

CANADIAN THESES ON MICROFICHE

I.S.B.N.

THESES CANADIENNES SUR MICROFICHE



National Library of Canada
Collections Development Branch

Canadian Theses on
Microfiche Service

Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada
Direction du développement des collections

Service des thèses canadiennes
sur microfiche

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

60289

PERMISSION TO MICROFILM — AUTORISATION DE MICROFILMER

• Please print or type — Écrire en lettres moulées ou dactylographier

Full Name of Author — Nom complet de l'auteur

PIERRE JOSEPH GELINAS

Date of Birth — Date de naissance

APRIL 17 1948

Country of Birth — Lieu de naissance

CANADA

Permanent Address — Résidence fixe

3513 41-B AVENUE
EDMONTON, ALTA.
T6L 5E6

Title of Thesis — Titre de la thèse

THE NLP META-model AND Psychological Adjustment

University — Université

UNIVERSITY OF ALBERTA, EDMONTON

Degree for which thesis was presented — Grade pour lequel cette thèse fut présentée

MASTER OF EDUCATION

Year this degree conferred — Année d'obtention de ce grade

1982

Name of Supervisor — Nom du directeur de thèse

DR PAUL KOZIEY

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

Date

July 22/82

Signature

Pierre Gelinas

THE UNIVERSITY OF ALBERTA
THE NLP META-MODEL AND PSYCHOLOGICAL ADJUSTMENT

by

© PIERRE J. GELINAS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION
IN
COUNSELING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1982

THE UNIVERSITY OF ALBERTA

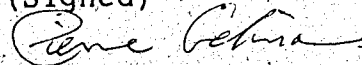
RELEASE FORM

NAME OF AUTHOR Pierre J. Gelinus
TITLE OF THESIS The NLP Meta-model and Psychological
Adjustment
DEGREE FOR WHICH THESIS WAS PRESENTED Master of Education
YEAR THIS DEGREE WAS GRANTED 1982

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(Signed)



PERMANENT ADDRESS:
3513 - 41B Avenue
Edmonton, Alberta
T6L 5E6

DATED

May 19,

1982

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read , and recommend to the Faculty of Graduate Studies and Research , for acceptance , a thesis entitled "The NLP Meta-model and Psychological Adjustment" submitted by Pierre J. Gelinas in partial fulfillment of the requirements for the degree of Master of Education in Counseling Psychology .

[Handwritten Signature]

.....

(Supervisor)

John Osborne

.....

M. A. Hay

.....

Date..... *May, 1987*

ABSTRACT

The purpose of this study was to investigate the potential value of the NLP, Meta-model as an objective and systematic method for analysing verbal behavior, in order to differentiate individuals who are psychologically well-adjusted from those who are not. Specifically, it was hypothesised that depressed individuals would express a greater number of deletions, distortions, generalizations, and semantically ill-formed statements, than would psychologically healthy individuals.

Thirteen university undergraduate students (ages 20 - 42, $\bar{X} = 24.3$) and 12 hospitalized patients (ages 21 - 53, $\bar{X} = 32.2$) diagnosed as depressed, all female, were administered five TAT cards. All 125 verbal stories were transcribed and scored on the basis of ten subcategories of the Meta-model. Scores were modified in order to account for variations in story lengths. Inter-rater reliability ranged from 0.28 to 0.95.

Directional t-tests, based on independent groups means, indicated that the hospitalized subjects tended to express a greater total number of deletions, distortions, generalizations, and semantically ill-formed statements, than did the normal sample, although not to a significant degree.

Further analyses revealed that the patients expressed significantly more deletions and generalizations: respectively, simple verb deletions ($p < .001$) and unspecified verbs ($p < .005$).

The present investigator concluded that individuals who experience psychological distress tend to reflect their distress in their verbal behavior by using deletions and generalizations to express their dissatisfaction.

The Meta-model was found to be a potentially useful tool for analysing verbal behavior and its relationship to psychological adjustment. Limitations such as sample matching and inter-rater reliability are discussed, as are some future areas for study.

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Dr. P. W. Koziey for his support and encouragement. I would also like to thank the other member of my committee, Dr. J. W. Osborne, and Dr. M. A. Nay who served as the external member on the committee.

I would like to express very special thanks and gratitude to my wife, Evelyn, whose enormous patience and support helped me to achieve my goals in life.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.....	1
Overview.....	2
Neuro-Linguistic Programming.....	2
Definitions of NLP Terms.....	5
Analysis of Verbal Behavior.....	7
The Present Study.....	8
II. RELATED THEORETICAL SUPPORT.....	10
The Construct of Surface Structure.....	10
Overview of Related Research.....	11
Neuro-Linguistic Programming.....	11
Verbal Behavior and Psychological Adjustment.....	11
Hypotheses.....	14
III. METHOD.....	15
Research Design.....	15
Subjects.....	15
Equipment and Facilities.....	17
Techniques for Eliciting Speech Samples....	18
Test Design.....	20
Dependent Variables.....	20
Assessment Procedure.....	21
Scoring Procedure.....	22

CHAPTER	PAGE
IV. RESULTS AND DISCUSSION.....	24
Overview.....	24
Correction for Story Lengths.....	31
Inter-rater Reliability.....	38
Findings.....	40
Conclusions.....	40
Results.....	40
Hypothesis #1.....	40
Findings.....	40
Conclusions.....	41
Hypothesis #2.....	41
Findings.....	41
Conclusions.....	44
Summary.....	44
V. CONCLUSIONS AND IMPLICATIONS.....	46
Limitations.....	47
Areas for Future Exploration.....	49
REFERENCES.....	51
APPENDIX A: NAMES OF PEOPLE DOING RESEARCH.....	56
APPENDIX B: ASSESSMENT CONSENT FORM FOR PATIENTS....	61
APPENDIX C: TEST GUIDE AND SCORING SHEET.....	63
APPENDIX D: TRANSCRIPTS OF TAT STORIES.....	77

APPENDIX E: RAW SCORES OBTAINED BY ALL SUBJECTS.....	155
APPENDIX F: TEST SCORES CORRECTED FOR LENGTH.....	167
APPENDIX G: SCORES OBTAINED BY TWO RATERS AND EXAMINER FOR THREE SUBJECTS. SET OF SCORES.....	182

LIST OF TABLES

TABLE	PAGE
1. Group Means for All Dependent Variables.....	30
2. Number of Words per Set of TAT Stories.....	32
3. Mean Number of Words per Set of TAT Stories....	33
4. Length Factors Used to Correct for Variations in Story Lengths.....	34
5. Effect of Length Factors of Patients' Test Results.....	35
6. Effect of Length Factors on Normal Subjects' Test Results.....	36
7. Inter-Rater Reliability.....	39
8. t-Test Values.....	42

LIST OF FIGURES

FIGURE	PAGE
1. Group Scores for De, Di, Ge, Se.....	26
2. Group Scores of Three Categories of Deletions.....	27
3. Group Scores of Three Categories of Generalizations.....	28
4. Group Scores of Three Categories of Semantic Ill-Formedness.....	29
5. Effect of Length Factors on Correlations Between Sum of Words and Sum of Dependent Variables.....	37

LIST OF ABBREVIATIONS

NLP: Neuro-Linguistic Programming

De: Deletion

Di: Distortion

Ge: Generalization

Se: Semantic Ill-Formedness

SVD: Simple Verb Deletion

MON: Modal Operator of Necessity

MOP: Modal Operator of Possibility

LRI: Lack of Referential Index

UQ: Universal Quantifier

UV: Unspecified Verb

CE: Cause-Effect

MR: Mind Reading

LP: Lost Performative

CHAPTER I

INTRODUCTION

Psychotherapeutic interviews have been extensively studied in the hope of acquiring new information for the purposes of improving psychodiagnostic assessments, maximizing counselor effectiveness, and evaluating change within the client. Dependent variables such as amelioration in affect and changes in nonverbal and verbal behavior have been measured and related to changes in psychological well-being. Traditionally, the analysis of verbal behavior has been a prominent aspect in studies of psychotherapeutic interviews, and continues to play an important role. Proponents of Neuro-Linguistic Programming (NLP) confirm, through the Meta-model of human communication, that verbal behavior is indeed a variable worthy of analysis.

This study investigated the potential value of verbal behavior as an indicator of psychological adjustment. Transcripts of verbal samples obtained from two groups of subjects, who responded to visual stimuli, were analysed and compared on the basis of variables derived from the NLP Meta-model.

Auld and Murray (1955) and Marsden (1965) provide comprehensive reviews of early content-analysis studies.

OVERVIEW

The formulation of this study necessitated the combined contribution of two areas of psychology. Neuro-Linguistic Programming was used as the conceptual model while the content-analysis of verbal behavior represented the experimental component.

Neuro-Linguistic Programming

Psychology has traditionally been a divided field due to a lack in communication between the theoretician and the therapist. The former, whose role has been to formulate beliefs about the true nature of man and to describe an effective therapist as authentic and empathic, has yet to satisfactorily state what specifically the therapist should do to attain therapeutic effectiveness. Meanwhile, the therapist attempts to help his client on the basis of some or many theories of counseling, often without knowing exactly how to proceed; for example, one often hears a therapist say "I just do this technique or say this phrase because of intuition", or, "I just let it happen unconsciously". He has been told to be genuine, understanding, and empathic, but the theoretician has not really shown him how.

Bandler and Grinder (1979) were interested in identifying specific behavioral techniques which could be learned by therapists to conduct effective counseling.

Rather than formulating a theory of counseling, Bandler and Grinder (1979, p. 7), calling themselves modelers, focused their attention on what other therapists did rather than what they said they did during therapy, and synthesized a model for therapy based on their observations. As modelers, they were not interested in what was true; rather, they wished to identify counseling strategies which could be useful. They selected three wizards of psychotherapy as models for observation: Fritz Perls, Milton Erickson, and Virginia Satir.

Although these three wizards initially appeared to use quite dissimilar counseling techniques and theoretical foundations, Bandler and Grinder discovered very similar behavioral strategies used by all three therapists. Their observations, added to previously known information from the areas of psycholinguistics, neurophysiology, and psychology, resulted in a model of therapy called Neuro-Linguistic Programming (NLP) which was claimed to be highly effective in treating, within relatively short periods of time, a myriad of difficulties ranging from learning disorders to phobias and other maladaptive behaviors. Of import is that NLP did not provide any new theoretical knowledge, but rather it was packaged as a new technological model which could be used by all therapists, notwithstanding their particular theoretical belief systems.

The aims of NLP are similar to those of other counseling methodologies, that is, gathering information from the

client, establishing rapport, and facilitating change within the client. What is new in NLP is that the therapist is provided with specific techniques which allow him to achieve these aims more quickly, and for the client, less painfully. Additionally, NLP ensures through a technique called future pacing that the change experienced by the client will endure long after the counseling intervention; traditional therapies have not been as able to make this claim.

In gathering information from the client, the therapist basically needs to know the client's present psychological state and his desired state. Establishing rapport requires the therapist to be aware of, and be able to match, the client's nonverbal and verbal communication patterns; that is, understanding how he represents his world.

Nonverbally, the client communicates by ideomotor responses such as breathing, skin color, lip size, facial muscle movements, and eye scanning. The latter indicates how the client deals internally with his representation of the world. Briefly, when the eyes move up or forward, he is seeing a remembered or a created image; when the eyes are directed to his left he is remembering sounds or words, and he creates sounds or words when the eyes scan to his right. Looking downward indicates a feeling state.

Verbally, the client represents the world by using verbal predicates corresponding to the sensory neuronal systems. In times of stress he tends to use one primary representational system, usually at the unconscious level.

Words like appear, see, focus, picture, show, indicate a visual orientation, while words like listen, sounds like, hear, discuss, are part of the auditory representational system. The kinesthetic system includes words like tense, feel, relaxed, touch, hurt. The olfactory and gustatory systems are not used as much by man as are the other systems and are therefore not stressed in NLP.

Verbal communication is the subject of another component of NLP, the Meta-model, which was designed to establish rapport and to help the client to improve his impoverished model of the world.

Key elements of the Meta-model include the client's frequent usage of universal modeling processes identified as deletions, distortions, generalizations, and semantically ill-formed statements. Recognizing and challenging these processes improves the client's communication in that his Surface Structures would then describe his Deep Structure more accurately; in other words, the client becomes more in touch with his internal self (Cameron-Bandler, 1978, p.172).

Definitions of NLP Terms

Neuro-Linguistic Programming (NLP). NLP is a model for behavioral change which involves the study of the structure of subjective experience and communications (Lankton, 1980, p. 13). The primary goal of NLP is to initiate therapeutic change within the client in a quick and painless manner, by means of specific techniques designed for this purpose.

Meta-model. An explicit set of linguistic tools used to gather information about the client and to help him reconnect his verbal language to the internal experiences represented by the verbal language.

Universal Modeling Processes. These are linguistic expressions used universally by man to represent his model of the world. These processes are categorized as deletions, distortions, and generalizations. They are also expressed in times of personal conflict in order to maintain an impoverished model of the world.

Deletions. These linguistic processes occur when parts of the Deep Structure are not expressed in the Surface Structure; in other words, the client does not reveal all of his inner experiences, and his model of the world is therefore impoverished to the point where he perceives himself to have a limited number of available choices for coping with his personal difficulties.

Distortions. One of the most common ways to misrepresent reality is to verbally transform a subjective experience into an objective thing or event. For example, by stating "I have a depression", the process of feeling depressed is represented as an impersonal event.

Generalizations. These linguistic processes involve the loss of detail and richness of one's subjective experiences. Generalizations tend to expand an original painful experience into a larger and seemingly insurmountable obstacle to cope with; for example, "the world is unfair to me" may be a

generalization of a more specific target of concern such as "my boss is unfair to me".

Semantic Ill-Formedness. This process of misrepresenting the world consists of the client's assigning outside of his control responsibilities which are really his; for example, "he makes me feel sad".

Surface Structure. The verbal statements used to explain what one is experiencing subjectively.

Deep Structure. One's subjective experiences, feelings.

Modeling. Representing something; a map.

Impoverishing. To have a limited number of choices, or no choices, in one's behavior.

Analysis of Verbal Behavior.

The analysis of verbal behavior in the area of psychotherapy is not a recent innovation. As early as 1933 Korzibski, the founder of General Semantics, studied the influential role of language on the human psyche and behavior (Hayakawa, 1962, p. x); he attempted to "construct a program of retraining human nervous systems toward more hygienic neurolinguistic habits, i.e., toward greater sanity" (Hayakawa, 1962, p. 24).

The assessment of verbal behavior is defined by Berelson (1952) as "a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (p. 18). Murray (1956) described it as "the general method for studying the meaning

properties of language" (p. 1). Whether one is studying manifest content, underlying meanings, or any other number of variables, assessment of verbal behavior "involves little more than finding the frequency of occurrences of words that have been determined by the researcher to be of interest" (Gottschalk, 1978, p. 387).

A sampling of the literature revealed that content analysis of verbal behavior proved to be a valuable research tool in psychotherapy (Auld and Murray, 1955; Eldred and Price, 1958; Gottschalk and Gleser, 1957; Jaffe, 1958; Marjerrison and Keogh, 1967; Marsden, 1965; Murray, 1956; Oxman, Rosenberg, and Tucker, 1982; Westbrook and Viney, 1977). Gottschalk (1978) found that content analysis of verbal behavior has become a reliable tool for measuring labile and more permanent psychological states.

The Present Study

The Meta-model provides a scientific foundation upon which the therapist can evaluate both the client's psychological state and his own therapeutic effectiveness.

This study was designed to investigate the potential value of the Meta-model as an objective and systematic method for studying verbal behavior. If verbal behavior could be analysed by using dependent variables derived from the Meta-model, it may then be possible to differentiate individuals who are psychologically well-adjusted from those who are not.

This thesis is divided into five sections. The first chapter provided a brief overview of the conceptual framework upon which this study was formulated. The basic constructs, the foundation for this framework, were reviewed. The rationale for implementing this research, as well as its potential importance, were discussed. Chapter two will present background theoretical support for this research project. In chapter three, the research design and procedure will be detailed and the dependent variables introduced. Chapter four will contain the statistical evaluation of the data. The results and conclusions will also be disclosed then. Finally, a discussion of the limitations of this study, as well as suggested areas for future explorations, will be presented in chapter five.

CHAPTER II

RELATED THEORETICAL SUPPORT

Most words evolved as a description of the outside world, hence their inadequacy to describe what is going on inside me.

Hugh Prather (1970)

The Construct of Surface Structure

Verbal language is the primary manner of interaction within most interpersonal relationships, including therapeutic situations. Verbal language is a bridge upon which individuals are able to meet and interact.

As the client communicates his concerns to the therapist he provides his impoverished model of the world. The words selected by the client are evaluative descriptions of his map of the territory of his experience (Hayakawa, 1962, p. viii). However, as Korzibski postulated in his principles of General Semantics, "the map does not represent all of the territory" (Hayakawa, 1962, p. 19). In other words, the client's verbal descriptions, or Surface Structure, would limit him to only a partial representation of his Deep Structure of inner experiences (Bandler and Grinder, 1975, p. 40), as "there is a necessary difference between the world and any particular model or representation of the world" (Bandler and Grinder, 1975, p. 7).

This necessary difference is a developmental consequence of neurological, individual, and social constraints which influence an individuals' perception, selection, and organization of external stimuli, and is thus reflected in Surface Structures as learned linguistic habits (Hayakawa, 1962, p. 22), or universal modeling processes (Bandler and Grinder, 1975).

Overview of Related Research

Neuro-Linguistic Programming

Since its relatively recent arrival, little research effort has been directed toward NLP assumptions and treatment methods, including the Meta-model (Goleman, 1979; Harman and O'Neill, 1981). A recently obtained list (Appendix A) shows the total known number as about two dozen completed or current NLP related research projects.

Verbal Behavior and Psychological Adjustment

Bandler and Grinder state that clients who come for therapy tend to display impoverished models of the world and that these "impoverished models . . . imply limited options for behavior" (1975, p. 41). These impoverished models are consequential to incomplete Surface Structures which are characterized by an above-average use of deletions, distortions, generalizations, and semantic ill-formedness.

The relationship between psychological adjustment and verbal behavior has been investigated and supported in the

literature. Gottschalk and Gleser (1957), for example, attempted to show that subjects with varying degrees of psychosocial adjustment reflected their internal conflicts "in their habits and patterns of speech" (p. 307); they concluded:

Mental illness is a complex reaction involving disorganization of social relationships and that the nature and severity of the social malfunctions are reflected in the kinds of symbols of verbal expression and communication that are used. (p. 309)

The assumptions of the Meta-model are also supported by Berg (1958) who found that psychological adjustment is related to verbal behavior. In his Deviation Hypothesis, he proposed the following:

A person who is deviant in a critical area (as adjustment) will also be deviant in noncritical areas of behavior (as word choice or sounds) when compared to the "normal" population. (p. 131)

Based on some support from General Semantics, Berg noted that an individual who experiences psychological distress tends to have difficulty in verbalizing exactly what his problem is. A sampling of the literature revealed similar findings (Lolas and von Rad, 1977; Marjerrison and Keogh, 1967; Marsden, 1965; Murray, 1956; Westbrook and Viney, 1977). One study (Macroy, 1978) based on the Meta-model assumptions, provides further support for the close relationship between verbal behavior and psychological adjustment.

It would therefore be logical to assume that as a client progresses during therapy, a corresponding improvement would occur in his verbal behavior. A successful psychotherapy, whatever its theoretical foundations and techniques, involves a larger amount of communication and a change in how the client represents his world (Bandler and Grinder, 1975, p. 45); that is, his verbal behavior would tend to display fewer numbers of limiting universal modeling processes (Bandler and Grinder, 1975, p. 54). This assumption has been indirectly supported in the literature (Jaffe, 1958; Marjerrison and Keogh, 1967), and strongly supported by Berg (1958) who indicated that the client's use of words such as never, nothing, none, would decrease as he progresses during therapy. The Meta-model identifies these words as universal quantifiers (Bandler and Grinder, 1975, p. 71).

In light of the information presented thus far, a study investigating the relationship between verbal behavior and psychological adjustment, based on the Meta-model assumptions, is merited, and would contribute to the emerging research endeavours in the area of Neuro-Linguistic Programming. The potentiality of using the Meta-model in the differentiation of psychological states could be valuable. Determining whether or not certain universal modeling processes are used more frequently by maladjusted individuals could provide useful information about how they attempt to cope with their distressful experiences. These

questions were the basis upon which this study was formulated.

Hypotheses

The above mentioned areas of inquiry may be more specifically stated as testable hypotheses.

1. Hospitalized persons diagnosed as depressed express a greater number of universal modeling processes in their verbal communication, in comparison to psychologically better adjusted persons, as indicated by the aggregate sum of deletions, distortions, generalizations, and semantically ill-formed statements.
2. Hospitalized persons diagnosed as depressed express a greater number of each of the following universal modeling processes, in comparison to psychologically better adjusted persons: a) deletions, b) distortions, c) generalizations, d) semantically ill-formed statements.

CHAPTER III

METHOD

In this chapter, the research design will be detailed, along with sampling selection and constitution. In addition, equipment, facilities, dependent variables, assessment, and scoring procedures will be discussed.

Research Design

The research design basically involved the assessment of two independent groups of subjects and a statistical comparison of their test results using t-tests.

Subjects

Subjects were obtained from two sources. Those persons who were considered psychologically well-adjusted were undergraduate students at the University of Alberta. All were enrolled in the faculty of Education, except for one who majored in Medical Laboratory Technology. These 13 students volunteered following a brief explanation of this research project to a large class. Caution was taken in not disclosing details which would have biased the results. Further information was to be made available following their participation.

The decision to evaluate these students as

psychologically well-adjusted was based on the author's clinical judgment and on their self-reports that they were coping generally well with their current life situations. They were all tested within eight days following their return from Christmas holidays and so were not experiencing increased stressful situations such as examinations. For reasons to be discussed later, all students selected for this study were female. Their ages ranged from 20 to 42 with a mean of 24.3 years. Although these students are collectively labelled as the "normal" group in this study, the term "normal" is not implied to mean ideal or preferred but rather as typical or average.

The second group of subjects consisted of 12 female psychiatric inpatients from an Edmonton hospital. All were diagnosed by their psychiatrists as being depressed. Their ages ranged from 21 to 53 with a mean of 32.2 years. Persons diagnosed as psychotically depressed or otherwise psychotic were excluded from this study. Following the authorization of this project by the hospital's Research Ethics Committee, the subjects were approached individually and were provided with similar information as that given to the "normal" group (Appendix B).

The assessment period for the hospital group began in December, 1981, and was completed in February, 1982. All patients were selected and tested within their first week of admission to ensure that antidepressant drugs would have no significant intervening role in this study (Marjerrison and

Keogh, 1967).

As mentioned above, all subjects selected for this study were female and all patients were depressed. Hospital records indicate that the majority of patients admitted to a psychiatric unit are female and that the most frequent diagnosis is depression. For these reasons the patients were selected as being representative of the general patient population and were compared to a fairly representative "normal" or typical average female sample. The effects of age and educational level were somewhat difficult to control as patients were generally older and had achieved a comparatively lower level of education; most had completed high school.

As the two samples of subjects were not evenly matched on characteristics like age, level of intellectual functioning, creative ability, verbal fluency, educational achievement, and socio-economic status, the dependent measures may be expected to reflect some degree of experimental error. The conclusions drawn from this study may therefore be viewed with some caution, as the differences in means between the two samples may be artificial.

Equipment and Facilities

All sessions were completed in quiet testing rooms at the University of Alberta and the hospital. The subjects, tested individually, sat in front of a desk while the experimenter sat in a chair nearby. The equipment used for

this study consisted of the Thematic Apperception Test (TAT), a pictorial projective test, as well as a portable audio cassette recorder, a microphone, and cassette tapes.

Techniques for Eliciting Speech Samples

The rationale for selecting the Thematic Apperception Test for this study will be discussed in this section.

The analysis of verbal behavior can be accomplished by various means. Such techniques for eliciting speech samples include verbal induction, visual induction, written sampling, and unstructured interviews.

Verbal induction consists of asking a subject to speak for five minutes about any one of his personal life experiences, while the visual induction method requires the subject to relate stories about certain visual stimuli, such as the cards from the Thematic Apperception Test (Gottschalk and Gleser, 1969). Written sampling may involve either asking the subject to write a story for a specified time without external stimuli, or with the aid of such stimuli as pictures. Another method is to observe a subject's spontaneous speech during an unstructured interview. Parts of the subject's verbal sample or the whole interview may be used for the purpose of analysis.

In deciding which technique would be used in this study some factors needed to be considered:

Time for Scoring. The amount of time needed for scoring a

verbal sample should be considered as a factor which may influence the reliability of the scores.

Subject Spontaneity. Gottschalk and Gleser (1969, p. 256) indicate that the writing of language may adversely limit a subject's spontaneous thought processes. As well, the actual output of words per unit of time may be less compared to that of a spoken sample. Nevertheless, the collection of samples should be consistently either verbal or written.

Subject Stimulation. The visual method of eliciting speech may tend to constrain the subject's speech and to slow the rate of speaking, compared to the more spontaneous verbal induction technique (Gottschalk and Gleser, 1957, p. 305). However, the visual method would be helpful in stimulating the imagination and would be a more systematic procedure.

Length of Test Session. Consideration should be given to the potential intervening influence of subject fatigue. The individual assessment time should therefore be restricted to a comfortable maximum. As well, the reliability of results obtained from small speech samples should also be considered. Gottschalk and Gleser (1969) and Mintz and Luborsky (1971) indicate that small speech samples are sufficiently adequate for analysis.

On the basis of these considerations a decision was made to utilize the spoken visual induction technique, and the

Thematic Apperception Test was chosen as the stimulus. The latter has been used by Gottschalk and Gleser (1957, 1969) in their content-analysis studies and by others who investigated change in psychological adjustment (Friedman, 1955; Dymond, 1955; Dymond, Cartwright and Vogel, 1960; Meisels, 1967; Shore, Massimo and Mack, 1965).

Test Design

A test based on the Meta-model was designed for the purpose of this study, that is, the analysis of verbal behavior. A scoring guide was also designed in order to ensure a systematic scoring procedure. Both test form and scoring guide are included in Appendix C. The dependent variables were arbitrarily chosen from the book The Structure of Magic I (Bandler and Grinder, 1975). These variables will be outlined next. Definitions and examples are provided in Appendix C.

Dependent Variables

Although the number of universal modeling processes used as dependent variables in this study is not complete, the following were selected to be representative and sufficient.

1. Deletions

- a) Simple Verb Deletions.
- b) Modal Operators of Necessity.
- c) Modal Operators of Possibility.

2. Distortions

a) Nominalizations.

3. Generalizations

a) Lack of Referential Index.

b) Universal Quantifiers.

c) Unspecified Verbs.

4. Semantic Ill-Formedness

a) Cause-Effect.

b) Mind-Reading.

c) Lost Performatives.

Assessment Procedure

All sessions were similar in that the subjects were given the choice of appointment times, were provided with the same brief explanation about this study, and were read the same procedural instructions. Once they indicated that they were settled and prepared, the testing commenced.

Test Administration

The subjects were requested to select five cards at random from the Thematic Apperception Test. All cards were selected face down and remained so until ready to use. A preselected set of TAT cards could have been used, however, this procedure would not have served a useful purpose as this study was not concerned with the examination of themes. The decision to select the cards in a random manner was made as a precautionary measure against extraneous variables which may

or may not ensue and which may or may not be serious if they do arise (Ferguson, 1976, p. 215).

The following instructions, based on those given in the TAT manual (Murray, 1943, p. 3), were then read:

I am going to show you five pictures, one at a time, and your task will be to tell as dramatic a story as you can for each. Tell what has led to the event in the picture, describe what is happening at this moment, what the characters are feeling, thinking, and saying. And then give the outcome. Speak your thoughts as they come to your mind. You may have a maximum of five minutes for each story. Please do not ask any questions during the test.

The maximal time for each session was 25 minutes which was indicated to be acceptable by the subjects. The normal subjects did not mind speaking into a microphone, however, a few of the patients were initially hesitant but completed their sessions with some reassurance from the examiner, who tested all the subjects in order to minimize experimenter effect in the results. Each recorded tape was labelled with a code number to assure confidentiality and anonymity.

Scoring Procedure

All tapes were transcribed (the transcripts are included in Appendix D) and were scored according to the directions provided in the Test Guide (Appendix C). In calculating the subject's final score consideration was given to variations

in lengths of stories by utilizing the "length factors" suggested in the TAT manual (Murray, 1943, p. 9).

No criterion was set for a minimal average number of words per story and each subject's verbal sample was therefore accepted for this study.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter will begin with an overview of the statistical procedure used to test the hypotheses presented in Chapter II. The findings and conclusions drawn from the data analysis will then be discussed in detail. The chapter will include some additional analyses.

Overview

The data analysis was divided basically into three parts. Part one consisted of an overall comparison of the two groups of subjects based on the sum of all dependent variables. Part two involved the comparison of these dependent variables when arranged into four categories of universal modeling processes. In part three, the four categories were further divided into their respective components and thus presented a more detailed analysis and comparison of the two groups of subjects.

The subjects' raw test scores were initially modified in order to minimize the influence of variations in story lengths. These raw scores are included in Appendix E. This modification will be discussed in more detail later in this chapter. The corrected scores, which were used in the data analyses, are listed in Appendix F and are portrayed

graphically in Figures 1 to 4. All statistical analyses consisted of directional t-tests which were used to detect any significant differences between the means of the two independent samples. The group means are listed in Table 1.

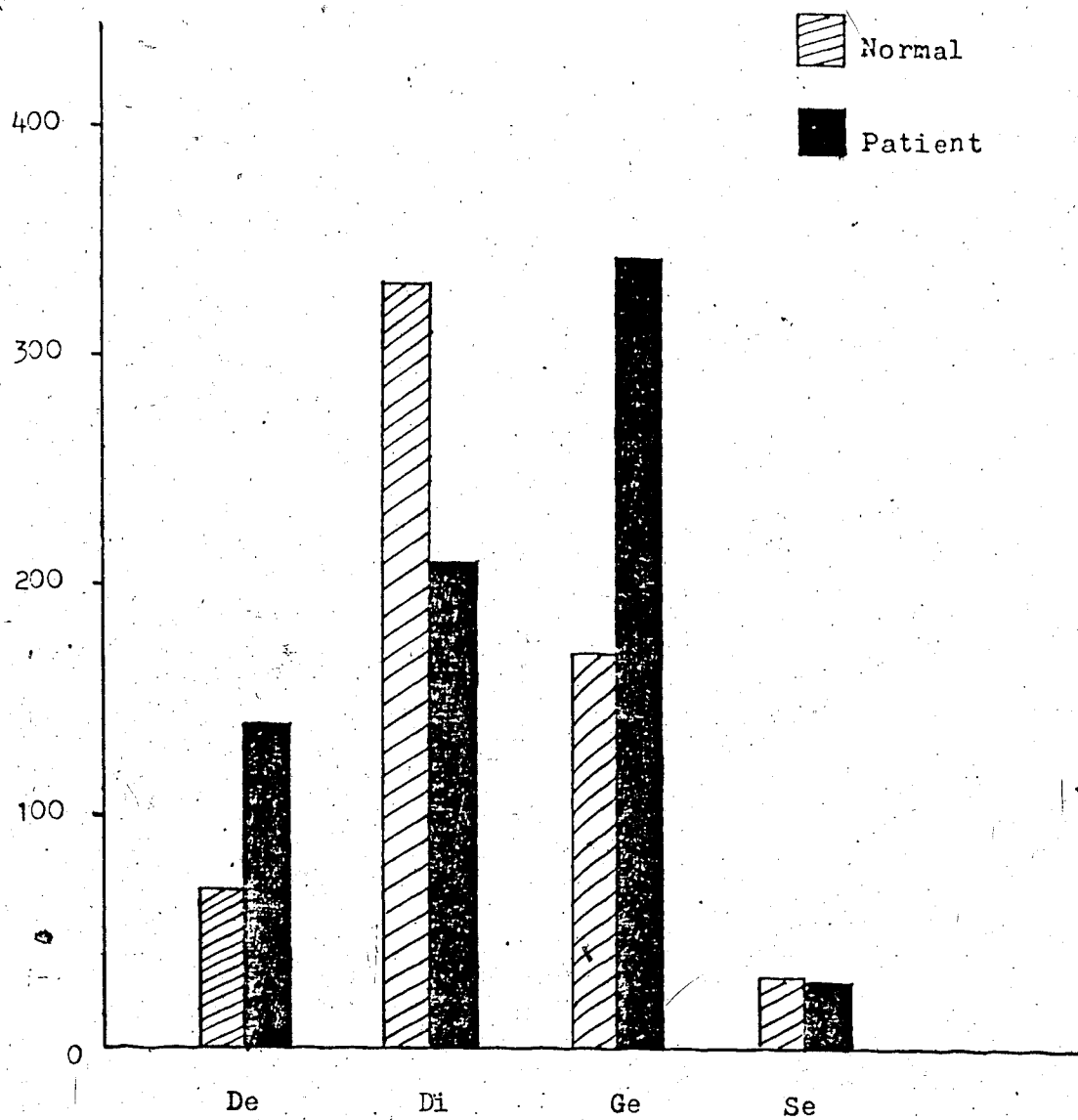


FIGURE 1

Group Scores (Corrected for Length)

For Patient and Normal Subjects

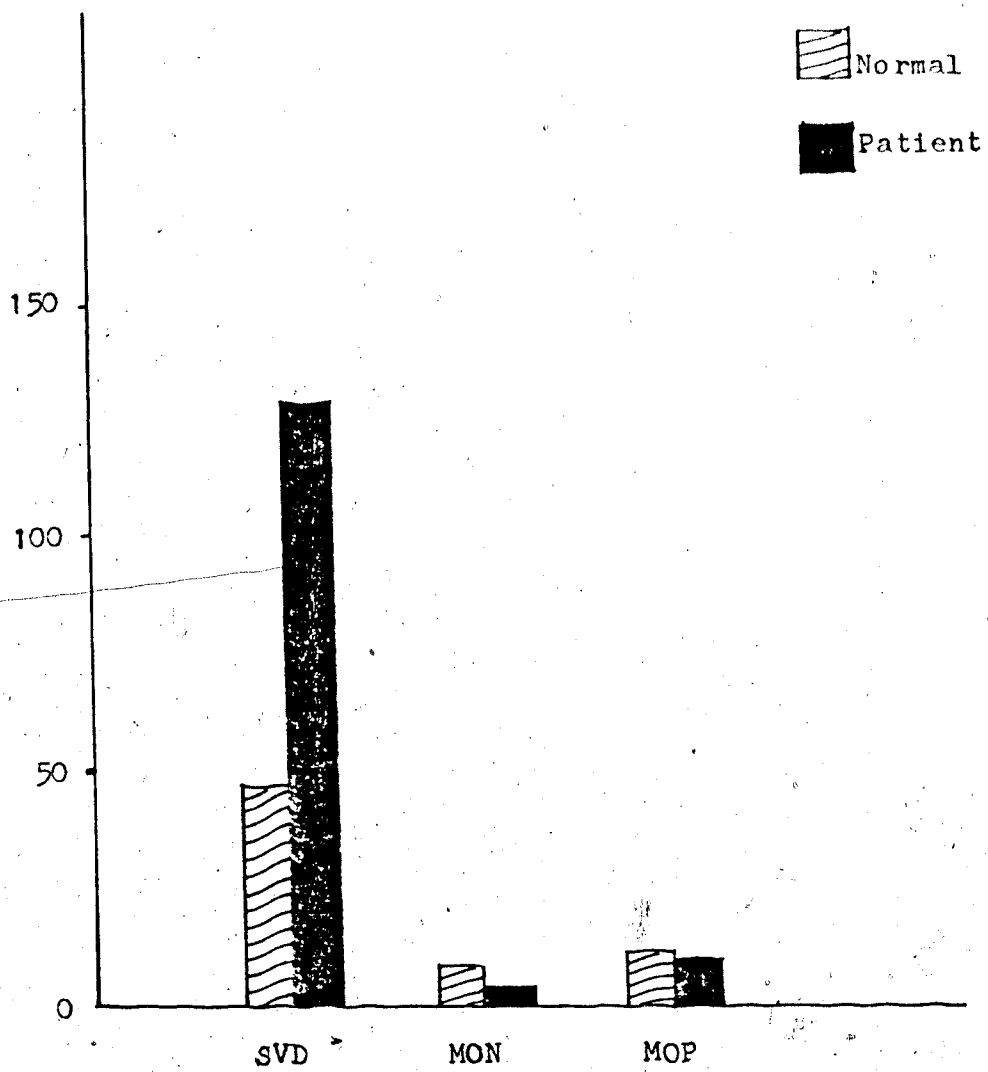


FIGURE 2

Group Scores (Corrected for Length)
of Three Categories of Deletions

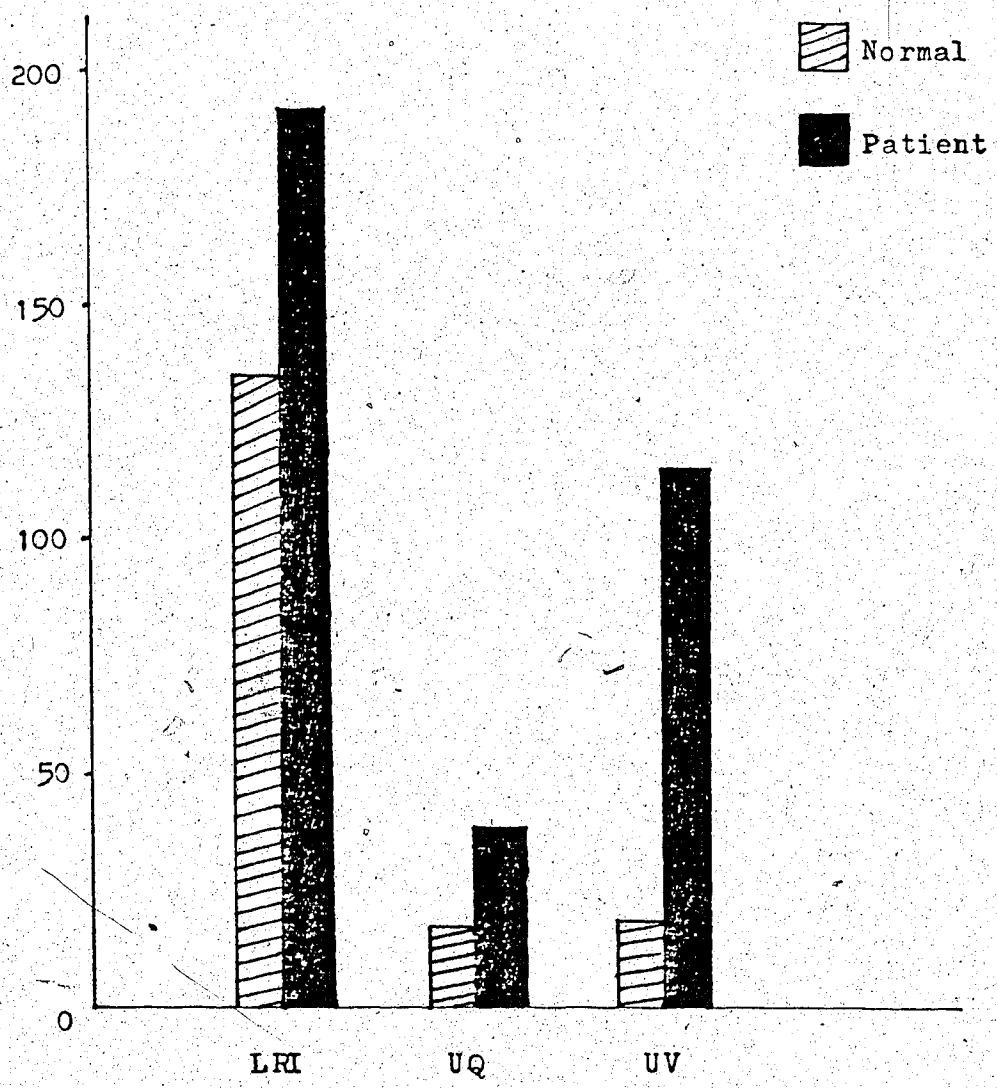


FIGURE 3
Group Scores (Corrected for Length)
of Three Categories of Generalizations

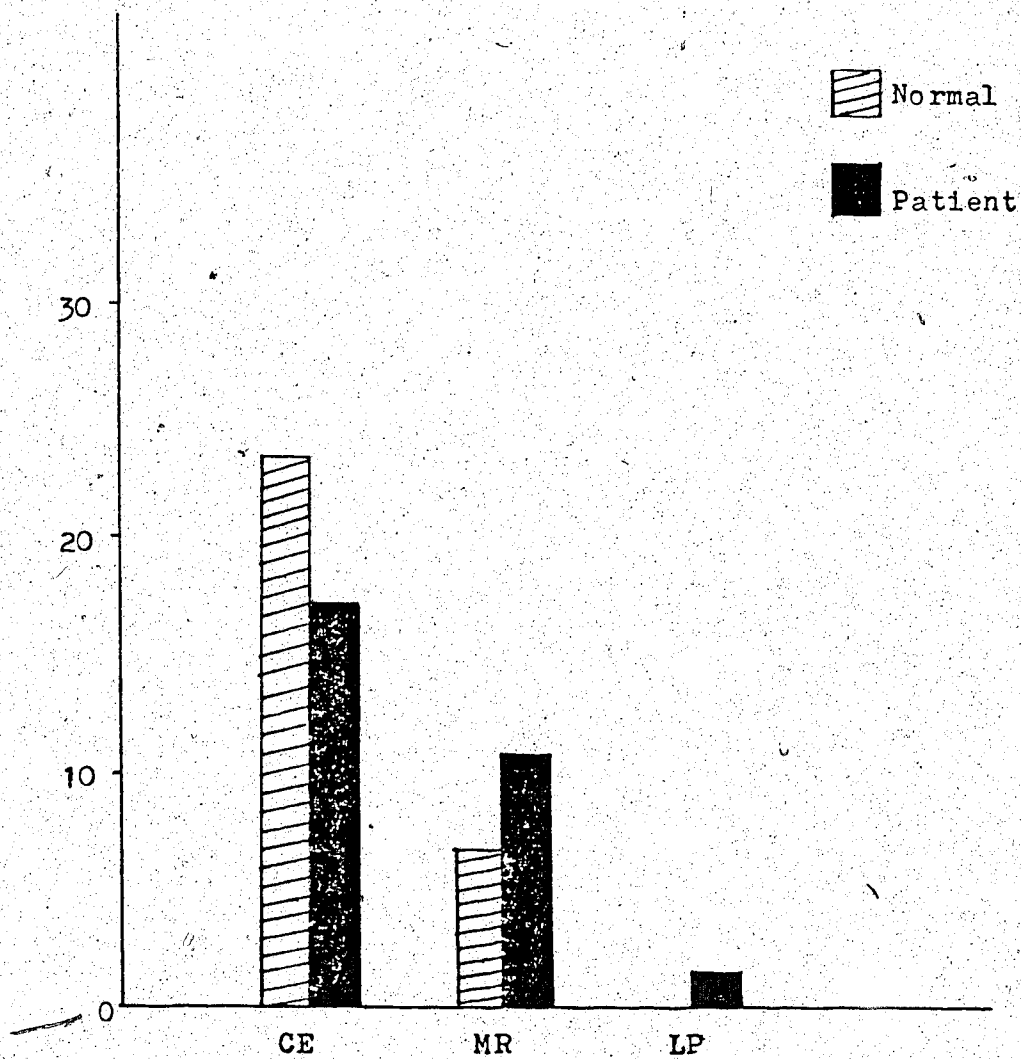


FIGURE 4
Group Scores (Corrected for Length)
of Three Categories of Semantic Ill-Formedness

TABLE 1

*Group Means for All Dependent Variables
Obtained by Normal and Patient Subjects

Dependent Variables	Group	
	Normal	Patient
Total: (De + Di + Ge + Se)	46.292	60.392
De	5.123	11.683
Di	25.615	17.625
Ge	13.231	28.609
Se	2.323	2.475
De SVD	3.646	10.658
De MON	0.685	0.242
De MOP	0.792	0.783
Ge LRI	10.369	15.900
Ge UQ	1.408	3.167
Ge UV	1.454	9.542
Se CE	1.808	1.433
Se MR	0.515	0.892
Se LP	0.000	0.150

*Corrected for Length

Correction for Story Lengths

As was mentioned earlier in this Chapter, consideration was given to the potential untoward influence of the lengths of stories told by the subjects. It was expected that a longer story would naturally contain more dependent variables and that the results may therefore be attributed to such variations in lengths (Murray, 1943, p. 9).

Table 2 indicates that the normal subjects spoke a total of 12,850 words, with a mean of 988.46, compared to the hospital subjects whose total output was 6,290 words, with a mean of 524.17. The normal subjects expressed approximately the same number of universal modeling processes (mean = 34.62) as did the patients (mean = 33.75) before a correction was instituted.

The procedure for correcting for length variation was based on directions and Length Factors suggested by the TAT manual (Murray, 1943, p. 9). The mean number of words spoken by each subject was calculated (Table 3). The respective Length Factors were then selected on the basis of these means and were multiplied by the total of all dependent variables. The Length Factors used for this purpose are listed in Table 4, while the results of the corrections are presented in Tables 5 and 6. These results indicated that the hospital sample obtained a larger number of universal modeling processes (mean = 60.392) than did the normal subjects (mean = 46.292).

TABLE 2
Number of Words per Set
of Five TAT Stories

Subject	Group	
	Normal	Patient
1	1147	708
2	902	514
3	919	321
4	1212	318
5	1040	169
6	1684	546
7	1387	311
8	535	510
9	881	493
10	549	301
11	912	719
12	1331	1380
13	351	---

TABLE 3
Mean Number of Words
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	229	142
2	180	103
3	184	64
4	242	64
5	208	34
6	337	109
7	277	62
8	107	102
9	176	99
10	110	60
11	182	144
12	266	276
13	70	---

TABLE 4

Length Factors Used to Correct
For Variations in Lengths
of TAT Stories

Subject	Group	
	Normal	Patient
1	1.2	1.8
2	1.4	1.9
3	1.4	1.9
4	1.2	1.9
5	1.3	1.9
6	0.9	1.9
7	1.0	1.9
8	1.9	1.9
9	1.5	1.9
10	1.9	1.9
11	1.4	1.8
12	1.1	1.1
13	1.9	---

TABLE 5

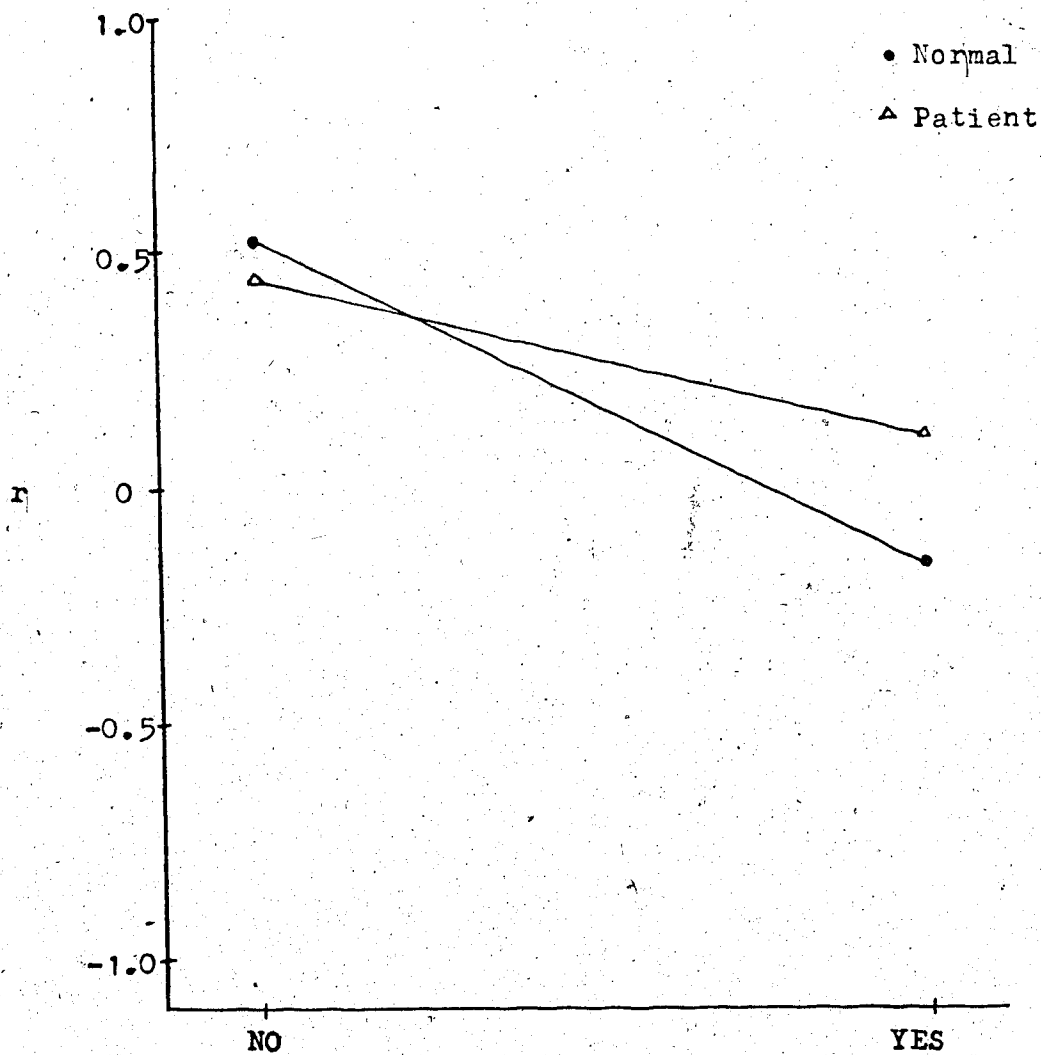
Effect of Length Factors on Patients' TAT Results

<u>Subject</u>	<u>Sum of Words</u>	<u>Sum of all Variables</u>	
		<u>Not Corrected</u>	<u>Corrected</u>
1	708	19	34
2	514	44	84
3	321	28	53
4	318	25	48
5	169	16	30
6	546	39	74
7	311	28	53
8	510	13	25
9	493	52	99
10	301	34	65
11	719	61	110
12	1380	46	51

TABLE 6

Effect of Length Factors on Normal Subjects' TAT Results

<u>Subject</u>	<u>Sum of Words</u>	<u>Sum of All Variables</u>	
		<u>Not Corrected</u>	<u>Corrected</u>
1	1147	43	52
2	902	43	60
3	919	25	35
4	1212	36	43
5	1040	15	20
6	1684	52	47
7	1387	44	44
8	535	40	76
9	881	49	74
10	549	12	23
11	912	33	46
12	1331	34	37
13	351	24	46



LENGTH FACTORS USED IN CORRECTING FOR
VARIATIONS IN LENGTHS OF STORIES

FIGURE 5

Effect of Length Factors on Correlations Between
Sum of Words and Sum of Dependent Variables

Another indication that the effect of variations in story lengths can be minimized by the use of Length Factors, is shown in Figure 5. Correlation coefficients between the total number of words and the sum of all dependent variables were calculated for each subject from both samples. Prior to using Length Factors, a correlation coefficient of $r = 0.519$ was obtained for the normal sample, and $r = 0.445$ for the hospital sample. Following the inclusion of Length Factors, a correlation coefficient of $r = -0.146$ resulted for the normal subjects, while the patients obtained a $r = 0.119$.

Inter-Rater Reliability

In order to determine whether the test scores obtained in this study were reasonably independent of experimenter bias, randomly selected transcripts, from three subjects, were provided to two scorers. The selected transcripts were: I) normal subject #11, II) patient #4, III) patient #1. Each scorer, therefore, evaluated 15 stories and searched for ten variables per story.

The results obtained by the two scorers were modified for length variations (Appendix G), and were then correlated with one another, as well as with the examiner's obtained scores, in order to determine inter-rater reliability (Anastasi, 1976, p. 119; Dustin, 1969, p. 33; Neale and Liebert, 1973, p. 90).

TABLE 7
Correlation Coefficients Obtained for
Inter-Rater Reliability

Subject		1	2	E
I	Scorer			
	1	-	0.65	0.64
	2	-	-	0.94
	E	-	-	-
II		1	2	E
	1	-	0.85	0.90
	2	-	-	0.95
	E	-	-	-
III		1	2	E
	1	-	0.28	0.41
	2	-	-	0.95
	E	-	-	-

E = Examiner

Findings. The correlation coefficients obtained from the two scorers (Table 7) varied in range from 0.28 to 0.85 (mean $r = 0.59$). Scorer #1 and the examiner also differed widely in their results, with a range of r from 0.41 to 0.90 (mean $r = 0.65$). Scorer #2, however, agreed more closely with the examiner, as indicated by the range of r from 0.94 to 0.95 (mean $r = 0.95$).

Conclusions. The variability of the correlation coefficients obtained for the two scorers confirm their reports that, despite understanding the instructions provided in the test guide, they relied occasionally on their own judgment in scoring the stories, and thus found their task rather difficult at times. Further studies involving more scorers and perhaps a better scoring procedure would be needed to improve inter-rater reliability.

Results

Each hypothesis will be dealt with sequentially. Results from the t-test calculations are summarized in Table 8.

Hypothesis #1

Findings. When all the dependent variables were considered as a whole the patients achieved a higher group mean than did the normal sample (Table 1). A t-test, however, indicated that the patients' higher group mean did not reach statistical significance: $t = 1.595$, $p > .05$.

Conclusions. Hypothesis #1 was not statistically confirmed. Such an overall comparison is not sufficiently adequate in specifying how maladjusted and well-adjusted individuals differ in their verbal behaviors. More detailed analyses are therefore required.

Hypothesis #2

Findings.

a) Deletions. A t-test analysis of this category indicated that the hospitalized patients expressed a significantly greater number of deletions than did the normal sample: $t = 3.420$, $p < .005$. A more detailed analysis revealed that this highly significant difference was due largely to the patients' more frequent usage of simple verb deletions: $t = 3.575$, $p < .005$.

The normal subjects tended to express a slightly larger, but not significant, number of modal operators of necessity ($t = -1.007$, $p > .05$) and possibility ($t = -0.015$, $p > .05$).

TABLE 8

t-Test Values for Significance of Difference
of Means (1-Tailed)
df = 23

I-(De + Di + Ge + Se)		t = 1.595	p > .05
II-			
		<u>t</u>	<u>p</u>
	De	3.420	<.005
	Di	-2.046	>.05
	Ge	3.109	<.005
	Se	0.158	>.05
III-			
		<u>t</u>	<u>p</u>
De	SVD	3.575	<.005
	MON	-1.007	>.05
	MOP	-0.015	>.05
Ge	LRI	1.631	>.05
	UQ	1.451	>.05
	UV	3.444	<.005
Se	CE	-0.530	>.05
	MR	0.704	>.05
	LP	1.043	>.05

b) Distortions. The results for this category indicated that the patients expressed a fewer number of nominalizations than did the normal subjects: $t = -2.046$, $p > .05$. These results could not be adequately explained in this study. A possible explanation may be that the more frequent use of nominalizations is associated with a higher level of abstraction, i.e., intellectual functioning. Further research would be required to validate this assumption.

c) Generalizations. The analysis of this category indicated that the patients displayed a significantly greater total number of generalizations: $t = 3.109$, $p < .005$. A closer examination revealed that this large difference in means was due mainly to the patients' significantly greater usage of unspecified verbs: $t = 3.444$, $p < .005$. These patients also tended to verbalize more statements containing universal quantifiers ($t = 1.451$, $p > .05$) and lack of referential indices ($t = 1.631$, $p > .05$), but not to a significant degree.

These results suggest that, on the whole, the patients utilized more generalizations as linguistic habits and tended to depend more on unspecified verbs in their verbal communications.

d) Semantic Ill-Formedness. In this category the hospitalized subjects tended to express a slightly larger total number of statements representative of semantic ill-formedness, but not to a significant level: $t = 0.158$, $p > .05$.

The normal sample tended to use more, but not significantly, cause-effect statements ($t = -0.530$, $p > .05$) while the patients expressed more statements containing mind-reading ($t = 0.704$, $p > .05$) and lost performatives ($t = 1.043$, $p > .05$), but not to significant degrees.

These data would suggest that the analysis of semantically ill-formed statements could not differentiate the patients from the normal subjects in this study and that the patients did not tend to overly rely on them as linguistic habits.

Conclusions. Hypothesis #2 is partially confirmed. The hospitalized patients tended to verbalize significantly greater numbers of deletions and generalizations than did the normal subjects. Specifically, the patients expressed a significantly greater reliance only on simple verb deletions and unspecified verbs.

Summary

The results obtained from the t-test analyses indicated that, in general, the patients did not express a significantly greater total number of deletions, distortions, generalizations, and semantically ill-formed statements than did the normal subjects.

Further analyses revealed that selectivity played a major role in the patients only preferred to express significantly more deletions and generalizations; specifically, they verbalized more simple verb deletions and

unspecified verbs.

The inter-rater reliability range of 0.28 to 0.95 reflected a difficulty in the scoring procedure due to the possible intervening role of subjectivity. Further research is needed to obtain a more objective scoring procedure.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

The NLP Meta-model proposes that a client's impoverished model of the world, which implies a limited number of choices for behavior, is characterized verbally by the increased usage of deletions, distortions, generalizations, and semantically ill-formed statements.

The results obtained in this study did not confirm such a generalized claim. Rather, the maladjusted individuals tended to use more simple verb deletions and unspecified verbs in their verbal communications.

Macroy (1978), who utilized the Meta-model in his study of linguistic patterns in families, discovered that those families whose members were dissatisfied with their interpersonal relationships used significantly more deletions than those families who were satisfied. He also found that the use of the other categories of distortions, generalizations, and semantic ill-formedness, by the dissatisfied families did not reach statistical significance.

Two possible conclusions can be drawn from this study. First, the NLP Meta-model's claim that individuals in psychological distress use all universal modeling processes may not be accurate; rather, these individuals may rely more

on specific learned linguistic habits. Secondly, experimental errors may have prevented this study from accurately confirming the Meta-model's claims.

Limitations

The second possible conclusion drawn from this study may have been due to limitations imposed by experimental errors which would render the results as not totally accurate.

Uneven Matching of Samples. This source of experimental error may have influenced the results in that the latter may have reflected differing subject characteristics, such as age, educational achievement, level of intellectual functioning and abstraction, and socio-economic status.

Inter-rater Reliability. The wide range of inter-rater reliability obtained in this study, as another source of experimental error, reflected a possibly inconsistent and subjective procedure which would therefore have led to inconclusive results.

Generalizability

The extent to which conclusions drawn from this study can be generalized to larger populations must be considered. Although the results were generally in the expected direction caution must be taken not to generalize too much, especially with the normal subjects who may not accurately be representative of the general population. At best, one may be somewhat safe in asserting that they are representative of

female undergraduate Education students attending the same class. One possible solution to this problem would have been to select subjects from the general population and compare them on the basis of a larger number of demographic data, such as age, level of intellectual functioning, educational achievement, psychological profiles, and other relevant variables.

The patients, on the other hand, were generally thought to be a fair representation of that segment of the population which is usually encountered on a psychiatric unit. Of course, they too could have been studied comparatively on the basis of other demographic data such as age, length of psychiatric history, specific nature of their depressive states, type of psychopharmacological agents used, and so on.

Such solutions would be left to future studies as they were beyond the goals and scope of this study.

Independence of Variables

As this study involved the measurement of many universal modeling processes as dependent variables, consideration should be given to the question "are all these variables independent of one another, or, could some of them be identifying the same constructs, or factors?" A low degree of independence among variables would certainly augment errors in measurement, and reduce construct validity.

The NLP literature indicates that the universal modeling processes, as used in this study, are assumed to be

independent of one another; contamination of results would therefore be unlikely.

However, empirical support for this above mentioned assumption is not reported in the literature; a factor-analytic study would be required in order to provide evidence for independence of variables.

Areas for Future Exploration

The use of the Meta-model in the analysis of verbal behavior within the clinical setting may be expanded to other useful areas of interest. Some of these will be discussed next.

Counselor Training

A teaching program based on the procedures used in this study could be a useful addition to a student-counselor's practicum course. Such an exercise would aid in strengthening the student's observational skills and thereby increase his effectiveness as a counselor. Studies investigating counselor effectiveness, based on this kind of program, may show promising results.

Family and Marriage Counseling

Macroy's study of families (1978) is indicative of the potential use of the Meta-model in verbal behavior analysis. The identification of linguistic habits within a family or marital system may be a useful diagnostic tool for the

therapist. Armed with this knowledge, he would then be better able to influence change within these systems.

Evaluating Client Change

The determination of client progress is a necessary aspect of the counselor's role, and this could be achieved by using the Meta-model in a pre- and post-test design. Such a study could be a useful technique in evaluating different treatment modalities.

Analysis of Suicide Notes

As our society is becoming more aware of the increasing problem of suicidal behavior, and as researchers are continuing to search for better analytic and preventative measures (Gottschalk and Gleser, 1960), the Meta-model may be a promising tool for this type of enquiry.

REFERENCES

REFERENCES

- Anastasi, A. Psychological testing (4th ed). New York: Macmillan, 1976.
- Auld, F., Jr., and Murray, E. J. Content-analysis studies of psychotherapy. Psychological Bulletin, 1955, 52, 377-395.
- Bandler, R. and Grinder, J. The structure of magic-I. Palo Alto: Science and Behavior Books, 1975.
- Bandler, R. and Grinder, J. Frogs into princes. Moab, Utah: Real People Press, 1979.
- Berelson, B. Content analysis in communications research. Glencoe, Ill.: Free Press, 1952.
- Berg, I. A. Word choice in the interview and personal adjustment. Journal of Counseling Psychology, 1958, 5, 130-135.
- Cameron-Bandler, L. They lived happily ever after. Cupertino, Cal.: Meta Publications, 1978.
- Dustin, D. S. How psychologists do research: The example of anxiety. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
- Dymond, R. F. Adjustment changes in the absence of psychotherapy. Journal of Consulting Psychology, 1955, 19, No. 2, 103-107.
- Dymond Cartwright, R. and Vogel, J. L. A comparison of changes in psychoneurotic patients during matched periods of therapy and no therapy. Journal of Consulting Psychology, 1960, 24, No. 2, 121-127.
- Eldred, S. H. and Price, D. B. A linguistic evaluation of feeling states in psychotherapy. Psychiatry, 1958, 21, 115-121.
- Friedman, I. Phenomenal, ideal, and projected conceptions of self. Journal of Abnormal and Social Psychology, 1955, Nov., 51, 611-615.
- Goleman, D. People who read people. Psychology Today, 1979, July, 13, 66-78.
- Gottschalk, L. A. Content analysis of speech in psychiatric research. Comprehensive Psychiatry, 1978, July-August, 19 (4), 387-392.

- Gottschalk, L. A. and Gleser, G. C. Analysis of verbal content of suicide notes. British Journal of Medical Psychology, 1960, 33, 195-204.
- Gottschalk, L. A. and Gleser, G. C. The measurement of psychological states through the content analysis of verbal behavior. Berkeley: University of California Press, 1969.
- Gottschalk, L. A., Gleser, G. C. and Hambidge, G., Jr. Verbal behavior analysis. A.M.A. Archives of Neurology and Psychiatry, 1957, 77, 300-311.
- Grinder, J. and Bandler, R. The structure of magic-II. Palo Alto: Science and Behavior Books, 1976.
- Harman, R. L. and O'Neill, C. Neuro-Linguistic Programming for counselors. Personnel and Guidance Journal, 1981 (Mar), 59 (7), 449-455.
- Hayakawa, S. I. The use and misuse of language. Greenwich, Conn.: Fawcett Publications, 1962.
- Jaffe, J. Language of the dyad. Psychiatry, 1968, 21, 249-258.
- Lankton, S. R. Practical magic. Cupertino, Cal.: Meta Publications, 1980.
- Lolas, F. and von Rad, M. Verbal behavior of psychosomatic and psychoneurotic patients: A comparative study. Acta Psiquiatrica y Psicologica de America Latina, 1977, 23, No. 2, June, 110-117.
- Macroy, T. D. Linguistic surface structure in family interaction (Doctoral dissertation, Utah State University, 1978). Dissertation Abstracts International, 1979-80, 40, 926B.
- Marjerrison, G. and Keogh, R. P. A study of the psychiatric interview. Canadian Psychiatric Association Journal, 1967, 12 (3), 293-302.
- Marsden, G. Content-analysis studies of therapeutic interviews: 1954 to 1964. Psychological Bulletin, 1965, 63 (5), 298-321.
- Meisels, M. Test anxiety, stress, and verbal behavior. Journal of Consulting Psychology, 1967, Dec. 31, No. 6, 577-582.

- Mintz, J. and Luborsky, L. Segments versus whole sessions: Which is the better unit for psychotherapy process research? Journal of Abnormal Psychology, 1971, 78, No. 2, 180-191.
- Murray, E. J. A content-analysis method for studying psychotherapy. Psychological Monographs: General and Applied, 1956, 70 (13) (1, Whole No. 420).
- Murray, H. A. Thematic apperception test manual, 1943.
- Neale, J. M. and Liebert, R. M. Science and behavior: An introduction to methods of research. Englewood Cliffs, N.J.: Prentice-Hall, 1973.
- Oxman, T. E., Rosenberg, S. D. and Tucker, G. J. The language of paranoia. The American Journal of Psychiatry, 1982, March, 139, No. 3, 275-282.
- Shore, M. F., Massimo, J. L. and Mack, R. Changes in the perception of interpersonal relationships in successfully treated adolescent delinquent boys. Journal of Consulting Psychology, 1965, June, 29, No. 3, 213-217.
- Westbrook, M. T. and Viney, L. L. The application of content analysis scales to life stress research. Australian Psychologist, 1977, 12 (2), 157-166.

APPENDICES

APPENDIX A
NAMES OF PEOPLE DOING RESEARCH
IN NLP

Received From

NOT LTD.
517 Mission Street
Santa Cruz, CA 95060
408-423-9820

NAMES OF PEOPLE DOING RESEARCH
ON NLP RELATED CONCEPTS

January 1982

NAME AND ADDRESS	TYPE OF RESEARCH
1. Connierae Andreas 2480 Juniper Boulder, Colorado 80302	Research on lateral eye movements and representational systems. (Dissertation in progress).
2. Michael Cortese 35698 Smith Romulus, Michigan 48174	EEG research on hemispheric dominance and representational systems (in progress).
3. Bert Lucas 2136 Prairie Field Place Manhattan, Kansas 66502	Research in biofeedback on the response of different representational types to feedback in different sensory systems. (Dissertation in progress).
4. Louise Paxton 320 Quinby Rd. Rochester, NY 14623	Representational systems and counseling.
5. Margaret Childs 1523 Magnoliz Street Shreveport, LA 71101	Representational systems and memory retention on serial learning tasks in different sensory systems. (Dissertation in progress).
6. Ellen McGuire and Virginia Tadie 321 Hamilton Street Geneva, Ill. 60134	Representational systems and accessing cues. (Thesis in progress).
7. Lee Owens c/o Dept. of Education Ball State University Muncie, Indiana 47306	Eye movements and representational systems. (Dissertation completed). 1977.

8. Darcy Shaw
c/o Dept. of Guidance
& Counseling
Ball State University
Muncie, Indiana 47306
Recall as effected by representational systems. (Dissertation completed). 1977.
9. Ardyth A. Norem-Hebeisen
University of Minnesota
330 Burton Hall
178 Pillsbury Dr. S.E.
Minneapolis, MN 55455
NLP and drug abuse prevention and treatment. (In preparation).
10. Robert B. Dilts
517 Mission Street
Santa Cruz, CA 95060
(1) Representational systems and eye movements. (2) EEG and representational systems.
11. Charles Sargenti
41-942 Laumilo Street
Waimanaco, HI 96795
Eye movements and representational systems
12. Laura Birholtz
282 Aspen Way
Santa Barbara, CA 93111
Representational systems and personality
13. Russ Beale
Center for Human Communication
120 Oak Meadow Drive
Los Gatos, CA 95030
Statistical research on accessing cues
14. Alan Salmi
1218 Washtenaw Ct.
Ann Arbor, MI 48104
Eye Movements
15. George W. Schmedlen
Kent State University
Counseling & Ser
Education
Kent, Ohio
Completed dissertation titled "The Impact of Sensory Modality Matching on the Establishment of Rapport in Psychotherapy" completed in 1981. Should show up in the dissertation abstracts soon.
16. Thomas David Macroy
Utah State University
Salt Lake, City, UT
Linguistic Surface Structure in Family Interaction. Completed dissertation 1978. P926-B in Dissertation Abstract.

17. Edward Q. Brengle
Wayne State University
Detroit, MI
Preference for sensory modality of mental imagery and its relationship to stress reduction using a systematic desensitization technique. Completed dissertation 1979.
18. Marc E. Rebstock
University of Missouri
Kansas City, MO
The Effects of Training in Matching Techniques on the Development of Rapport between Client and Counselor during initial Counseling interviews. A copy of the abstract is in Dissertation Abstracts Vol. 41 No. 03 September 1980.
19. Thomason, Arbuckle
& Cody
"Test of the Eye Movement Hypothesis of Neuro-linguistic Programming" in Perceptual & Motor Skills. 1980 Vol. 41 P 230
20. E. Thomas Down
& John Pety
31 Teachers College
Educational Psychology
& Social Foundations
Lincoln, NE 68588-0440
The Effect of Counselor Predicate Matching on Perceived Social Influence and Client Satisfaction
21. Dr. Michael Yapko
The Effects of Matching Primary Representational System Predicates on Hypnotic Relaxation in "The American Journal of Clinical Hypnosis" 1981, 23, 169-175.
22. Stephen C. Bacon
Dept. of Psychology
University of Montana
Missoula, Montana
"Effects of Visual-Kinesthetic Dissociation on Anxiety in Six Phobic Clients", MA Thesis 1981.
23. Stephen Brody
Johnston College
University of Redlands
Redlands, CA
"Neurolinguistic Programming Transpersonal Dimensions", MA Thesis 1981.
24. Lois Monteith
128 Wetherill Road
Cheltenham, PA 19012
"NLP Techniques with Reading Difficulty in Children", Dissertation in Progress 1981.

25. E. Thomas Dowd
Dept. of Educational
Psychology & Social
Foundation
University of Nebraska
Ann J. Hingst
Dept. of Human Services
and Studies
University of Florida

Counselor Predicate
Matching: an In Vivo Demon-
stration and Effectiveness
1981.

APPENDIX B
ASSESSMENT CONSENT FORM
FOR PATIENTS

MISERICORDIA HOSPITAL
Edmonton, Alberta

CONSENT FOR PARTICIPATION IN A RESEARCH PROJECT

Described below is an outline of a research project. The names of the principle investigators are indicated. It is important that the nature of the project be explained in order that you understand what part you will play. This should include an understanding of the probable risks involved, any side effects to be expected and alternative established methods of treatment. After reading the summary below and having the investigator explain the project and answer any questions you may have, your witnessed signature is required, attesting that you understand the project.

It is also understood that you may withdraw from the study at any time by notifying the attending physician and/or the investigator.

If the administration of drugs or surgical procedures are involved, you will be required to sign a more detailed consent form for their use.

Title: THE NLP META-MODEL AND PSYCHOLOGICAL ADJUSTMENT Project: THESIS - M.Ed.

Investigators: PIERRE J. GELINAS

Outline of Project (Purpose, methods, principle risks involved): The purpose of this project is to study your ability to use your imagination. You will be shown 5 pictures from the Thematic Apperception Test, one at a time, and you will be requested to tell as dramatic a story as you can for each. Your responses will be recorded and shall remain confidential. The total time requested of you will be approximately 25 minutes (maximum 5 minutes per story).

There are no risks involved as your participation in this project is not related to the treatment you are receiving in this hospital.

I understand the above statement and agree to participate in the project:

PATIENT

WITNESS

Name

Name

Signature

Date

Signature

If patient is under the age of majority (18) or has been declared a Dependent Adult under the Dependent Adult Act, the written consent of the legal guardian is required.

Please complete the following:

The patient is unable to consent because:

Legal Guardian Date

Witness

Withdrawal From a Study: I hereby Withdraw my consent for continued participation in the study.

Patient, or Legal Guardian

Date

Witness

APPENDIX C
TEST GUIDE AND SCORING FORM

TEST GUIDE

GENERAL PROCEDURAL RULES FOR SCORING

- 1) The reader should distinguish between what may be called the "facts" of a story and the subjective elements within a story. The "facts" are the events which are actually occurring, as told by the subject being tested. These "facts", therefore, would not be scored. For example, if the subject relates in a story that "no one came to see Joseph depart on the train", the term no one would not be scored as a universal quantifier. In contrast, "Joseph is leaving and feels sad that no one cares about him"; the term no one in this case is a universal quantifier.
- 2) Only those statements which are subjective, or which relate something personal or phenomenological, need be scored. Other statements which refer to impersonal events such as natural phenomena, e.g., storms, rain, etc., are not to be scored.
- 3) It is possible to score one word or statement more than once. For example, in the following statement "all the people I work with don't think I am competent", all the people may be scored as a universal quantifier and a generalization with lack of referential index.

- 4) Statements in a story should not be judged as separate entities. Rather, pay attention to other parts of the story. If a suspected statement is clarified earlier or later in the story then there is no basis for scoring.

DESCRIPTION OF VARIABLES TO BE SCORED

I DELETIONS

A deletion naturally implies that something is missing. In the Meta-model a deletion occurs when the verbal description of one's inner experiences is not totally revealed. Some aspect of that inner state (Deep Structure) is obviously missing. When an individual deletes, the model of his experience is impoverished thus indicating that he perceives himself to have a limited fund of available options for behaving; he seems stuck, blocked.

A. Procedure for Identifying Deletions (Simple).

- 1) As you read each statement presented by the subject in a story identify the verbs.
- 2) Determine whether these verbs can occur in sentence which is fuller--that is, has more arguments or noun phrases in it than the original. If the second sentence, made up by you, has more argument nouns than the subject's original Surface Structure, the latter is incomplete--a portion of the Deep Structure has been deleted.

Examples of Deletions

The following statements contain deletions. The questions in the right-hand column would be asked by the therapist in order to help the client recover the deleted material. You may ask similar questions when reading the stories in order to identify deletions. It is important to

remember that statements, or sentences, are not to be viewed as separate entities but rather as parts of a whole. This means that if you have identified a deletion in a statement and this deletion has been recovered earlier or later in the story, you would not count that deletion. For example, "Mary is upset . . . She was eager to attend the party, but her boyfriend did not want to go and she was upset at him": no deletion.

Examples of Simple Verb Deletions

Surface Structure

John feels happy.

His father was angry.

This exercise is boring.

She is scared.

He has a problem.

He does not know what to do.

She said that she would try.

He talked to a man who was bored.

He just doesn't listen.

Her husband claimed he was scared.

He always talks as though he is mad.

His brother swears that his parents can't cope.

Communicating is hard for her.

Questions to Ask

happy about whom/what?

angry at whom/what?

boring to whom?

scared of whom/what?

a problem with whom/what?

to do about what/whom?

said to whom?
try what?

talked about what?
bored with whom/what?

listen to whom/what?

claimed to whom?
scared of what/whom?

talks to whom?
mad at whom/what?

swears to whom?
can't cope with what/whom?

who's communicating?
communicating about what/whom?

Running does not help.

who's running away?
running from what/whom?
does not help whom/what?

B. Modal Operators of Necessity

These statements can be easily identified as rules that an individual has developed in his model. The Surface Structures indicate that something must occur. A response to such a statement is naturally "or what?" or "what would happen if you failed to . . .?" The presence of modal operators indicates that an individual is experiencing limited options or choices in his life.

Procedure for Identifying Modal Operators of Necessity

1) Identify statements which contain cue words such

as:

have to	as in	I/you/they have to, one has to . . .
---------	-------	-----------------------------------------

necessary	as in	it is necessary . . .
-----------	-------	-----------------------

should	as in	I/he should . . .
--------	-------	-------------------

must	as in	one/he/I must . . .
------	-------	---------------------

2) If the statement does not provide a consequence to the necessary behavior you would score it.

Examples of Modal Operators of Necessity

Surface Structure

It is necessary to behave properly in public.

One should always take people seriously.

Questions

What would happen if you failed to behave properly in public?

What would happen if you failed to take people seriously?

He must not get involved too deeply.

What would happen if he got involved too deeply?

He has to learn to avoid conflicts.

What would happen if he failed to avoid conflicts?

C. Modal Operators of Possibility

Again, statements containing such deletions identify rules from the subject's model and that the subject is experiencing limited choice in his life.

Procedure for Identifying Modal Operators of Possibility

- 1) Identify statements which contain cue words

such as:

not possible	as in	it's not possible . . .
can	as in	no one can, nobody can
may	as in	no one may, nobody may
can't	as in	I/you/he/one/people can't
able	as in	no one is able
impossible	as in	it is impossible
unable	as in	I am/you/people are unable

- 2) Score as a modal operator of possibility if the statement does not provide further information regarding what makes such a behavior impossible.

Examples of Modal Operators of Possibility

<u>Surface Structure</u>	<u>Questions</u>
It's impossible to find someone who is really sensitive.	What prevents you from finding someone who is really sensitive?
He can't understand it.	What prevents him from doing so?
He is unable to express his feelings.	What prevents him?
She is unable to accept his death.	What prevents her?

II. DISTORTIONS (NOMINALIZATIONS)

A nominalization is a linguistic process whereby "a process word or verb in the Deep Structure appears as an event word, or noun, in the Surface Structure" (Bandler and Grinder, 1975, p. 74).

Procedure for Identifying Nominalizations

- 1) For each element of a statement which is not a process word or verb ask yourself if it describes some event or thing which is actually a process.
- 2) Test to see if the event word fits into the blank in this phrase "an ongoing _____". For example, "an ongoing chair" would not indicate a distortion (nominalization).

Examples of Nominalizations

My divorce is painful. His perceptions are wrong..
Fear is stopping me. She has a depression
Her laughter is not real. Their relationship is dying.
He had a fruitful life.

III. GENERALIZATIONS

Generalizations are processes which "impoverish the client's model by causing loss of the detail and richness of his original experience" (Bandler and Grinder, 1975, p. 86).

A. Lack of Referential Index.

Statements containing such generalizations fail to identify a specific person or thing. Instead, the statements are general and vague.

Procedure for Identifying Lack of Referential Index.

- 1) Identify each non-process word, e.g., noun, pronoun, etc.
- 2) For each of these words ask yourself whether it picks out a specific person or thing by asking "who, specifically?" or "what, specifically?".
- 3) There is no generalization if the person or thing has been identified earlier or later in the story.

Examples of Generalizations with Lack of Referential Indices.

<u>Surface Structure</u>	<u>Questions</u>
Nobody pays any attention to <u>what</u> I say.	Who, specifically, does not pay attention? What, specifically, are you saying?
He always avoids <u>situations</u> he feels uncomfortable in.	What situations?
<u>One</u> should respect <u>others'</u> feelings.	Who should respect? Whose feelings?
<u>People</u> push me around.	Who, specifically?
<u>You/We</u> can see that he is mad at him.	Who, specifically?

B. Universal Quantifiers.

These generalizations also do not have referential indices.

Procedure for Identifying Universal Quantifiers.

- 1) As stated before, identify statements related only to characters and not those that are "facts" told by the subject about the story.
- 2) Look for cue words such as:
all, each, every, any, always, never, nowhere, none, no one, nothing, nobody.

Examples of Statements Containing Universal Quantifiers.

He feels that she never pays attention to him.

He stated that nobody like him.

She said that she always feels this way.

He believes that no one understands him.

He related "everything I do never turns out".

C. Unspecified Verbs.

These verbs are rather vague to the listener or reader and leave the latter with doubts about what the subject means. How clear an image is that the verb presents is determined by:

- 1--the meaning of the verb itself and
- 2--the amount of information provided in the rest of the story.

Procedure for Identifying Unspecified Verbs.

- 1) Identify the process words or verbs.
- 2) Ask yourself if the image presented by the verb in its sentence is clear enough for you to visualize the actual sequence of events being described. A good question to ask is "how, specifically?".

Examples of Unspecified Verbs.

Susan hurt him. How, specifically? Physically?

He is demanding attention. How?

She shows her love for him. How?

IV. SEMANTIC ILL-FORMEDNESS

Statements which are semantically ill-formed indicate that the speaker is distorting his model and causes himself pain by assigning responsibility for that pain to outside forces.

A. Cause - Effect.

A statement of this type indicates that the speaker believes that a person or a set of events caused him to experience an emotion, and he may therefore feel that he has little choice in acting the way he does. He describes himself as a "victim" who is helpless.

Examples of Cause - Effect Statements.

His wife makes him feel angry.

He caused her a lot of pain.

He depressed her too much.

The party bored him.

B. Mind-Reading.

Such statements involve the belief that one person can "know what another person is thinking and feeling without a direct communication on the part of the second person" (Bandler and Grinder, 1975, p. 104).

Examples of Mind-reading Statements.

Everybody in this group thinks that I am lying.

I'm sure she didn't like the present.

I know what is best for you.

You can see how I feel!

You know what I mean.

C. Lost Performative.

Such statements are typically in the form of a generalization about the world itself, which include judgments which are recognized as "being true of (the subject's) model of the world" (Bandler and Grinder, 1975, p. 106).

Procedure for Identifying Lost Performatives.

- 1) Identify statements containing cue words such as:
good, bad, crazy, sick, correct, right, wrong, true,
false, only (there is only one way . . .)
- 2) For each of these statements add the following
phrase: "I say to you that . . ." in front of the
statements.

Examples of Lost Performatives.

It is wrong to hurt his feelings.

It is bad to drink.

scoring form

	PICTURE					TOTAL	
	1	2	3	4	5		
deletions :							
SIMPLE VERB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	}	DE
MODAL OPERATOR :	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NECESSITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	}	DI
POSSIBILITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
distortions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	=	<input type="checkbox"/>
generalizations :							
LACK OF REFERENTIAL INDEX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	}	GE
UNIVERSAL QUANTIFIER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
UNSPECIFIED VERB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
semantic ill-formedness:							
CAUSE-EFFECT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	}	SE
MIND READING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
LOST PERFORMATIVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
words per picture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MEAN NUMBER OF WORDS	_____						
LENGTH FACTOR	_____						
TOTAL RAW SCORE	X _____						←
TOTAL CORRECTED SCORE	= _____						

APPENDIX D

TRANSCRIPTS OF STORIES TOLD BY THE SUBJECTS

STORIES TOLD BY THIRTEEN NORMAL SUBJECTS

Subject #1Story #1

Just before this picture the gentleman had met this young lady down in an inner city kind of setting, in which he met her, and he asked her to go out. So they went out and had a good time and all that, and he took her back to his apartment and they spent some time talking and drinking and exploring what each other did, and those kinds of things. And then, they had . . . probably spent some time in bed. And in a fit of rage and passion he had strangled her for something that she had said or implied in something she said to him. He was very angry about it and he, at the moment, is feeling very remorseful about . . . about . . . about his actions. And he is contemplating what kind of action he should take; whether he should just kind of break down and end his life because it would mean the end of his student career if anybody finds out, or whether or not he should gather up the body and dispose of it in some way. She obviously is not feeling a lot, seeing as how I assume that she is dead. His decision will be out of character for him. He will, instead of kind of taking the easy way out and running, he will decide to go to the authorities and confess in the hopes it turns up in the mercy of the court. It is not the kind of thing that he has been known for doing. It does not fit with his kind of moral upbringing that he has had to this

point. This is kind of a turning point in his life for him.

Story #2

This picture is set in Europe and probably in the early war years. And this woman, prior to opening the door, she had been going around doing her normal housework and whatever. She misses her son who is gone to war, very much, and she remembers all the times that she spent with him when he was growing up and all the pleasant times they had spent together talking, while he had been going to school and things like that. And she gets this powerful emotional need to kind of somehow place him back in her life, and so, she goes to the room in which he used to spend all of his time, or a great portion of this time studying or just looking out the window or whatever . . . being a child.

And she opens the door and looks in and is overwhelmed with a whole bunch of feelings and memories of him as a child and of playing with him, and interacting with him. In some ways all that makes her feel the pain of his absence less. She will, after looking at this and experiencing some of the feelings that she is having, will close the door and go back to her work feeling somewhat more at ease with his absence. It is probably a good thing, it is like a grieving process that she is going through for his absence because her son will not return from war. So, it is a grieving process that she has started and it is probably a good thing.

Story #3

Prior to this story there has been a drastic change in the climate of the world, for whatever reason, probably due to environmental pollution and maybe World War Three. And so, people have taken to living in structures which are less exposed than normal homes that we have today, so that half of their house is under the ground and the other half is kind of on top, and because of the sand storms and the snow storms.

The picture is set in the midst of one of those kinds of turmoils, one of those storms, and it is not only a storm in they physical sense of a storm, like snow and rain and sleet and all those kinds of things; it is probably also very symbolic of the climate of that day in terms of the political situation and people's survival.

There are a number of windows that you can see which somehow provide a brighter kind of more formed and defined area in the picture. If one can look hard enough one can see shapes in the window that could represent people. I guess after the storm continues for a while all the characteristics in the picture will be obliterated so that you will just have kind of one big white area.

Story #4

This story takes place in the south Pacific in the early twentieth century, the early nineteen-hundreds. People have gone for a holiday on a kind of desert tropical kind of island, one of them to forget a kind of crisis that she has

had in her life, and the other one to kind of search for a husband. In the picture the one who is feeling somewhat anxious, recovering from sorrow in her life, is watching the one who is all set to interact with other people, and in some ways is feeling sorry for the one whose total purpose is to find a husband and get married and whatever. As she relives some of the sorrow in her own life she kind of projects it on the other woman. I am not sure what the outcome would be. I guess, I imagine that the outcome would be that they would meet and somehow both complement each other. The one who is struggling with the meaning of life and all those kinds of heavy questions would somehow gain some of the vibrancy of the other woman, and the woman who is sad and has had some difficulties in her life might share those experiences with the other one.

Story #5

This young boy has spent a considerable amount of time in his life around people who make music with instruments or singing any kind of musical kind of thing, and he has always had a wanting to be able to also somehow share in the joy of that experience, because he sees the other people around doing that.

And in the picture, he has just opened a gift from his father and it turns out to be a violin, and he is so overwhelmed by how important this is and how much he feels his father obviously must care about him that he is just

sitting there looking at it and not believing that this could possibly be true, that he could have his violin. And he is wondering how he is going to ever learn how to play it.

The outcome of this will be that he will pick it up and try to learn how to play the violin and his father will play a big role in teaching him, sharing his kind of expertise in that area.

Subject #2

Story #1

The couple in this picture have just come back from having lunch. It is a rainy day outside and it was rather an upsetting lunch. They had quite a serious conversation at lunch and they returned to her apartment. She is obviously doing something that he does not want. He is hurt and upset over her attitude and she believes in what she is saying, but she wants to keep him. She holds on to him tightly, tries to talk sense into him. She believes in what she is saying and he believes in what she is saying is wrong.

How will it come out? How does it ever come out? Probably the problem will go unsolved. Just the look of determination on his face, the turning away, he is not having anything of it, and she is not going to win. So, they will probably go their separate ways.

Story #2

The ball game had been a great ball game. Their side

had won and he was the hero of the game and that was great. And then, to have to come and play the violin, to sit and practice for hours and work on it at his parent's insistence, it just was not fair, it was not fair at all. He thinks "I have never felt so crappy in my whole life and I am just not putting up with it. I am not playing this violin. I will sit here forever if I have to, but I am not playing this violin". And in the end, he does not. He ends up with a lot of fighting, a lot of bickering with his parents. And in the end, he does not play, he is too determined to ever play the violin. After such things as baseball, so many more important things like baseball, being outside, being in the fresh air, the violin is not an important thing in his life.

Story #3

A blank page. To me, it brings out a lot in me. A blank page; there are so many things that go through a person's mind that you think about. The thoughts that are running through my mind now: how I have been thinking about life, my family, everything seems to come together on this bloody blank page. There are so many things that I could say that I could write a book. Actually, that is what I have been intending to do, and this blank page makes me think of it: writing a book about all my feelings and all that has happened to me, everything in my life. Because it is interesting and a blank page seems to show that to me, it seems to say "here, put down everything, show everything,

give it all you have because there is so much there." And it can be put down. Once it is put down on paper, once the blank page is filled, I think that would give myself more direction and more purpose and more realizing what life is.

Story #4

The girl in this picture, she seems she was having problems with what she was feeling about her girlfriends. And usually, this girl when she does have problems with her girlfriends gets terribly upset. Her girlfriends mean a lot to her and she does not know what to do. She is in her bedroom feeling sad, feeling lonely, and as a result of these feelings that she has, these feelings of insecurity when she is upset about her girlfriends, she uses her doll as a source of comfort. She carried the doll downstairs, which was a mistake; her mother who is very kind and loving, indeed she tries to do all she can, cannot tolerate the doll. She loves her daughter. The idea of her older daughter with the doll is not the answer to her, she does not want it.

She tries to console her daughter, the daughter turns away in anger knowing that her mother is rejecting the doll. The doll is an insecurity of hers. And in the end the daughter keeps the doll and the mother keeps trying to love her, keeps trying to hide her feelings about the doll, but it always comes out, what she feels about the doll.

Story #5

It was a warm summer day and the teacher had just come from the schoolhouse. Her books were heavy, her sweater was warm, it was a beautiful day indeed. She looked over, and there she saw what life actually meant, what it meant to live: the pregnant woman watched her husband toil in the field with the sweat running down his bare back, working hard with the horse. She thought "this is what life is. Life is not in the schoolroom, life is not in books. This is real life, this is back to nature, this is life itself". She carried on her way knowing that she would not change, that she would never change, that her straight appearance, the way her mind thought, her books were a refuge for her, it was what she wanted. She knew in her heart that what she saw, the scene of the pregnant woman basking in the sun, the man, the labourer working with sweating and toiling, that was life. But she did not know how to get into this life. For her, her life was through books. She lived vicariously.

Subject #3Story #1

This young mother has had a problem with her child. The child has been really bothering her and she looks puzzled and is wondering what she should do. She is thinking in her mind "how am I going to solve this problem?". This problem is really bothering her. She has finally come to the conclusion

that she is going to confront the child with the problem and try to solve the problem with the child by talking to the child and maybe in the end they will come out with a better solution.

Story #2

This picture is in a land where insects are really big and they are really oversized. What is happening is, we are in a mountainous region and what happens is that a scientist has developed a formula to make insects grow, and he is taking a few of the insects to a region that is away from people so that his experiment will not hurt the people. And he has put on his formula on these insects and they are really getting big, and they are growing to gigantic sizes. So, he put the formula on these insects and they start growing, growing, and they get bigger. And then, all of a sudden, they shrink and the scientist concludes that his formula does not work.

Story #3

Johnny has taken his grandfather's old relic of a violin off the wall and he has the violin in front of him, and he is looking at it and he is trying to think "what am I going to do with this? I do not know how to play it but I sure want to learn", he says, "maybe I will ask my mom if she could get me lessons". Johnny thinks about this problem for a while and he says "that is a real good idea" he says to himself.

He is looking at the fine tuning of the violin. It is really old. It is actually a family heirloom, and he is wondering "is my mom going to let me take lessons on this violin? What happens if I break it?". Well, Johnny figures that maybe his mom will buy him another violin so that he can learn, and then he can be able to play the relic after he has learned. So he goes off and asks his mom, and his mom says "Johnny, that is a real good idea". So, he starts to learn the violin and it takes him a number of years to really get to know how to play the violin really good. So he goes and he is getting really good at playing the violin and he decides that one day he is going to take the violin off the wall and play his grandfather's old violin.

Story #4

Louise is very angry. Her best friend had taken her car for a ride and she is really angry. So she goes for a walk in the park and she comes across this stream and she sits down, and she is really thinking about how come she is angry that her friend has taken her car. She is really happy that her friend is going to take these things, but she really needed that car today because she was going out to a ball, or she was going to a party with her boyfriend, and she wanted to go and get her hair done. But now that her friend has taken the car, she feels she can't go and get her hair done. So she goes and she sits down by the stream and she looks at herself and she sees herself with her hair done up and

she is trying to dance. But her face has got an angry look and so she goes home and she does her hair herself just to look like what she looked like in the stream. And she is happy now.

Story #5

John and Martha had met when they were twenty or so, and they had met and developed a relationship that they felt was love. And they decided that they wanted to get married but their parents would not let them. Their parents were very angry that John and Martha had met, and they were angry that they had loved each other. They were very upset and they decided that John and Martha just could not marry each other.

There was a family feud that caused these families to be angry at each other and they just felt that John and Martha could not get married because they were part of the family and no families would get together that were feuding. So, John and Martha decided that, rather than lose their families' love, they would break apart and would not get married.

And so, they went on their merry ways and both of them got married at different times, they had gotten married to different people. And they had a happy life. But now, they are getting on to being sixty and each of their spouses had died. And one day they had met at a hotel in Las Vegas. They had met and they thought they had met each other sort of

accidentally, and they really realized that their feelings were still there and so they started to dance and they had a really enjoyable time, and later on they decided that they were going to go against their families' wishes, that was twenty years ago, and get married.

Subject #4

Story #1

It looks very morbid. It is a graveyard. It is a picture of a man who was thinking of either someone special . . . no, I do not think he was thinking of anyone special. He was just thinking of himself and his future perhaps, thinking of the position of something that was worrying him, thinking very morbid thoughts about himself and about his future. He is at a graveyard in the present, he is in the middle not really looking at any particular tombstone. He is just very turned inwards, he is not opening himself. He just seems to be in the middle thinking about something, maybe perhaps thinking about wanting to get rid of himself, not wanting anyone to come near him, not wanting to share himself with anyone else. It seems that the only people that he wants to be around are people who are already gone, people who are not able to disturb him.

He seems very lonely, very distraught. He is an elderly man, balding with grey hair at the sides of his head. He has a heavy black coat on, long stringy fingers, very thin high cheek bones, long prominent nose and prominent chin. You

can't see his eyes, looks like he is trying to hide yet we can see him. He seems only comfortable with . . . well, I can't really say that he feels comfortable with these dead people around him because he seems very afraid, very frightened. I think perhaps that he would like to join these people, but he seems too afraid to want to do it himself. So, for the future, I think that he would like to become one of these tombstones.

Story #2

In this picture, there are two people. I do not really think it matters what sex they are, it is hard to tell; one is a man. I do not think that is the importance. It seems like they have a very close relationship. Perhaps they just had a fight and are making up, or perhaps they have just shared something, but they do have a close relationship. One is older, the other younger.

The older one seems sort of higher (physically in the picture). It seems that he is the one responding to the younger one, he is the one kissing him on the forehead as if to say "I love you" or "it is o.k.". The younger one has a hand on his chest, not pushing away but trying to get closer. It is a very comforting picture, very tranquil.

For the future, I can see them carrying on an eternal relationship, letting no one come between them, yet wanting to keep separate from each other, not only separate but continue their own lives. It seems it is in black and white

and greys. It is not colorful, it is just sort of like it is not anybody trying to put their own feelings into it, just letting it happen like it is. The definite cliché is that they are not coloring it. It seems like a very close relationship, which is very important especially today when there are not so many true close relationships anyway.

Story #3

This one reminds me of a soap opera where you have the bannister, you have the long climbing stairs up to the second floor, and you have a woman holding another woman. She seems like she was fainting or maybe she was dead and she was picking her up. It is a very dramatic sort of scene. This woman that she is holding could have been sick; it does not look like she is responding at all, her arms are down at her sides. She may have passed out and this woman found her and lifted her, or just caught her as she was falling down. It is hard to tell if she is leaning over the bannister or if she is just above the steps; she could be leaning against it. The woman holding her does not seem too sincere. She seems like she is just wondering if she killed her or something like that, from the expression she has on her face. Although she could be worrying, she seems very tense at the moment. She is grabbing her by her head, just trying to find out if she is alive. Or, she could also have pushed her, just holding her over the bannister trying to contain her there, being hostile. Her face is shadowed and it sort of makes her

look a little more stern. I can't see the expression on the other woman's face, I do not know if her eyes are opened or closed. Perhaps this woman is dead, or perhaps she is just ill. Maybe this other woman is trying to strangle her, maybe she will succeed in killing her. It does not appear to look like she is alive at all.

Story #4

This is a picture of a woman sitting down thinking intensively. Perhaps she has just found herself a moment when she can be by herself and think out some thoughts. She sort of has a smile on her face. She reminds me of a teacher with a blackboard behind her, and she just helped one of her students and she looks very fulfilled, and she is sitting down reflecting on it, thinking of what happened, maybe trying to remember what happened so that she can use it with other students.

She also looks like she could be in love and she is thinking of her loved one; he may have just left or he could be far away. She looks like she has no constraints on her at this moment. Or perhaps she will just get up and jump around and float for awhile and sing and go out in the sunshine and follow a creek. Sort of looks like Little House on the Prairie, with the long skirt, long hair pulled back. It looks like a very peaceful moment.

Story #5

This picture has much more distinct features. Everything is outlined perfectly. It is hard to tell where they are. There are two women, one is running, the other one looks like she is trying to catch her, the older one trying to catch the younger one. Perhaps a mother and daughter. She is carrying something in her hand, a book and a scarf on top of it, something like that. Could be a teacher and a student. Perhaps she found something, the girl is embarrassed and she is running trying to comfort her. It does not look like she is trying to catch this girl to threaten her in any way. The younger girl does seem disturbed. Again, an older picture with long dresses, buttoned up collar, hair pulled back.

They are outside. She has been running for a while. She looks . . . I can't tell if she is tired or just upset. They could have been sitting there discussing something and she got up and started running. I think the other woman will catch up to her, talk to her about what the problem is. She may have to knock her down to talk to her, but she does not look violent. Maybe they will talk about what she has in her hands; that could have been the upsetting thing.

Subject #5Story #1

Previous to this picture there was supposed to be a solar eclipse, and the warnings were given for everybody to

stay inside because this was a special solar eclipse. It gave off a deadly radiation this time around, for some reason unknown to everybody except the major scientists.

Right now in the present, there are two people that went against the warnings and because they were looking for each other were looking for each other to make sure they were inside, and both of them were outside while this was happening. So, they were looking for each other, one is on a bridge, one is underneath the bridge by the house. They are calling and calling and they cannot seem to find out where each other is because they are just so close. Because of the set-up of the building, the echoings make them look other places besides where they are.

Well, eventually as the radiation still comes, they do find each other and by then it is kind of too late because they have already exposed themselves to the radiation. And then they die in each other's arms. But they love each other.

Story #2

Previous to this, there was a scene in her classroom. She is a teacher, and one of the little boys revealed something quite personal about his home life and he kind of got out of hand. And he said that his parents were not very happy and that his father committed suicide. And the rest of the class really got upset and there was a real ruckus. She sent him out of the room and the rest of the class was

dismissed for recess, and now she is pondering what she should do about that.

She does not know whether she should call the parent or talk to the boy. Well, she is going to have to talk to the boy but she does not know what she is going to say. She has never been in that situation before. And the rest of the class will be coming in shortly after recess and she is not sure what she will say to them either.

But as it turns out, since the little boy is so upset she sends him home after she calls his mother who will pick him up. The class have a discussion about what happened and they try and understand what that little boy is going through.

Story #3

That girl is running away looks really mad. Perhaps she had a fight with her boyfriend, because she is running away, or maybe she is running to . . . I do not know, I cannot tell. She almost looks like she is focusing on something ahead, but she looks mad or intent. Maybe this girl and her boyfriend had a conversation and maybe, like the one who is running away, maybe this is her sister that is listening that was just going to ask her a question, but she decided to stay away instead and avoid the scene. There was a big scene and her sister, being one who takes off from a situation when she gets made or upset, she is running away on the sand. Perhaps there was a grad dance or something because they are dressed

...nice, some kind of a dinner or occasion, and they went out on a beach and her sister followed them because she had to ask her a question, but she came back later.

Her sister storms off and the bigger sister, well, she does not run after the little sister, but she asks the question to the boyfriend. What she was going to ask, I do not know, I cannot tell. That is it, she just asks the question.

Story #4

This little girl was playing with her friends outside, perhaps they had a little clubhouse or a doll house or something and her mother called her in for her daily bible readings that they have at a certain time every day. The little girl was so wrapped up that she did not really want to go, but she had to because she had to obey her mother. Right now, the mother is reading to her some devotional material and the girl's mind is not on it at all. She is looking towards where her friends are, she can even hear them playing right now outside. She has her doll in her hands and she really wants to go. She really does not want to listen, but she has to listen to her mother.

Then, her mother realizes that she is not listening and so she quickly finishes off and she decides that she will re-read it another time, maybe the next sitting. They will discuss it later instead of pushing the issue. So the little girl goes and plays with her friends.

Story #5

This guy was studying hard in school and really trying to concentrate on what he was doing. And one of the girls at school really had the hots for him, and he really did not care for her too much. So he kept brushing her off because he had to study for this exam that was going to be coming up. So she had a brilliant idea; she knew where he lived and so she decided that she would break into his apartment and kind of crawl into his bed and give him a real surprise.

Well, when he came home many hours later, his eyes being tired from studying, he did not even bother to turn on the lights because he was just going to hop into bed. Well, he was going to do it but he noticed that there was just enough light in the room that he could see someone laying in his bed, and they looked like they were sleeping. It was that girl again and she was not even wearing anything, and that really turned him off because he did not believe in pre-marital sex. So, he just did not go for it. He can't even believe it! He is covering his eyes. He is so embarrassed! She is still sleeping, thank the Lord for that. So, what he does is, his friend is next door, and he sleeps over at his friend's place that night.

Subject #6Story #1

Sarah comes from a really wealthy family and she is used to getting pretty well everything she wants. But this year her father has died and things do not run as smooth as they

used to go. And Sarah has asked for a million and one things for Christmas and her mom is trying to tell her that she is just not going to get everything that she wants like she used to get all the time. And Sarah is kind of disappointed in that. She does not really seem to be listening to her mom and she holds her doll sort of absent-mindedly, like she could just let it drop any second. Her thoughts just keep going to all the things that she wants to get. She is really a spoiled little girl.

She is trying to figure out some way that she can get that great, great big doll that she has been hoping for, trying to weasel it out of her mother. She is not even really listening to what her mom is saying at all. She has this big plan of running away so that her mom will feel really, really terrible at what she has done for Sarah. But she is scared about not having any food or anything like that when she does run away.

So, probably as usual, her mom will have to give up something and Sarah will get her big doll for Christmas, without Sarah having to run away. She will just have to be her normal stubborn obstinate self. And she will get her doll anyway.

Story #2

This guy's name is Gen. He has been waiting outside this fenced-in place that has a lot of money in it. And he is sort of the guys' lookout. His friends and he have

decided that straight life is just not for them and that if they are going to get anywhere in life they are going to have to get some money for themselves. It does not seem like anybody else has been helping them so they are going to have to do it themselves.

So, his other friends are inside right now and they have not really planned things too carefully, so they are just hoping that everything will work out. They will go inside and they will figure out some way to get inside the bank. And meanwhile, he is out here looking and he is kind of getting nervous because everything is really dark and he can hardly see anything, and it is kind of foggy outside. He has been pretty lucky so far, nobody has been around at all except for this big dog which kind of scared him, almost scared him over the fence. But otherwise there has been no big problems. Meanwhile, inside the fence, his friends who are not the greatest thieves have been having a terrible time trying to pound on the door and they cannot seem to get the money they want.

They have been sitting there for an hour trying to figure out what to do. So, since they cannot seem to think of anything at all, they have decided that they will have to give up and find some other place to rob. So they come back to the lookout guy and they take off.

But the cops have been watching them all the time, just watching to see what has been going on, and so they stopped them when they are driving away in the car. But the boys

really have not been doing anything except for breaking and entering. So, they make up some story about how they just were wandering around looking for something to do, and so the cops let them get away.

Story #3

Mary has just heard that her little boy, who is only two years old, is going to die. He has been sick for a long time but it is the first time she has ever heard that he might die from it. And it is her first boy and she has always wanted a little baby boy. She had such big plans for him.

And now when she comes home to tell her husband she can't even move past the door. She is standing there sobbing beside the door. But she knows that she has to go tell him some time. So, she slowly kind of absent-mindedly closes the door behind her and she walks into the room and her husband is standing there in front of her, and he is looking really, really sad, too. She is so worried about how she is going to tell him that their son is going to die. She can't even really accept it in her own mind, but she comes up to him and he sort of puts his arms around her and gives her a kind of understanding smile, and she realized that somehow he must already know, that she is not going to have to tell him after all.

And so they sit down and discuss how they are going to work it out. But somehow it does not seem quite so bad to her if she can face it with him, so long as she does not have

to face it alone. Then it is not quite so bad.

Story #4

Harriet is a really, really jealous sister. It seems like her sister Meagan has always been able to do things better than she has. Harriet has always dreamed about being able to do all the things that Meagan can do, but somehow she just does not seem to be able to do what Meagan can. She is so handy with her hands, she can do almost anything. Everyone always looks up to Meagan because she is the one you can depend on to get things done and she carries the responsibilities. But somehow Harriet always seems to be left behind. No one ever asks if Harriet is at the party; first, they always ask if Meagan is at the party. They do not really seem to care if Harriet is ever around.

Harriet has decided that if she is going to get people to care about her the way they care about Meagan, that the only thing that she can do is to get rid of Meagan. So one afternoon when Meagan comes home from work, Harriet has already been sitting there and she has been thinking how much she hates Meagan and how she really, really has to get rid of her because Meagan is just destroying her.

So Meagan is just about to start at the stairs, she has already said "hello, how are you?" and her lunch was put away and everything like that, and she is just relaxing from getting home from work, and Harriet quietly comes behind her and she stops her and tells her that she does not think that

Meagan has been fair to her, that she hates her and she wishes she was anybody's sister but her own, and that she is destroying Harriet, and Harriet thinks that she has to do something about this. So she comes up to her and grabs her around the neck and starts choking her. And she can see Meagan gasping for breath, and her eyes rolling around her sockets, and just wondering what is wrong with Harriet because she never saw anything that could be bothering Harriet at all.

Then Harriet starts to see this searching look in her sister's eyes and she sort of gets scared inside herself, thinking about what could she be doing. And so she releases her hands and she just stands there shaking, and she can't think of anything to say, so she runs out of the house.

She runs as far, as far, as far as she can into the woods just behind the house, and as she is running she sort of has a plan in mind that her life is not worth living. So she runs to the giant, giant slough that is in the back of their yard, just in the woods, and she just keeps running and running. She does not even let the weight of the water slow her down very much. She just keeps running and running until she feels the water closing in over her head. And then she is no more.

Story #5

Sandra and Joe have been married only for two years and they just got to know each other really, really well. And

they really do love each other, but Joe feels that he can't always be staying at home with his wife, and the jobs that he has around his home in the country just are not the ones that he can live with. He feels that he has to find the challenge somewhere else. But his wife can't really understand this, although she loves him so much that she thinks he must really do what he wants to do, and she knows that if she holds him back she could never forgive herself, or she knows that he could never forgive her either.

And so, Joe decides that he has to go to the north, to the Northwest Territories, to find a job so that he can earn some money and not be living all this miserable poverty that he and his wife are living in right now. They are just having their last two or three minutes before he has to catch the plane to go up to the Northwest Territories, and they can feel already how sad it is going to be once he is gone. They have been dreaming about coming back and seeing each other again before they are even parted. And even though they know they will probably be back together in a month again, they still feel so sad just to know that they are going to be away just for that long.

And finally they let go of each other and Joe turns around and without a further look he boards the plane and goes to the Northwest Territories.

Subject #7Story #1

Tommy and Susie had been going together for quite some time now. They had met in their first year of high school and became very attached to one another. When they graduated from high school they became married a year later and were still very much in love, unlike some other younger couples that they had known. They had a child who was a joy for them and when it was two years old the little boy was run over by a car. They were very traumatized by his death. They felt that something that was a part of both of them had died. They embraced each other and somehow this bond comforted them.

They will always have the memory of their little boy but that part of them has also died in a way. They plan to have another child to hopefully try to recapture what they had lost.

Story #2

Lisa had lived in the country all her life. Each day she got up in the morning and took the bus to school. When she would leave, her mother and father would be up and about for hours before she was, working doing chores on the farm.

Lisa was an only child and was very attached to her parents. One day her mother came to her and told her she was expecting another child. Lisa felt that she should be happy, but she had other feelings inside of her: jealousy,

and perhaps even hatred of her mother, as though her mother was trying to say "you are not enough for me". Her mother went through a difficult pregnancy, which Lisa would come home from school to find her mother lying on the couch looking very pale and weak. This upset Lisa and she resented the baby for causing this to happen to her mother.

When the baby finally was born Lisa had mixed feelings about this. The little boy looked so fragile and helpless, yet somehow there are those feelings of resentment. As her younger brother grew Lisa did not grow to love him but felt more of a tolerance toward him. Their disagreements seemed more severe than normal siblings' disagreements.

Lisa's father was forced to work harder because of the two children, in the fields labouring late at night. Lisa felt an obligation to go to work to help out her family. So she left home just before she had finished grade twelve, before she had graduated. She went to live in the city and there she stayed for the rest of her life.

Occasionally she went home to visit her family, but she had never really forgiven her mother for what Lisa had thought was an unforgivable thing.

Story #3

Alex was walking late one afternoon. He kept walking through the town, over the hills, around down by the park and the river. The sun started to set in the west, the sky became colorful: oranges, reds. He walked on further up the

hill and he came to a house, a very old house that had a certain majesty about it. The lights were on and through the window he could see two people.

From a distance he could not tell what these people were doing, but as he approached the house he saw a woman and a man arguing. This brought back feelings of when he was younger and his parents had argued while he was laying in his bed late at night. He stood there for a moment and watched them, not hearing what they were actually saying, but imagining just by their expressions in their hands, their bodily motions. He would watch the two people then watch the sky. The clouds were moving towards and apart each other just as the people in the window did toward each other. As the sun slowly sunk into the sky he could see that the two people were somewhat calmer, their gestures not as violent or as sharp. Finally, there was no movement at all. Their hands remained still and then they reached out for one another and touched each other's hands.

Alex felt peaceful then and he wondered what they had really been saying. But he could tell that everything was all right and he continued on his walk and went home to his bed and slept.

Story #4

Lucy was sitting in the living room one day watching television. This was her habitual thing to do when she came home from work every night. She was twenty-two years old and

still lived with her parents. That did not really bother her because she really loved her parents, and besides it was a lot cheaper than getting an apartment on her own.

One day, Lucy's father came home and came up behind her to kiss her as he always did when he came home from work. "I have a surprise for you, Lucy" he says. She looked at him, startled. "Me? What, dad?". "Oh, well, it is something that I have been meaning to do for a long time". Lucy still did not know what he was talking about. "Come with me", he said. So she got up and followed her father into the den. There, the fire was blazing and her father sat in his cushy lazy-boy chair. Lucy sat on the ottoman in front of him. "Well, Lucy, I have been to the travel agent". Lucy was not surprised at this as the travel agent was her father's friend. "So?" she said. "Well, I have decided that you need a change. So, for your birthday I am going to send you on a cruise at the Carribean". Lucy was silent. She could not believe what her father had just told her. "Dad! No, dad! Dad, why are you doing this?" "Well, just like I told you. Because I think you need a change, to get away from this little town, go out and see some of the world. Have a holiday!" Lucy embraced her father. "Oh, dad! Thank you so much. What a birthday present!"

The months passed and finally it was time for her to go on her cruise. She packed excitedly and her knees trembled as she drove to the airport with her parents. She waved goodbye out the little plane window, hoping they would see

her, and tears came to her eyes at the anticipation of future events.)

Story #5

This gentleman was once a prominent lawyer in the little town of Smithville. He had been in the public eye for quite some time. He and his lovely wife lived in a large house on the north side of town. One day Mr. Jones came home from working late at the office. There were no lights on in the house. He thought this rather odd as his wife was usually home with supper waiting for him.

He walked into the house and called for his wife, but there was no answer. The little French poodle Muffy did not come running to greet him either. He walked into the living room, the television was on. He walked into the den and the kitchen, the kettle was plugged into the wall, boiled dry. By this time he was very suspicious. He walked upstairs into his wife's sewing room, down the hall to their bedroom. He opened the door and there was no one there. Then, he decided to check the bathroom. He found his wife on the floor, a broken glass beside her. A wave of terror ran through him. He could not conceive his wife had taken her own life. Not only that but she had also killed the little poodle.

Smithville was stricken by this terrible horror. No one could really understand what a suicide really was. They would all say "oh, she was such a nice woman. How could she do this?" But underneath, Mr. Jones was really blaming

himself. And after his wife was buried, each day after work he would go and stand by her grave and tell her how sorry he was that he did not know and that he did not take the time out of his busy day to listen.

He did this until a very, very old age. He devoted his law practice to family problems, hoping that he could prevent such a tragedy from happening to anyone else.

Subject #8

Story #1

The pen is poised in the hand of the writer as he contemplates what he is going to draw in his next picture. The hand is shaking and thus disrupting the area around the top of the pen to create a light sensation. Eventually, as the story unfolds itself, the picture clears and the writer has been satisfied. The pen then goes down.

Story #2

The boy in anticipation of his birthday thought of the wonderful gift that he would get, a baseball glove. Upon getting his birthday present, opening it, and finding a violin, his disappointment was overwhelming. He contemplated all the terrible moments he would spend with the violin and longed for the outdoors and the freedom and the good times he would have with his friends as they played ball. He realized that all those notions were fantasy and he would be stuck inside with the violin. And he was sure that his parents would encourage the use of it thoroughly.

Deciding to make the best of the situation though, he picks up the violin and resolves to accomplish the task of learning the art of playing the violin.

Story #3

The snow is blowing and swirling outside as the degrees drop to minus sixty below. The bus clogs down the road at a steady pace. All you can see is the white blurr ahead of you as you step off the bus and into the foot-deep snow. As soon as you get into the building you realize that you will not have to meet the consequences again for another eight hours.

Story #4

The approaching clouds look threatening as the people look through the windows of their small home, and the waters look very cold and the prospects of having an enormous storm crept upon them as they looked outside and envisioned various figures through the clouds and bringing with them evil connotations.

The storm is now at its full fury. The water is thrashing about the small home and the sky is in its thundering capacity and is alive with various forms of clouds that carry with them different meanings: threatening, angry, and so forth. But inside the home the light still burns, and security and comfort are seen within.

Soon, the storm abides and the sky resumes a peaceful and calm state, and the waters recede and begin to simmer,

and inside the light still shines.

Story #5

The conflict between the two people in the picture was quite strong with bad feelings between them. They were unable to resolve their differences and wondered if their only escape would be death. In the picture, one person is faced with the prospect of a dying person in her hands. The regret and remorse is felt throughout her whole person and she realizes that the time they had wasted because of their bitterness. She feels the life slipping through her fingers and she is unable to do anything about it. She resolves though after the funeral to, although she cannot patch things up the way they had been, she will try to live life in such a way as to make up for the things that had gone wrong between the two, her and her sister.

Subject #9

Story #1

This man is feeling loneliness and depression. He is in a state that bothers him a lot; it reminds him of sorrowful things, and partly by his expression and also by the surrounding landscape. Maybe he is thinking back to happier times when the markers in the graveyards symbolized his friends instead of just the markers. Probably it is just as well that he is at a grave or graves of people he knows, rather than just arriving at one and just standing there

looking at things. The way he is hunched over makes him look . . . even if you could not see his face, you can tell by the way that he is hunched over that he is depressed or discouraged or worried about something. His hands are not relaxed. He just looks very tense.

He may also be thinking about his own future, when the same thing will happen to him when he dies, and maybe he is even contemplating suicide or a way of ending it quickly rather than just knowing that he would be there in a few years time.

When he goes home he will be as depressed and discouraged looking as he appears to be right here.

Story #2

This is kind of a blurry looking picture and it is hard to see the person who is standing in the picture, as far as seeing any of his features. Perhaps too he, because of that and the position of where he is in the picture, indicates that he does not have much of a good opinion of himself, as if he is trying to hide. He reminds me of a person who is kind of lost in his own psychological fog, not knowing where he is going or where he has been, or what is happening to him. His hands in his pocket and his sort of slumped over shoulders to indicate that he is probably feeling depressed. He does not have a cheerful outlook on the world.

Story #3

This is a picture of a person who looks fairly positive, who seems to be pleased enough with her life and the way it is going. She has a look of as if she is dreaming or remembering something that happened that was pleasant though, and possibly she is contemplating her future. She occupies too a very significant part of the whole picture as if to indicate that her own awareness of herself is fairly good and fairly positive. She is not trying to escape or to hide. Also perhaps she is thinking of someone who has just left to either leave to go to work or to go out on a long trip and not come back for a while, and is musing about his or her return.

Story #4

This is a picture of two people, one whose face you cannot see so it is hard to find any recognition on that face, you cannot tell how they are thinking about things. And the face on the other person, the mother of what appears to be a child, has a look of anguish as if there is something horrible that has just happened, and she looks really worried or concerned about him. She is looking up at his face as if there is something the matter with his mouth or his features on his face, as if something has just occurred. Or maybe too, she is thinking of him and looking at him as if remembering someone else.

He is leaning against the staircase as if he has been

pinned there by her because he does not look comfortable at all, he is rigid. The stairs themselves look very kind of rigid in a way, as if they are sort of sparting. Also, the staircase rail is curving and it looks almost symbolic of escaping to another place.

Perhaps the outcome from this picture will be that he is either going to be punished for something that he has done or that he will have a fate befall him. Also it appears as if he was caught doing something that he should not have been doing.

Story #5

This is a picture of a small house that is out on a fairly barren place. It looks like it might be a pioneer house. It is in the middle of the winter and there is a lot of snow seen around it. It is as if it symbolizes the hope in a desert plain because there is a friendly lake sloping out from it. The curtains in the windows means that there is somebody that lives there and really likes to care for their house.

In the background the clouds that are swirling around look as if they are a force about to take over the little house, and there is a strange pattern to the clouds as well that have an almost animal or human shape to them. Perhaps it is highlighting a major storm that is going to take place because there is a lot of snow and it is possible that there is more snow falling and burying everything. It almost looks

too, as if the house could be symbolic of some kind of hope or happiness, but that it is being overwhelmed by what is taking place outside.

Subject #10

Story #1

Once upon a time there was a wizard and this wizard was very, very wicked. He used to like to make people do things that they did not want to do. He used to make people do things against their will. And once, he tried to make this boy do something against his will and the boy snuck up into his tower, the wizard's tower, and he found his books of magic spells, and now he has imprisoned the wizard in this place on top of a big pile of rock, and the wizard is very sad. He is stuck up there on the rock, he is trapped. And eventually he is going to break loose and he is going to get back at the boy. He is going to put the boy up there instead of him.

Story #2

Once upon a time there was a grandmother and she was very fond of her little grandson. The little grandson ran away and she could not find him for days and days, and she called the police in. And then, she found her grandson and, here in the picture, she has found him and is giving him a big kiss. And he is never going to run away and they will live happily ever after.

Story #3

There were these smugglers off the north coast of England and they were smuggling goods, and they had their cave hidden underneath a barn. They used to sell right in underneath this big old barn and load their goods into the barn.

And then, a girl saw them one day and this picture shows where the girl is finding the smugglers. She can see them underneath the barn loading all their smuggled goods into the barn. And the girl is going to join the band. She will tell on them if they will not let her join the band.

Story #4

There were these people who lived up in the North Pole and it was snowy and dark all the time. There were two little kids as a matter of fact. And one night, during the middle of winter, the sun never shines at the North Pole during the winter, it is dark twenty-four hours a day, they were out for a walk and they got lost. And they saw these lights shining through a window. And they went to the lights and they found out that it was Santa's workshop up at the North Pole.

This picture is what they see. It is a picture of Santa's workshop up at the North Pole. The kids are going to go in and Santa will fly them back to their house and drop them down the chimney.

Story #5

The persons in this picture are very sad. They had been having problems in their life, with their love life, with their parents. They have been taking a lot of drugs. And here they are, they are looking out the window and they are thinking about committing suicide. They are going to jump out the window.

Then they look up and they see a nice bright star and the star seems to show them that there are things that they can reach for. And so, they go back inside and they work out their life and live happily ever after.

Subject #11Story #1

The story takes place somewhere in inner city Paris, and just before we come to what we are seeing now, the lady has screamed in her bedroom and her husband or boyfriend came running into the room where he saw her lying on the bed. She was undressed and she was obviously in pain.

Now, the story has progressed and the lady is now lying very, very still. She seems lifeless, one of her arms has fallen to the side of the bed. He has partially covered her up and he is in terrible distress because he thinks the lady is not going to live. He will then rush downstairs, seeing that there was no telephone in this room or apartment. He will rush down the rickety wooden stairs and run to the landlord and telephone the authorities, either the hospital

or the police or both.

Story #2

This is a man who is a bit of a loner and he lives all by himself in a fairly large city, and he is not doing too well. There is not much furniture in his room. He is quite lonely, quite depressed. He does not have any friends. He spends a great deal of time alone. He does not do his own cooking, he goes out to a restaurant to eat and returns back to his room. He does not do much reading. He does not feel very comfortable with himself and the world. In fact, he is so depressed that he feels that it is really not worth going on, and he opens his window and he steps on the ledge and he is contemplating the rooftops below. He is contemplating whether he should jump and end it all, or whether he should just keep on doing as he has been doing for the last few months and years.

I think that this fellow is not courageous enough to jump. He is just going to come down from there and continue prodding along. He is not going to seek help or mingle with people. He is just going to continue as he has been doing.

Story #3

The little boy in the picture has received from his father a lovely violin as a birthday present. And of course, when you receive a musical instrument you must also take lessons and practice the darn thing. So, the mother and

father made sure he had a good teacher, and he goes there every week and then he gets his homework and he makes terrible noises on this violin.

And one of these days he just puts it down on top of his music and he sits there he says "the hell if I am going to learn to play this damn thing. I did not want to do it in the first place. All my friends are out playing and I have to sit here and tweeple along on this violin, and I do not like it, and why must I? And why can't I make my own decisions as to whether I want to learn to play an instrument or not? What is the reason? Why must I do everything my parents tell me? Why don't I have any freedom of choice? I would rather be out and play!"

He is going to continue practicing his violin. He goes to his lessons every week, and then one of these days he is going to put it in his violin case, he is going to stick it in the corner, he is going to stand in front of his mom and dad and he is going to put his hands on his back, and he is going to say "I am not going to touch the damn thing ever again!"

Story #4

The lady standing in the doorway has just had a terrible experience. She has seen something very shocking. One of her very, very close family members has died and she is grief stricken. She does not know how to proceed from here because obviously that person meant an awful lot to her and

she lets her grief speak through her body, through her whole posture.

She will go through the doorway eventually. She will close the door, have a cup of coffee, light a cigarette, have a real good cry, kick the box or the cat, scream and holler. She will curse God and everyone: the doctor who could not save the person. And eventually she will get over her misery, go back to work or find a job, and sort of slowly work her way out of her depression.

Story #5

A man in Paris has gone to the cemetery and he is surrounded by gravestones and crosses. He was looking, however, for one particular grave, that of his departed friend. He finds the gravestones and the crosses very depressing. They seem to march toward him, they seem to overwhelm him, and he tries to shrink into his own body, he tries to make himself as small as possible, and he tucks in his head so that the gravestones will not actually attack him.

He has found the grave that he is looking for, but he is not standing in front of it as in contemplation and in reverence or in memory of his friend. He is very, very uncomfortable.

He will, within a very few minutes, he will find his way out of the graveyard, never to return there again. The experience has been just too uncomfortable.

Subject #12Story #1

This lady was in her drawing room and she was preparing something for her husband who was not supposed to come home yet. She was feeling very anxious that he was going to come very soon and so she was hurrying and getting all excited. Actually, she was wrapping his birthday present at the table and, all of a sudden, there was a knock at the door and she really did not know what to do, so she stuffed everything underneath the couch. And as the husband walked in the door she turned around and looked at him, trying to pretend that nothing had happened and that she was not hiding anything.

He looked at her very lovingly with a cigar in his mouth and noticed that she looked a little frazzled. And he decided that maybe she just had a hard day or that something had happened. So, he asked her "Is there a problem dear?" and she said "Oh no, oh no. I was just writing some letters." So they decided that since it was so close to dinner she had better get dinner started. So they left the room and he went and sat down in his big easy-chair with his pipe and read the paper until the supper was ready.

Story #2

Once upon a time there was a woman and her husband. They lived in a very big house with a long spiral staircase leading from the main hallway up to the bedrooms. With them

lived the woman's mother and she was a very elderly lady, and because she had problems getting around, they decided to install an elevator system in the house. So, they did that and this pleased the grandmother very much because she really did have a hard time going up and down the stairs.

One day, the husband and wife had gone to their son's concert, he was a pianist, and had left the grandmother at home because she did feel quite ill and did not feel like coming. So she had been upstairs, and while the family was gone she heard a noise downstairs and she was really quite frightened. And she went to try to go down in the elevator to try to see what was happening downstairs, and the elevator was not working. She got really frightened and she decided that maybe she would try the stairs. She has not gone down the stairs for a long time.

So, she started walking very slowly and she heard a really frightening noise down in the kitchen, and had lost her footing and had tumbled down the stairs. The noise actually in the kitchen had just been the family cat who had caused some ruckus and it got so frightened by the noise of her falling and scooted out of the kitchen, and was hiding in the pantry.

When the parents came home, the woman found her mother lying at the bottom of the stairs and rushed over to her and held her and was very worried, and told her husband to run and phone the ambulance. And so he did that, and the ambulance came and took her to the hospital and it turned out

that she had just bumped her head on the bannister and that they just kept her for a couple of hours. And then, they all went home.

Story #3

A long time ago there was a very young woman and a very young man. And they met one day in the park and found that they had a lot in common and that they were quite interested in each other. So, they began to cultivate a relationship.

The days went by, and the weeks went by, and the months went by, and eventually they were married. And they had three lovely children and they had a really wonderful life together. As they grew old, their children grew old with them, and they had many happy years and their children really gave them a lot of fulfillment, and their children really meant a lot to them.

One day in their older years, they were about sixty, there was a phone call. It was about their son who had gone to war and had been reported missing. She was just devastated because this was her only son, the other two were daughters, and her son meant so much to her. She went to her husband for consoling and he tried to comfort her, and he was also very saddened. Eventually the pain went away but the memories are still there and they lived in the joy of their two daughters, and always remembered their son.

Story #4

There once was a land far, far away in a place called Ethon, and in this place there were people, there were buildings and rivers, and it was actually a very beautiful place. And in this place the people lived together in harmony, and there was not the problem of hate and dishonesty and all of the evils in the world, and there really was a happy life.

In this place lived a woman named Seron and she loved nature, she loved to go for walks in the country and look at the birds in the trees and at the water, and really became in touch with nature and it made her feel good. One day as she was walking through the countryside she came to a spot that she had never been before and she saw this very large bridge going across the river, and as she walked over she stopped halfway and looked down and saw her reflection in the still water. She really felt very peaceful with the sun shining down. And she continued on her walk and saw many of the things that she had not noticed before and realized that her own country was a place that had so much that she would never see everything and that she had a feeling that she could walk forever and see new things and be excited by new experiences and new people that she might meet.

Story #5

There once was a man who was a very philosophical man. He was a very deep thinker and needed to spend a lot of time

being by himself and contemplating life and his aims in life. Even though he was a loner and he needed a lot of time to be by himself he was also very interested in people and he did meet someone that he loved very much and married, and had a family.

But in his house that he had built in a very small town, he made sure that there was one room where he could always go to be by himself. And he very often went there when he needed some time away. And there was not much in the room, it was very simple with just a chair and some books and his favorite pipe. He often would go there and not even sit, just stand by the window and look out, and often he would like it dark because he felt that if he could not see, the rest of his senses were heightened and he could really be aware of his thoughts. And he spent a lot of time there gazing out, sometimes during the day when it was light outside, sometimes in the evening. He really treasured those times in his life. And as time went on he passed this feeling onto his son who was also a very sensitive child. And as this child grew older his father said "Son, I would like to show you a place that is very special to me. I know you have never been in it and I just said to you that it is my place, but I think that I would like to share it with you now."

So he would bring his son in and it was also a place for his son to come to now. They would sit together and discuss things and together be by themselves.

Subject #13Story #1

It appears in this one that it is a normal time of the day, but there is an eclipse of the sun and it is very dark. The men on the dock are still at work and they seem to be carrying on even though they know that the eclipse will pass on and it won't affect them.

Story #2

I would think that the girl in this picture with the books has been inside reading and she has come outside to get some fresh air and to see what is going on. The man with the plough has been working for quite some time, and the woman standing by the tree, she is thinking she is pregnant. She seems quite contented. He is going to finish his work and they will all go back to the house. She is not going to have the baby for quite some time, a couple of months.

Story #3

This picture has undertones of death in it. It represents to me someone who is closed within himself and he is thinking of death. It looks like there is no way out, the way the crosses and tombstones are placed around him, and he can see no way out. I think he is in a depressive state and he is contemplating suicide.

Story #4

This seems like a housewife who has been working because her sleeves are rolled up and she is sitting down for a rest, contemplating. She seems quite happy. After a while she will get up and get back to work. She seems quite content.

Story #5

This is a contrast of old and new. What it might suggest is that the younger woman is thinking of becoming old, and the old woman in the background is what she is imagining herself to turn out to be. She does not look very happy about it. There is something about the old woman with her back hunched and her long fingernails, something evil. There is something evil in the old woman's face, especially in the eyebrows; it probably means that she has been betrayed. She is probably thinking of a doomsday scenario.

STORIES TOLD BY TWELVE HOSPITALIZED PATIENTS

Subject #1Story #1

He has just admitted that he is really in love with another woman, and she has tried to convince him to stay with her and he is looking away because he really cannot look her in the eye. And she is probably not going to win. He is probably gonna go off with the other woman. She is probably heartbroken.

Story #2

This looks like some sort of private-eye kind of guy, and she could be his secretary. It reminds me of an Agatha Christie murder or something story. She has been caught. I do not know what she would be doing, probably rifling through his papers to get some . . . some sort of information about him, and she is caught in the act. But he is so struck by her innocence and her fear that he falls in love with her, and they live happily ever after.

Story #3

This looks like a very sheltered child whose mother has been very protective, almost suffocating. And at this point in time she figures she should tell her daughter something of the facts of life because she looks like she is just about

ready to mature, and the girl does not want to hear it because she is still at the stage where she is playing with dolls and wanting to be a baby. The girl is very lonely and the mother is very sad, and whatever it is that she is trying to tell her, she is really not getting through to her because the girl is looking away. I cannot quite figure out what probably the mother is trying to speak to her about but I would think that she is probably trying to tell her something about growing up and maturing or something.

The whole of the picture is that it talks to me of suffocation, that the mother is trying to keep the daughter to herself, and she does not really want to let her go. So, what I would assume would happen after that would be that the daughter would always feel tied to her mother's apron strings and the mother would be able to be completely free to be her own person and probably would live in a fairy tale world rather than in the real world because she is pretty big for a little girl.

Story #4

It is a very dark stormy night in New York city and you cannot see anything before you, or behind you, or beside you. And this guy, he has just moved to the city to get away from all the responsibilities that he had there, and so has left his family and all that kind of thing. And he ends up in this big lonely city without much money and without anywhere to stay and it is pouring rain. And he walks along the street and he gets mugged and whatever money he has is taken

from him. And eventually he is just stabbed and died.

Story #5

This guy is one of the mob and he has been around, and he was involved in some sort of gang killing, and that is what led up to this picture. He decided to come and look at all the markers of the graves of all the people that he had murdered. And he has been doing this sort of thing for many years, as you can see by the number of tombstones and crosses. He murders people who do not think the way that he does. And he just pulls the gun on them. And so far he has been very clever because he has not been caught at all, and nobody has ever lived to tell the tale about who murdered them. So he is still on the go. And so he is going around looking at all the names to see who he might have missed by now and who his next target should be.

But he has got to the point where there probably is no one else. He has murdered all of the people that he had something against, and so he figures the best thing to do is to turn the gun on himself, and he shoots himself. And he becomes one of the those markers in the cemetery.

Subject #2

Story #1

It is blank. Kind of the way I feel right now. You work your butt off and you are left with nothing, just like a blank piece of paper. Or you can work your butt off and end

up with a lot. What is going to happen is, there is going to be color in that blank piece of paper again. The color is going to come back. Life is going to go on. Everything is going to start to grow and develop and, and, then there is going to be a happy ending. There is going to be, like in a fairy tale, the happy ending because a person cannot live a good clean life and come up with nothing.

Story #2

Someone just found out there has been a death in the family. Her husband, or her son, or her daughter, has been in a car crash. She has had the emotional time of it, the initial shock, but hopefully she will find that inner strength that seems to pull everyone out of their crisis, and she will cope with it. She will learn that you can live without someone, you can live with the good memories.

Story #3

It is a winter night and it is blizzarding out. And there is no one out because of the blizzard, and the street lights are shining. The power had been cut off before that night because of the severity of the storm. But so far the power is still on, the heat and electricity is still on. No one has been hurt because of the coldness or the dampness.

And now I see another thing. There is a man outside in that blizzard standing under the light post. But he will, he will find a place to spend the night. He will get out of the

storm and he will find a warm place to sleep. And in the morning the world will be a better place.

Story #4

I guess someone has passed away a couple years ago, a year ago, whatever, and this gentleman has gone to the cemetery to place flowers or whatever you do in remembrance of this person that died. And right now he is being sad, he is remembering the good times. But he will leave the graveyard and he will go on with his life, and he will always remember the person that has passed away. But he will remember the good things.

Story #5

That looks like a couple that is having an argument, or they have just had an argument, and she is trying to win him over maybe to her point of view, her side, the way she is clinging to him. They will argue because everybody does and perhaps this argument they won't be able to resolve. Maybe it will be one of those You cannot solve what stays unsolved.

This one, there won't be a happy ending because there is so much anger in that man's face in the picture and they will go their separate ways and work their own personal problems out and live their own lives.

Subject #3Story #1

I think there has been a disaster from a volcano or an earthquake or something. And those birds are up there as if they are looking around for a drink of water. By the looks of it they will get down and they will find the water.

Story #2

That is a mother looking for her kid. She looks in her room and something the kid did was maybe strange or distorted. She is seeing something that she did not expect to see. She is having great thoughts about what happened as it looked different to her. Things are not very well in order and it is different to her. She will know from the kid who is hiding in the clothes closet or something. But she is quite worried that something is wrong.

Story #3

Well, this fellow is excited that he looks quite a bit like his ancestor there. He is standing by his picture. He thinks that they are a lot alike. There are some things that he wants but . . . to feel like he has loved his ancestor. And he was possibly told that not to raise his hopes up through his ancestor. I mean, it can happen if you think someone else can see it.

Story #4

While she was sitting there thinking about someone, possibly someone to talk to, something startled her and she looked around and here he was. He probably wanted to see her. She looks like a frightened soul and she was wanting to see him. And that is what he wanted, and they are both there starting to talk.

Story #5

Looks to me like somebody lost some shoes. And possibly someone has borrowed these shoes. He is laying there and is hoping that someone comes around and helps him. And possibly he was working with someone else and they came and found him and he would be alright then. And he would have no more problems after this.

Subject #4Story #1

This is a mother and daughter. And previous to this picture the daughter have been through a major crisis and she has come to her mother for support and love. And in the future she will get the strength and support she needs to carry on with her life.

Story #2

Previous to this picture this man has had an alcohol problem and has been separated from his family because of it.

In the picture he looks lost and alone and confused. And in the future he will probably end up on skid row with the rest of them.

Story #3

Looks to me like this man has had a lot of mental problems and he is committed or has been committed to the insane asylum. And he is looking out at the light but can't seem to reach it. There is nothing but darkness around him. And in the future, hopefully he will be able to reach that light.

Story #4

This woman looks like she has been very badly hurt by someone she loves, probably her husband or boyfriend, and seems to be just holding a lot of grief and hurt feelings. In this picture someone else is showing interest in her and maybe trying to speak to her, but she looks as if she would not trust him or anybody else because of the way she has been hurt. And in the future it probably will be a long time before she does again.

Story #5

This reminds me of a kind of cozy picture because it looks like a kind of a log cabin, or a cottage or something. And they just had a big snow storm but the lights are shining right inside the house and it looks like it is a good cozy

atmosphere inside. And the cabin looks strong and full of life, like it is going to survive the storm and probably many more in the future.

Subject #5

Story #1

Two people comforting each other. Perhaps something sad has happened before and now they are comforting each other. And then, they might help each other.

Story #2

A mother reading her book and a girl holding her doll. The mother asks the child if she would like to listen to a story and the child is listening. But I do not think she looks very interested in the story. The little girl might get up and walk away. She is wishing perhaps her mother would read something more interesting that she really wanted to hear. Maybe she did not want to listen, she did not want a story.

Story #3

The young woman looks very happy as though something nice she has just seen or heard has happened. And now she is thinking about it.

Story #4

It just looks like a nightmare around the house. It

looks like lots of anger, of confusion afterwards. Looks like the house is disappearing. I do not know.

Story #5

The blank card looks like life on a dull day.

Subject #6

Story #1

It appears to me that she is hearing noises and she is going to investigate, and she is sort of hesitant about going directly right into the room. She looks like she is kind of slowly opening the door to try and see what the noise is, and she finds it is just a cat that threw off a book or something.

Story #2

It seems like the daughter has been maybe getting rough or mean with her doll and the mother is trying to show her how to be kind, in case it might be a real baby. Looks like she has a book, that she is trying to get something through to the girl, but the girl just don't want to have nothing to do with it. She prefers not to listen. I mean, she is hearing it but she is not registering it in her mind at all. It is just a no-deal thing for whatever that lady is trying to tell her.

Story #3

That man looks like he was drinking and he was served his supper, his dinner or whatever, and he just crashed everything off the table and jumps up. And the woman there is trying to find out what really is bugging him. And he is really angry, and she is thinking that maybe the supper she made was not good enough and she would like to help in the worst possible way. But she does not seem to be able to reach him. He is just angry and he is just not responding to her in any way at all.

Story #4

It looks like this one lady is angry at another and she is in a real turmoil, and in her anger she goes at the other lady and actually is choking her. The result is that maybe she does choke her. And yet, she has that look on her face, that sort of has a questioning look right at the moment that she is strangling that other woman. And then again maybe she will come to her senses before she actually does choke her to death. To me it is a two-way thing: you either go deep or else you get caught in time. You either catch yourself or else someone else will get you just at the right moment.

Story #5

The man is very lonely. The dark picture around him is real bleak. It seems he is caught up in some kind of prison of his own, like he is standing there looking out that

window, sort of, wishful thinking, maybe feeling that he is trapped. And if he could open the doors wider he could fight his way out of it. Or else, he could keep them just partially open and keep on wishing and hoping. Or he can, like I said, it goes two ways: he can free himself from that dark bleak feeling or whatever it is. It is not like he is in jail or he cannot. He is sort of something like me, standing at the window and being lonely, wishing I was someone else, anything else. And knowing I would either let go, get drunk and crash my world, or else carry on the best way I know of to the best of my ability.

Subject #7

Story #1

Well, it looks like a cottage in the forest. Apparently there is a blizzard that has been blowing for a considerable time. It appears that the snow has built up around the windows and on the roof and along the walls. It appears very windy, blowing snow. It looks like an awful blizzard to me. I would think they will be snowed in for days.

Story #2

It appears that the two women have been talking. Perhaps it is the younger woman's recollection of what perhaps she might be like in her senior years.

Story #3

It appears to me like something out of an epic

television series. I would think the girl would be perhaps coming home from school passing the field where perhaps her uncle, or her older brother, or her father, is working the fields, and her sister or aunt or mother is expecting a child. It appears to be a peaceful situation. It appears that things would just carry on as they look in the picture.

Story #4

The boy, it looks as if he is in a violin lesson and it is not going too well for him. He is a little discouraged perhaps.

Story #5

Looks to me like it is an older couple. It reminds me of an older couple on the bus at Christmas time who are just sitting together and holding hands. It looks like they trust and confide in each other. There is lots of understanding, compassion for each other. It is something like a situation where something good has happened or something bad. It appears to me like they do not have to talk much at all, that they have that understanding, that communication between two people that really love each other, just comforting each other. Afterwards, I do not know It just appears that it feels good to be together and just staying in each other's arms.

Subject #8Story #1

I guess this is a daughter and mother and they decided to have their portrait taken. And now they are at the studio posing. The daughter, she is young, and the mother is the older woman. After they finish the photo session they will both go over to the mom's house and have a cup of tea and talk, and then the daughter will go home to her family.

Story #2

I guess there has been a storm, a winter storm brewing all day. And it is evening. And now the storm is at its worse and the snow is piling up and looks like everyone is curled up inside where it is nice and warm. It is a family. Afterwards, I guess they will go to sleep and wake up in the morning, and mom will make breakfast for the family. The kids will go out and play in the fresh pile of snow.

Story #3

It has been a long hard day. The husband and wife have gotten the kids tucked up into bed and have a little talk before bedtime. Now they are just giving each other a hug. Afterwards they will go to bed and give all the kids a good night kiss. I guess I get a good feeling from it. It looks like a warm picture, warm in that it is a family and wife.

Story #4

Everybody has gotten up early this morning. Mom has made the meal for the family. Her daughter is off to school with her books and it looks like she is a little bit sad perhaps to leave her mom who is expecting. Before going off she is watching her mom, and her dad is in the field working, starting working for the day. He is a very hard working man, working to provide for his family and make a nice home and see that the kids are provided for. The wife is taking it easy before she goes off to do her daily chores. And so the daughter goes off to school and then mom goes and does her chores, dishes, laundry, and the husband remains in the field working. Come lunch time the wife brings lunch to her husband and they both eat together and talk. And then he goes back off to work. And she goes home to prepare the evening meal.

Story #5

This little boy has been in school all day and he has come home tired and had supper. He probably wants to go off and play with his friend, but his mom wants him to sit down and practice his violin lesson. Here, he is looking kind of sad and thinking about his friend and things he would rather be doing than sitting here playing the violin. He is trying to decide whether or not he should pick it up or not. Then afterwards he decides that he might as well get it done as quickly as he can so that he can go off and join his friend,

before he has to go to bed for the night.

Subject #9

Story #1

This man has just come home and told his wife that he is going to leave her, and she is absolutely shocked. She does not know what to do. She is flabbergasted and she is just hamstruck. And he thinks it is funny. He is a little bit worried but not that worried of getting rid of her. He will leave and she will probalby crack up and either try to commit suicide or end up in some mental institution.

Story #2

Somebody has got a music lesson and it is the day before a very serious music exam. He is absolutely petrified. He has not practiced enough. He knows that he is going to get supreme heck from his parents and he feels like he wants to run away from home because he knows that he is going to get it. He is blaming himself for not practicing and he is feeling pretty down, pretty low. He feels like nobody cares, blaming himself for just not practicing. He is worried that his parents are going to give it to him and he is feeling unloved.

Story #3

The one on the right looks like she is a nun and she is trying to convince the one on the left to go into the

nunnery, and she is trying every single way she can to manipulate the woman. But she is stubborn and there is no way she is going to go in, and I think there is going to be a big hassle over it. The one on the left who is trying not to be convinced to go into the nunnery is going to win out. She is going to take off from the woman who is trying to convince to go into the nunnery. She is just going to get away from her.

Story #4

This woman has just found out that she has to go into a hospital and she had to take her dog to the kennel. She does not know what is happening, and she is just totally confused, she is unhappy, she just does not know where to turn. She is hanging on to the door for security and hoping that someone will come to her rescue and get her out of her financial problems and get her back on her feet. Eventually she will get help.

Story #5

This lady has had something really nice happening to her. Perhaps she just found prince charming and she is daydreaming about him and wondering where they are going to go, and how their life is going to turn out. She is just extremely happy and she is content, and she is just feeling terrific. Eventually it will turn out terrific and it is one of those fairy tales where everything will turn out happily

ever after. The look on her face is one of this sort of beauty and she is really looking good. She says "Hey, things are finally turning out for me!"

Subject #10

Story #1

His wife was really sick and in this picture she probably died and he has gone through a lot of heartbreak and sorrow, and does not know what to do with his life now. She probably must have died at home in her own bed.

Story #2

It looks like maybe this man was married before, and now he got a new woman, and he is not sure. He is afraid. It looks like she is trying to talk him into loving her and he does not want to. Hopefully it will end up happy. It looks like she might be a nurse, him a doctor maybe.

Story #3

It looks like it is an elderly couple. They probably met young, married, lived together for many years. Looks like maybe he fell down the staircase, had an accident. Or else maybe she pushed him because she was angry or upset with him over something. And now, she is that she has done it. She is weeping.

Story #4.

It looks like an elderly couple. Looks like they are saying goodbye. Maybe she is leaving him or he is leaving her. Something came between their marriage maybe, broke them up. Or maybe he has to go off somewhere or maybe somebody in the family has died. And they are saying goodbye to each other, a very sad goodbye.

Story #5

Looks like the little girl was probably left homeless and she is sitting in an orphanage waiting to find new parents. She is holding her little doll and she looks pretty sad. It is probably a social worker talking to her, telling her it won't be so bad, but she does not really have nothing to look forward to. She has got no mother or father. Hopefully, somebody will take her one day and give her a good home.

Subject #11Story #1

There is a mother and her daughter with a newborn. The mother just had the baby and the girl is maybe feeling a little bit jealous or whatever, and the mother is saying "It is your responsibility to help me raise this child, and it is your responsibility to help her grow up." She is kind of feeling a little bit . . . she realizes that she is not the only one in the family anymore and her mother's love is not

going to be just for her. She is trying to deal with that. The mother is explaining that she will love her just as much, if not more, and that they will work closely as a family to raise the child, and she is thinking over and over about what she is going to do and how she is going to handle it. I think it will open up some new thoughts in her mind, suddenly having someone else to care for instead of taking care just of herself. She is kind of excited at one point yet scared, and her mother is just trying to console her. It is going to make her a better person.

Story #2

Looks to me like a young girl dreaming of the man in the background with the horse ploughing the fields. To the side, the woman looks pregnant, also dreaming possibly about the same man. The young girl is saying that if this is what life is going to be like for her, her husband in the field ploughing, being pregnant, she is going to school and learning a lot about life, wondering if she can have more than what her parents have. Her mother is just dreaming about the child coming and how they are going to feed it. Of course, the father is not thinking of anything except the ploughing of the field.

Story #3

Looks to me like the older woman just had some depressing thoughts maybe about her age, and maybe her kids

have just left and she is going through a rough time, and her husband is trying to console her and saying they have a long life yet to live, and that they will live it together, and they have a lot of things to look forward to, like grandchildren or travelling. She is feeling kind of like it is the end of her life, nothing more to live for, everybody is gone, do not need them anymore. He is trying to reassure her that he needs her and the kids still do.

Story #4

These are two sisters, the older one behind the tree looking at the younger one running along the brook. The older one is quite jealous of the younger one knowing that she has a boyfriend, and has decided to follow her to see where she was going and who she is meeting with. She feels that she does not have the qualities that her sister has, the youth, the looks, maybe a better personality. She is a little bit jealous and hateful. She is planning to use whatever she can against the younger one. The younger one does not seem to suspect that her sister feels this way and will be quite shocked when she finds out. Maybe once she does, she will be able to help her older sister realize that she may have qualities of her own that are good.

Story #5

There is a young girl on the bridge and she is thinking of jumping. She feels pretty lonely, no point in going on,

no one really cares whether she lives or dies. She does not care anymore either. Things have not been going her way. She has been trying for years and just does not have the energy to keep trying. The men on the dock loading some grain probably see her jump, come over to help her. I do not know whether she really wants to be helped. I think when you decide to do that and you want it to end, that is it. Well, if she is feeling that way she has the right to die. But then again most of the people down there are not going to let her if they can help it. I would say they would win out. They are probably stronger than her.

Subject #12

Story #1

Wanda was down on the beach one day with her mother. They were having a picnic when her father suddenly screamed from over the hill. Wanda suddenly flew up from the ground, running without looking where she was going, stumbling along the sand. Mother did not realize what was happening on the other side of the hill. She ran grabbing the blankets trying to grab Wanda. She was running along the beach toward the cliff, not watching where she was going. Finally mother did get a hold of Wanda but alas it was too late; she just slipped over the edge of the cliff. Still nobody found out what exactly happened to the father. He was still screaming on the other side of the hill. Everyone can hear him but no one knew what exactly had happened.

Once mother had Wanda well on top of the cliff, both of them together ran up the side of the hill. There was the father, half hanging on to the boat that he had been fishing in. It had upsided and he was holding on to the boat screaming for help. His body had cramped on him and he was unable to swim or to pull himself to the top of the boat. Wanda and her mother ran down along the top of the cliff to the shoreline, back along the beach, out to where the father was drifting with the boat. Her mother stood there in shock, unable to move, watching her husband slowly slip off the bow of the boat.

Wanda, without thinking, tore her dress from herself and ran into the water to save her father. With great strength she pulled her father up from the bow, held his head above the water and slowly with great strokes brought him back to the beach to safety. It was quite a few minutes afterwards that they finally brought him back to life.

Story #2

There was a young boy in the neighborhood. He had never talked to anybody. He always seemed so alone. Nobody really knew where he lived. Everyone always wanted to know more about him but he always seemed to disappear just when anyone got too close to start up a conversation. He was a nice looking young man with large brown eyes and a full mouth. He was of moderate built and moderate height, nothing really

outstanding about him, with a moderately pleasant face. But he looked awful lonely. He never had any friends. One day when I was passing a house I had seen him on a porch with a little old, old lady in a wheelchair. Just him and her, that is all there were.

And I could hear a tiny kind of singing coming from the porch. No one was around. I do not think that they were even aware that I was there but I just stopped and watched. The little old lady sat with her hand on her chin, listening as her young son or nephew, or whatever the young man was, humming away softly to her. He must have spent hours each day doing this.

I made a point sometimes of actually stopping there and watching. I never ever did get to know his name. I sometimes wonder even today what actually happened to him.

Story #3

Sitting on the train going into Boston Shirley was feeling pretty down that day. All the hubub in the city in the older days, it must have been the nineteen-twenties. All the jossling around in the carriage in the train, on the train seats, being pushed one way and another by passengers getting on and off. She was totally bored with herself. All she wanted to do was to get home after a heavy day at work at the office.

Suddenly, she was nudged on the shoulder by a man. He was a very handsome man with a pipe, making him look quite

distinguished looking, bending over excusing himself and asking her if he could sit down beside her. Without any delay she said "Of course." She very properly moved her things aside and the gentleman sat down. He struck up a conversation with her and she was quite in awe at him. His serene and easy manner and his laughing eyes seemed to take her away almost instantly, as if this day was supposed to have come to an end this way. Her being so down in the dumps, depressed, and hot and tired after a day's work. Meeting a person like this to lift up her spirits on the way home. His name was Bert. Once they arrived at her station where she got off, Bert got off as well with her to escort her to her flat.

On the way while talking she found out that he was a young French writer that had just stopped in the town in hope of publishing a small book that he was writing. Without delay he of course asked her out for dinner and from there on there was quite a romance.

Story #4

All the sailors got off the boat and went in on shore leave that night. Joe was pretty happy. After thirty days on the ocean he was finally free. Him and Jim decided to make a whirlwind around the town, never realizing that dear old Betsy's letter lay forgotten in his bunk back in the ship. Him and his buddy Jim decided to go downtown to the bar for a couple of drinks.

Joe, never being much of a drinker, and Jim being quite a bit of a drinker, decided to show him just how much a sailor was supposed to drink when you hit port after thirty days. So there they sat at the small pub bar drinking until the wee hours of the morning. And in walks this golden lady shining from top to feet, all the beaujangles, the jewelry and the bright red lipstick and rosy cheeks and the smile on her face. She sits down with the two men. Bert by this time, and Joe by this time, were under the table ready to be carried out by the bartender. The lady left them there as she could not interest them in going to a party with her. They soon returned to the boat and forgotten her. They left port the next day for another thirty days.

Story #5

When the policemen finally arrived at the motel that day the manager ran out to the car to meet them. There had been a lot of noise coming from room three down the way, across the field. They were little separate cabins for the tourists along the highway. There had been a lot of racket there that evening but no one could go near the place.

There was a strange couple staying there. They arrived at about four o'clock in the morning, proceeded to pack in a lot of food for themselves. Neither one of them came out of the room since. At about five o'clock in the morning all this ruckus started to happen in cabin three.

The manager and his wife became so alarmed that they called the police. Finally the police arrived being that it was so far out of town and approached the [redacted] They knocked. No one answered. They knocked again and declared they were the police. Still no one answered. Finally, they pushed the door opened and they found a man standing there in a state of numbness, with his hands up over his face to shield his face from the sunlight, fully dressed standing there beside a woman in bed with a blanket down to her waist. The woman was dead.

The policemen quickly subdued the man and dragged him outside and asked him what happened. He was in a state of total shock, as if somebody had put him under a trance. They could not find out who he was. There was no identification, no wallet. The woman had no identification, her clothing was nowhere in the room nor in the vehicle, yet the manager and his wife knew that the woman had gone in fully dressed.

It is one of the few mysteries in that town that to this day remains unsolved.

APPENDIX E

RAW SCORES OBTAINED BY ALL SUBJECTS

Raw Total Number of Variables (De + Di + Ge + Se)
per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	43	19
2	43	44
3	25	28
4	36	25
5	15	16
6	52	39
7	44	28
8	40	13
9	49	52
10	12	34
11	33	61
12	34	46
13	24	

Raw Number of Simple Verb Deletions
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	2	4
2	4	3
3	0	3
4	7	3
5	0	4
6	1	9
7	4	6
8	3	4
9	7	13
10	0	5
11	3	10
12	0	7
13	3	

Raw Number of Modal Operators of Necessity (MON)
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	1
2	0	0
3	0	0
4	0	0
5	3	0
6	4	0
7	0	0
8	0	0
9	0	0
10	0	0
11	1	0
12	0	1
13	0	

Raw Number of Modal Operators of Possibility (MOP)
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	1
2	0	2
3	0	0
4	0	1
5	0	0
6	6	1
7	3	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	1	

Raw Number of Distortions (Di)
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	30	7
2	28	19
3	16	3
4	17	10
5	11	3
6	11	6
7	32	11
8	22	5
9	17	12
10	8	9
11	18	19
12	24	15
13	13	

Raw Number of Lack of Referential Index (LRI) Statements
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	11	3
2	7	17
3	6	15
4	8	4
5	0	4
6	16	13
7	1	7
8	13	3
9	17	9
10	4	9
11	3	12
12	8	9
13	4	

Raw Number of Universal Quantifiers (UQ)
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	2
2	2	3
3	0	0
4	3	1
5	0	0
6	8	2
7	0	0
8	0	0
9	0	1
10	0	1
11	2	7
12	0	6
13	1	

Raw Number of Unspecified Verbs (UV)
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	1
2	0	0
3	1	7
4	0	5
5	0	5
6	0	7
7	0	4
8	1	0
9	6	15
10	0	7
11	2	8
12	0	3
13	2	

Raw Number of Cause-Effect (CE) Statements
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	0
2	2	0
3	2	0
4	1	1
5	1	0
6	4	1
7	1	0
8	0	1
9	2	0
10	0	3
11	4	2
12	2	2
13	0	

Raw Number of Mind-Reading (MR) Statements
Per Set of Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	2	0
7	3	0
8	1	0
9	0	2
10	0	0
11	0	2
12	0	3
13	0	

Raw Number of Lost Performatives (LP) Per Set of
Five TAT Stories

Subject	Group	
	Normal	Patient
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	1
12	0	0
13	0	

APPENDIX F

TEST SCORES CORRECTED FOR LENGTH

*Total Number of Dependent Variables (De + Di + Ge + Se)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	51.60	34.20
2	60.20	83.60
3	35.00	53.20
4	43.20	47.50
5	19.50	30.40
6	46.80	74.10
7	44.00	53.20
8	76.00	24.70
9	73.50	98.80
10	22.80	64.60
11	46.20	109.80
12	37.40	50.60
13	45.60	

* Corrected for Length

*Number of Deletions (De)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	2.40	10.80
2	5.60	9.50
3	0.00	5.70
4	8.40	7.60
5	3.90	7.60
6	9.90	19.00
7	7.00	11.40
8	5.70	7.60
9	10.50	24.70
10	0.00	9.50
11	5.60	18.00
12	0.00	8.80
13	7.60	

* Corrected for Length

*Number of Distortions (DI)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	36.00	12.60
2	39.20	36.10
3	22.40	5.70
4	20.40	19.00
5	14.30	5.70
6	9.90	11.40
7	32.00	20.90
8	41.80	9.50
9	25.50	22.80
10	15.20	17.10
11	25.20	34.20
12	26.40	16.50
13	24.70	

* Corrected for Length

*Number of Generalizations (Ge)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	13.20	10.80
2	12.60	38.00
3	9.80	41.80
4	13.20	19.00
5	0.00	17.10
6	21.60	41.80
7	1.00	20.90
8	26.60	5.70
9	34.50	47.50
10	7.60	32.30
11	9.80	48.60
12	8.80	19.80
13	13.30	

*Corrected for Length

*Number of Semantically Ill-Formed Statements (Se)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	0.00
2	2.80	0.00
3	2.80	0.00
4		1.90
5		0.00
6	5.40	1.90
7	4.00	0.00
8	1.90	1.90
9	3.00	2.80
10	0.00	5.70
11	5.60	9.00
12	2.20	5.50
13	0.00	

* Corrected for Length

*Number of Simple Verb Deletions (SVD)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	2.40	7.20
2	5.60	5.70
3	0.00	5.70
4	8.40	5.70
5	0.00	7.60
6	0.90	17.10
7	4.00	11.40
8	5.70	7.60
9	10.50	24.70
10	0.00	9.50
11	4.20	18.00
12	0.00	7.70
13	5.70	

*Corrected for Length

*Number of Modal Operators of Necessity (MON)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	1.80
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	3.90	0.00
6	3.60	0.00
7	0.00	0.00
8	0.00	0.00
9	0.00	0.00
10	0.00	0.00
11	1.00	0.00
12	0.00	1.10
13	0.00	

* Corrected for Length

*Number of Modal Operators of Possibility (MOP)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	1.80
2	0.00	3.80
3	0.00	0.00
4	0.00	1.90
5	0.00	0.00
6	5.40	1.90
7	3.00	0.00
8	0.00	0.00
9	0.00	0.00
10	0.00	0.00
11	0.00	0.00
12	0.00	0.00
13	1.90	

* Corrected for Length

*Number of Lack of Referential Index (LRI) Variables
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	13.20	5.40
2	9.80	32.30
3	8.40	28.50
4	9.60	7.60
5	0.00	7.60
6	14.40	24.70
7	1.00	13.30
8	24.70	5.70
9	25.50	17.10
10	7.60	17.10
11	4.20	21.60
12	8.80	9.90
13	7.60	

* Corrected for Length

*Number of Universal Quantifiers (UQ)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	3.60
2	2.80	5.70
3	0.00	0.00
4	3.60	1.90
5	0.00	0.00
6	7.20	3.80
7	0.00	0.00
8	0.00	0.00
9	0.00	1.90
10	0.00	1.90
11	2.80	12.60
12	0.00	6.60
13	1.90	

* Corrected for Length

*Number of Unspecified Verbs (UV)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	1.80
2	0.00	0.00
3	1.40	13.30
4	0.00	9.50
5	0.00	9.50
6	0.00	13.30
7	0.00	7.60
8	1.90	0.00
9	9.00	28.50
10	0.00	13.30
11	2.80	14.40
12	0.00	3.30
13	3.80	

* Corrected for Length

*Number of Cause-Effect (CE) Statements
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	0.00
2	2.80	0.00
3	2.80	0.00
4	1.20	1.90
5	1.30	0.00
6	3.60	1.90
7	1.00	0.00
8	0.00	1.90
9	3.00	0.00
10	0.00	5.70
11	5.60	3.60
12	2.20	2.20
13	0.00	

* Corrected for Length

*Number of Mind-Reading (MR) Statements
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	1.80	0.00
7	3.00	0.00
8	1.90	0.00
9	0.00	3.80
10	0.00	0.00
11	0.00	3.60
12	0.00	3.30
13	0.00	

* Corrected for Length.

*Number of Lost Performatives (LP)
Obtained by Normal and Patient Subjects

Subject	Group	
	Normal	Patient
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	0.00	0.00
8	0.00	0.00
9	0.00	0.00
10	0.00	0.00
11	0.00	1.80
12	0.00	0.00
13	0.00	

* Corrected for Length

APPENDIX G

SCORES OBTAINED BY TWO RATERS AND EXAMINER
FOR THREE SUBJECTS' SETS OF STORIES

Raw Scores Obtained by Two Raters

Subject	Rater	SVD	MON	MOP	DI	LRI	UQ	UV	CE	MR	LP
I	1	3	3	1	6	4	5	1	0	0	1
	2	4	1	0	9	1	2	0	3	0	0
II	1	2	0	1	8	4	0	1	2	0	0
	2	1	0	1	4	1	1	2	1	0	0
III	1	17	2	1	1	4	3	1	0	0	0
	2	3	0	1	7	1	1	0	0	0	0

Scores Obtained by Two Raters and Examiner (E)
(Corrected for Length)

Subject	Rater	SVD	MON	MOP	DI	LRI	UQ	UV	CE	MR	LP
I	1	3.6	3.6	1.2	7.2	4.8	6.0	1.2	0	0	1.2
	2	4.8	1.2	0	10.8	1.2	2.4	0	3.6	0	0
	E	4.2	1.4	0	25.2	4.2	2.8	2.8	5.6	0	0
II	1	3.8	0	1.9	15.2	7.6	0	1.9	3.8	0	0
	2	1.9	0	1.9	7.6	1.9	1.9	3.8	1.9	0	0
	E	5.7	0	1.9	19.0	7.6	1.9	9.5	1.9	0	0
III	1	30.6	3.6	1.8	1.8	7.2	5.4	1.8	0	0	0
	2	5.4	0	1.8	12.6	1.8	1.8	0	0	0	0
	E	7.2	1.8	1.8	12.6	5.4	3.6	1.8	0	0	0