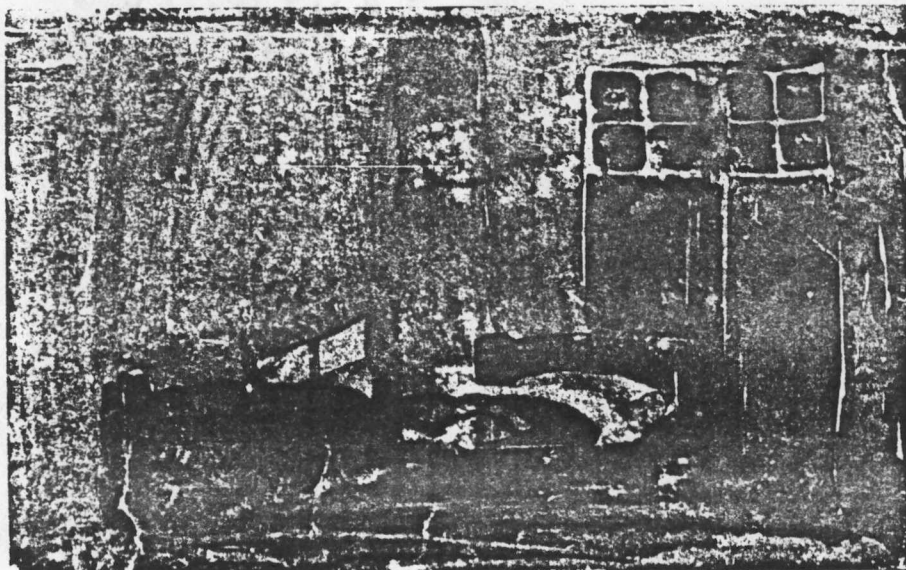
* Significant at .05 ($r = .39$ or greater)

APPENDIX C



VAN LENNEP'S FOUR PICTURE TEST--CARDS I & III

Note: Van Lennep, D. J. (1948). Manual: Four-Picture Test. Nederlandsche Stichting voor Psychotechniek. (Original work published 1930).



VAN LENNEP'S FOUR PICTURE TEST--CARDS II & IV

Note: Van Lennep, D. J. (1948). Manual: Four-Picture Test. Nederlandsche Stichting voor Psychotechniek. (Original work published 1930).

VITA

Charles Steven Jones was born in St. Paul, Minnesota on August 18, 1948. He attended elementary schools in Mankato, Minnesota and Sioux Falls, South Dakota and was graduated from high school in Columbus, Nebraska. He attended the University of Nebraska and the University of Missouri, graduating with a Bachelor of Arts in American and English literature in June 1970.

After joining the Teacher Corps program in Detroit, Michigan he became interested in working with emotionally disturbed children and pursued this interest by entering a graduate program in social work at Michigan State University. He received his Master's degree in Social Work in June 1976.

After working six years at an outpatient psychiatric clinic in Flint, Michigan, he re-entered graduate school at the University of Tennessee. He received his Doctor of Philosophy degree with a major in Psychology in August, 1986 after an internship at the Colmery-O'Neil Medical Center, a Veterans Administration facility, in Topeka, Kansas.