THE RELATIONSHIP BETWEEN SYMPTOMATOLOGY AND THE DEGREE OF REPRESSION OF SEXUAL CONFLICT

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
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1974

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ABSTRACT

THE RELATIONSHIP BETWEEN SYMPTOMATOLOGY AND THE DEGREE OF REPRESSION OF SEXUAL CONFLICT

Ву

Ira Moses

A continuing line of research (Reyher 1958, 1961, 1967; Perkins and Reyher 1971; Burns 1973; and Sommerschield and Reyher 1973) has consistently found a relationship between the frequency and type of symptom elicited in the laboratory and the degree of repression of hypnotically implanted sexual and/or anger conflicts. The purpose of the present investigation was to test whether 1) the symptom-repression relationship could be replicated utilizing non-hypnotic techniques and 2) the symptom-repression relationship could generalize to symptoms in every-day life: repression would vary for symptoms of skin disorders (which would have the highest repression scores), respiratory ailments (which would have intermediate repression scores), and head-aches (which would have the lowest repression scores).

With eyes closed, subjects (N=25) were read a false story (paramnesia) designed to arouse sexual feelings towards an attractive older woman. The subject was asked to revisua-



lize the story and then to describe five minutes of free imagery (whatever images that come to the mind's eye).

Subjects were queried each minute for feelings and bodily sensations.

The experimental hypothesis could not be tested since S's responses to the Cornell Medical Index could not be categorized into mutually exclusive symptom groups. Unexpectedly, this procedure, compared to the previous research utilizing hypnosis, produced a greater variety of symptoms in the laboratory in a briefer period of time. Analysis of the symptoms elicited in the laboratory showed a significant correlation between S's degree of repression of Oedipal conflict and frequency of symptoms. Type of symptom was also shown to vary with the degree of repression. Fluctuation of symptomatology determined by variations in the degree of repression, was also considered in the context symptom change during the course of psychotherapy.

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THE RELATIONSHIP BETWEEN SYMPTOMATOLOGY AND THE DEGREE OF REPRESSION OF SEXUAL CONFLICT

Ву

Ira Moses

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

DEDICATION

To Marsha
who taught me the most about psychology
by teaching me about love.

ACKNOWLEDGEMENTS

I express appreciation to Dr. Joseph Reyher, not only for understanding my impatience with research, but for exposing me to a contagion of enthusiasm for it. I thank Dr. Norman Abeles for his systematic approach to psychotherapy research, and to Dr. Griffin Freed for helping me articulate my proposal more clearly. Special thanks to Dr. Albert Aniskiewicz for coming to my rescue by substituting on my committee in Dr. Freed's absence, and for his appreciation of this line of research. Special appreciation goes to my mother-in-law, Frances Belman, for typing this manuscript without censoring the obscenities rampant herein.

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TNTRODUCTION

In the psychoanalytic tradition, Alexander (1950) proposed that a specific psychosomatic symptom is a function of a particular constellation of drives and defenses, or as contrastingly proposed by Wolff (1950), a given symptom is hereditarily determined and represents an individual idiosyncratic pattern of reaction. Until recently, due to the lack of a laboratory method for producing psychopathology, these two opposed and influential theoretical positions could not be evaluated. A reliable method of producing a wide range of psychopathology was first reported by Reyher (1958, 1961, 1967) who found that the degree of spontaneous repression of posthypnotically activated anger (toward an authority figure), combined with a destructive impulse, was related to the type of symptom produced. He (1967) also reported that the GSR, frequency of symptoms, and number of types of symptoms were negatively correlated with the degree of repression. These relationships were subsequently verified by Perkins and Reyher (1971), Burns (1973) and Sommerschield and Reyher (1973). In order to evaluate the theoretical positions of Wolff and Alexander, Sommerschield and Reyher

(1973) compared an anger-aggression conflict with an Oedipal sexual striving. No difference in the degree of
spontaneous repression or type of symptoms were found.

The type of symptom was neither solely attributable to a
hereditarily predetermined response to stress nor to the
type of drive constellation. Their conceptualization of
symptom choice is as follows:

We contend that the degree of repression of a drive (any drive) is the crucial factor in the production of a particular symptom. As repression begins to weaken, anxiety is released and produces psychosomatic symptoms. As repression continues to weaken, anxiety increases in intensity and affects more physiological functions until, at some point, the drive itself begins to achieve expressive or symbolic representation in the subject's behavior and/or symptoms. Further weakening of repression permits the drive or drive-related impulses to find more direct outlets with increasing awareness until full awareness or consciousness is achieved and the drive ceases to be pathogenic. In terms of this formulation, the drive per se has nothing to do with the specific form of a psychosomatic symptom, but it has everything to do with the specific form of a symbolic symptom such as a hand-washing compulsion or a snake phobia. Nevertheless, the degree of repression determines whether a symptom will be a compulsion or a phobia with the latter representing less repression (Burns 1972).

As a means of observing more closely the repressive process and its relationship to symptom formation, Burns (1972) used free imagery instead of the activation of posthypnotic conflict using conflict words. He confirmed the relationship between degree of repression and type of symptom, and showed that the onset of a symptom was concomitant with

GSR activation, but not with an increase in drive representation. Although in the right direction, the correlations between degree of repression and both frequency and type of symptom were not significant.

The role of demand characteristics appears to be very limited since simulating subjects, with the exception of Burns' investigation, consistently did not report as many symptoms. Burns (1972) found the symptoms in a simulating control group to be significantly less numerous than in the hypnotically treated subjects. The occurrence of symptoms in Burns' simulating Ss may very well have been due to his use of a paramnesia involving Oedipal sex as the stimulus for free imagery. Free imagery (Reyher 1962), particularly when it is used in the context of emergent uncovering psychotherapy, is intrinsically uncovering and readily activates unresolved and pathogenic Oedipal complexes.

Reyher and Basch (1970) further substantiated the repression-symptom relationship by the use of a nonhypnotic technique. Correlating self-report, and personality inventory items, they found a significant relationship between the frequency of symptoms and the degree of repression.

The purpose of the present investigation was to test further the relationship between degree of repression and type of symptom by preselecting subjects on the basis of their having different symptoms in everyday life and com-

paring them in terms of the degree of repression of major drives. The symptom types under investigation were skin disorders, respiratory ailments and headaches. It was specifically hypothesized, on the basis of earlier research, that the degree of repression of major drives would be greatest for individuals with skin disturbances and least for those with headaches. A formal hypnotic induction was not involved, and no attempt was made to intensify conflict.

METHOD

Subjects

Twenty-five volunteer male undergraduates ranging in age from 17 to 20 years participated in this experiment.

Materials, Techniques and Experimental Setting

The Cornell Medical Index (CMI), State-Trait Anxiety Inventory (STAI), the Stern-Reyher Symptomatic Reaction Scale (SRS), and the Reyher Drive Activation Scale were used to assess S's symptom history, consciously experienced anxiety, symptoms elicited in the laboratory, and level of drive expression, respectively. The laboratory was an accoustically quiet room equipped with a comfortable reclining chair, tape recorder, and a stop watch.

Free imagery was used to produce data for assessing degree of drive activation.

Developed by Reyher (1960, 1969), free imagery is used as a psychotherapeutic and research procedure to uncover the aims and objects of repressed drives. By requesting S to close his or her eyes and describe images "that come into your mind's eye," S is impelled to abandon

secondary process, symbolic levels of representation (words and speech) for a protosymbolic level (images). Unlike words, protosymbols, according to Warner and Kaplan (1967), contain a physical resemblance to their referrents and therefore bring the subject into a more concrete and intimate relationship with repressed drives (primary referrents). According to Reyher, "there is a reciprocal relationship between visual image and drive; that is, an image will stimulate the drive that it depicts and a drive will produce an image to depict itself (the drive will seek out an appropriate object)." As drives become intensified, observes Burns (1974), a disequilibrium between anxiety-producing impulses and the inhibition against them (repression) occurs; this process results in a variety of outcomes: symptomatology, acting out of impulse, or increased repression.

The CMI was developed (1949) as a nominal selfreport scale to collect medical and psychiatric history.
The test consists of 195 questions requiring a "yes" or
"no" response and takes approximately 10 to 20 minutes to
fill out. The questions relate to four classes of functioning: bodily symptoms, past illnesses, family history
and behavior and mood. Related questions are grouped into
18 categories (e.g. Category A concerns eyes and ears,
Category C refers to cardiovascular functions, Category Q
to anger, etc.). Broadman (1952) suggests the use of the

CMI as an index of emotional disturbance. Questionnaires with more than 10 yes responses checked, with more than six omitted responses, more than three yes and no responses, and in cases where three or more responses have been changed, are all considered indicators of emotional disturbances. Hamilton (1962) found that functional somatic symptoms, (responses in the A through L categories), increase in proportion to scores of the psychiatric sections of the CMI, (responses in the M through R categories). Matarazzo (1961) found that the number of medical symptom (A through K) was a good predictor for a number of psychiatric symptoms for medical and psychiatric in- and outpatients (N = 160).

Symptoms elicited in the laboratory were grouped into a hierarchical scale (referred to as the Symptom Reaction Scale - SRS) based on their respective magnitudes on an index of repression. The SRS represents a "...continuum of repression with different types of psychopathology becoming manifest as anxiety producting impulses become more blatantly represented in an individual's awareness." (Sommerschield, p. 279).

The SRS, initially developed by Reyher (1961), delineated 13 symptom categories. Burns (1972) found a .51 correlation between the rank of the drive scores for the symptoms (N=36) generated in his research and the original Symptom Scale. Subsequent revisions by Burns (1973) which

depicted 73 categories and by Stern (1974) which includes 84 categories substantially expanded the original scale. It is the latter revision which is used herein:

SYMPTOMATIC REACTION SCALE (Revised June, 1973)

- RAS, I. Reactions produced by the presumed inhibition (I) of the ascending reticular activating system (RAS) in order of increasing activation:
 - 1. Sleep
 - 2. Sleepiness, yawning
 - 3. Tiredness
 - 4. Feeling of being "drained."
- ANS, S. Reactions of presumed sympathetic innervation, autonomic nervous system (ANS):
 - 5. Tingling
 - 6. Itchiness, weals
 - 7. Sweaty, clammy
- 8. Abdominal pain and gastric distress, "stomach moving."
 - 9. Belching
 - 10. Feeling of malaise
 - 11. Chest pain
 - 12. Cold sensation
 - 13. Goose flesh, shiver
 - 14. Dryness of mouth
 - 15. Tachycardia, heart pounding, pulse
 - 16. Coughing
 - 17. Breathing heavier
- SNS. Reactions of presumed somatic nervous system (SNS) innervation:
 - 18. Tics
 - 19. Tremors
 - 20. Stiffness
 - 21. Tightness
- 22. Muscular aches and pains; also pains described as caused by a specific external source (e.g., "My glasses are hurting my nose.")
 - 23. Tension
 - 24. Shaking
- UD. Reactions of an undifferentiated (UD) nature in which the somatic, autonomic, and psychological components cannot be specified:
 - 25. Uncomfortable
 - 26. Fidgety
 - 27. Jittery

- 28. Nervous
- 29. Shaky
- 30. On edge
- 31. Restless
- 32. Upset
- 33. Funny, uneasy
- 34. Queasy, antsy, stomach empty
- Excitement, hyper, anticipation
- 35.5 Surprise, shock (score here only when not identifiable as DA (66) or some other category.)
- Reactions of presumed parasympathetic (P) innervation (vasodilation), cranial division (C), autonomic nervous system:
 - 36. Sensation of warmth
 - Dizziness, light headed
 - 38. Headache
 - 39. Throbbing in head
 - 40. Pain behind eyes
 - 41. Watery eyes

 - 42. Blushing 42.5 Blood rushing to head
- Sym. Reactions in which the repressed drive is symbolized by the soma or sensory processes:
 - Hysterical symptoms such as blindness, deafness, anesthesia and numbness.
 - Urges indicating that a conversion of affect has occurred, such as urination being equivalent to ejaculation, and hunger being equivalent to sexual impulses.
 - Alteration in body image such as limbs feeling detached, elongated, or fatter; sensation of being heavy, squeezed;
- Sym. Symbolic acting out (AO):
 - Repressed drive acted-out in behavior without awareness e.g., running pencil through closed loop made by forefinger and thumb.
- SED. Somatic (S) expression (E) of drive (D). (To be used only for specific paramnesias.)
 - 47. Tingling
 - Pleasant warm feelings
- Expression of anxiety (EA). The neurophysiological pattern of inhibition and excitation represented by repression is sufficiently weak to permit the experience of arxiety.
 - 49. Troubled, uptight, worried.
 - 50. Apprehensiveness
 - 51. Anxiety
 - 52. Scared, frightened
 - 53. Fearful, afraid
- RSE. Reduction in self-esteem (RSE). Reactions in which there is a perceived disparity between the real and ideal selves.

54. Experience of failure, feeling inadequate, feeling dumb, stupid, idiotic, self-conscious, impotent, powerless, helpless.

Dissociative reactions (DR) in which there is aware-DR. ness of an unknown force influencing one's affect, thinking and/or behavior:

55. State of confusion, inability to concentrate,

bafflement, inability to think.

Includes such reactions as one's thoughts being pushed and pulled but the content of thought cannot be specified; awareness of blocking out something. Strong urges not carried out in behavior, such as wanting to move hands around or to rub something or to get up and dance; feeling confined, restricted, pressured.

57. Something racing up and down.

57.5 Feeling "stoned" or "out of it," or "feel like I'm talking in my sleep," or "even though I'm talking, it's like I'm daydreaming."

DR, PO. Disturbance in physical orientation. (PO).

58. Sensation of floating, sensation of rocking or motion.

59. Out-of-one's-body experience.

DR, CE. Alteration in perception of time, place and identity which disturbs continuity of experience (CE):

60. Disorientation in direction or place.

60.5 Disorientation in time. For example, " I don't even know how long I've been here."

Depersonalization: feels like someone else or 61. experiences a loss of personal identity. Includes talking about oneself in the third person. (Score only when \underline{S} is not using the third person to make a generic statement, e.g. "It's easier to think with your eyes open.")

62. Amnesic and fugue states.

Reactions denoting disturbances of affect (DA) as repressed drives approach the threshold of awareness and conscious apprehension:

63. Apathy, blase.

64. Humorous reaction.

Ego alien affect -- feeling weird, strange, odd, unreal, unnatural, crazy, spooky, foreign. There must be a distinct reference to a negative feeling, surprise, shock.

Superego reactions -- feelings of being alone.

abandoned, guilty, depressed, disgusted.

67. Feeling bothered, feelings of dislike, frustration, impatience, cynicism.

Anger 68.

Neurotic reactions (NR) indicating that the threshold of awareness has been reached and psychological mechanisms

are activated to prevent repressed drives from being experienced and consciously apprehended as part of one's self:

- 69. Obsessive behavior: any perseverative thought, image, tune, verse, etc.
- 70. Compulsive behavior: any intention or behavior designed to increase the order, symmetry or neatness of the room, materials or personal clothing or image. This includes such "mental games" as placing one's foot on the floor so that it is bisected by a tile line or equidistant from two things; mentally drawing lines between things to create pleasing geometrical forms; square corners, etc. Also score any urge to take note of or describe items or features of the room. Also score extended imagery which is highly veridical, i.e., which is purely descriptive of realistic scenes from S's everyday life, but which does not contain identified people or interpersonal events. Also score imagery describing the room.
- 71. Phobias: fear of a specific object in the room. 72. Some attenuation of perception: words getting harder to see.
- 73. Conscious denial of thoughts or affect.
- PR. Psychotic reactions (PR) in which blatant derivatives of repressed drives in awareness necessitate the defense of projection to prevent derivatives from being consciously apprehended as part of one's self:
 - 73.5 Psychotic withdrawal "I'm tired of the world.
 - It's intruding on me."
 - 74. Delusions.
 - 75. Paranoid thinking.
- DP. Reactions in which there is profound disturbance of perception (DP):
 - 76. Hallucinations, positive: seeing a word when it was not presented or seeing something other than a word; also auditory or olfactory.
 - 77. Hallucinations, negative: cannot see words presented.
 - 77.5 Perception breaks down entirely, and "everything seems like it's moving and changing."
- ANS, PS. Reactions produced by presumed innervation of parasympathetic innervation, sacral division, as direct representation in awareness of repressed drives and their objects is imminent and the integration of somatic, autonomic and psychological processes begin to deteriorate. Indicates a failure of defense:
 - 78. Explosive feelings in stomach.
 - 79. Explosive feelings in chest.
 - 80. Flatus.
- A. Reactions in which the experience of anxiety maintaining repression and auxiliary defenses is unattenuated causing the disorganization of behavior:

- 81. Urinary incontinence.
- 82. Fecal incontinence.
- 83. Panic.
- 84. Terror

Spielberger (1960) has developed two brief (20 item) measures of two types of anxiety - State anxiety (A-State) and Trait anxiety (A-Trait). A-State attempts to measure one's transitory emotional states of conditions which are relatively situationally specific. As described by Spielberger, the test instructs the S to depict his or her feelings at a particular moment as specified by E.

The 20 items attempt to elicit S's subjective, conscious-ly perceived feelings of tension, apprehension and heightened ANS activity. Past research, as reported by Spielberger, demonstrates that A-State varies with stress situations and relaxation training. The author suggests use of A-State scale to determine levels of anxiety induced by stressful experimental procedures.

The A-Trait scale is of a similar 20 item construction: however, it requests <u>S</u> to report how he or she <u>generally</u> feels. A-Trait is considered a measurement of stable dispositional reactions to anxiety. A-Trait with a retest reliability of .80, correlates .76 with IPAT and .79 with the Taylor Manifest Anxiety Scale and therefore can be considered a very reliable, as well as time saving, measurement of anxiety.

Correlations between A-State and A-Trait scales

are predicted to vary with the type and amount of stress under which the State scale is given. However, mediam correlations between the two is .47.

Normative samples based on 982 college freshmen show a mean of 38 for the A-Trait scale with SD of 8.2 for males, and a mean of 38.2 with SD of 8.2 for females. A-State scale has a mean of 40.0 and an SD of 7.8 for males and a mean of 39.4 with an SD of 8.6 for females (Spielberger, 1960).

Both A-State and A-Trait scale correlate .70 with Cornell Medical index for normative samples of hospital-ized neuropsychiatric patients. Its independence as an anxiety measure is supported by its lack of correlation with IQ measures and achievement scores.

Since this research, as in the previous line of research, involves experimentally activated conflict as well as activation of symptomatology, questions of ethical considerations must be raised. In order to ascertain any detrimental effects attributable to the experimental technique, a brief questionnaire was administered to provide an opportunity for the subject to address himself to these questions. (Appendix C). Included in the questionnaire is an open-ended item to test the presence of any demand characteristics of the experiment.

Procedure:

The CMI was mailed to S's to be filled out and brought to the experiment. Upon arriving at the experimental laboratory, S was instructed to sit in a soft reclining chair, close his eyes, visualize, and describe a picture of an automobile. There was no casual or anxietyreducing conversation or rapport established with S prior to the implementation of the procedure. If S asked questions of E, E replied in a matter-of-fact tone, "I know you may have a lot of questions and I'll be glad to answer them after the experiment." A stop watch, which was used later in the experiment, was started at this time in order to desensitize S's reaction to the ticking. Criteria for participating in the experiment was \underline{S} 's ability to visualize and describe an automobile for at least 30 seconds. If S stopped before describing his image for 30 seconds, E queried, "Can you describe anything more about it?" All S's, however, satisfied this criterion. S was then asked to keep eyes closed and "visualize this story as I read it to you":

Eisenbud-Sommerschield Story

These events occurred one evening while you were out walking. As you were leisurely walking, your attention was drawn to an attractive, older woman who seemed quite upset. You offered to be of assistance as the woman was about to pass you. Frantically, the woman revealed that she had lost her purse and did not have enough money for her bus fare. Wishing to help the woman, you reached into your pockets and your wallet. You only had a tendollar bill. You then offered to accompany her to the bus

and pay for her fare. She, however, felt very indebted to you and insisted that you accompany her to her apartment in order that she might repay you. Somewhat reluctantly you agree.

Once within her apartment she suggested that you might like to look at her record collection while she left to find some money for the bus fare. When she returned, she seemed very friendly and reluctant to have you leave. After talking about the collection, she offered you a drink and a snack. She then turned on the record player and you danced awhile with the woman. Gradually you became aware of some stimulating, but disquieting thoughts and feelings. She was very good looking and it seemed like such a pity to have all her beautiful softness and curves go to waste. She seemed to be silently inviting you; her closeness, glances, words, and breathing, suggested to you that she was becoming extremely sexually aroused. You were just starting to make love to her when suddenly more thoughts ran through your mind. She was older, respectable, perhaps married, and undoubtedly very experienced. You wondered if you would be able to satisfy her. How traumatic it would be if she laughed at your advances. In spite of these thoughts, you found yourself becoming increasingly excited and aroused. You wanted to make love to her right there, but the telephone rang. While you waited, you became so aroused and excited that you could hardly speak. You made a hurried excuse for leaving, promised to call her back and left the apartment.

After the story was read, <u>S</u> was instructed:

"Keeping your eyes closed, I'd like you to revisualize the story that I have just read to you and describe it to me as you revisualize it." After revisualization, <u>E</u> instructed <u>S</u>: "Keeping your eyes closed, I'd like you to now describe <u>whatever</u> images that come to your mind's eye, making note of any feelings or bodily sensations that you may have." (Tape recorder was activated while instructions were given.) At the end of the instructions, the stop watch was restarted, and at each 60 second interval,

for a total of five minutes, \underline{E} inquired of \underline{S} : (1) "How are you feeling?", and then after \underline{S} 's reply, (2) "Do you have any bodily sensations?" If \underline{S} replied, \underline{E} queried: "In what part of your body?" All other comments by \underline{E} during the free imagery period followed the standarized guidelines adopted by Burns: 1) "What's happening?" if \underline{S} was silent for a period of one minute, 2) "Are you describing what's in your mind's eye?" whenever it was not clear whether \underline{S} was free imaging or free associating; if \underline{S} says "no", or if it seems necessary, \underline{E} says: 3) "Can you just wait for things to come into your mind's eye and describe them for me?" 4) "What was that?" if \underline{S} speaks too low or indistinctly.

After the fifth inquiry, \underline{S} was instructed to open his eyes. \underline{S} was then given three instruments in the following order: A-State anxiety scale, experiment feedback questionnaire, and the A-Trait anxiety scale. A debriefing session then was held in which \underline{E} answered \underline{S} 's questions concerning the experiment and his subjective experience.

Scoring

<u>Drive Activation</u>: Individual protocols of free imagery were scored on an operational scale as reported by Reyher and Burns (1972) and further revised by Reyher

(1974), to determine the degree to which Oedipal drives were activated and represented in visual imagery. imagery was rated on three dimensions: 1) type of drive present, i.e. the presence of drives of sex, anger, selfesteem, and tenderness all received weighted scores of 2 and nonscorable drives received rates of 1; 2) the degree to which the drive is expressed, i.e. if a drive is merely inferred (di) it is weighted by 1, if it is depicted (dp) explicitly it is weighted by 2, if it is recognized (dr) it receives a weight of 4, and if the drive is experienced by S with appropriate affect (de) it is weighted by 8; and 3) the remoteness or blatancy of the derivatives of Oedipal objects, i.e very remote derivatives such as geometric forms and inanimate objects receive very low weights whereas images of parents, woman in the story, etc. receive the greatest weighted scores. Derivatives engaged in interaction are further weighted by scores up to 8. (See Appendix C for further details on scoring.)

Each episode of imagery is scored on the three above dimensions and these scores are multiplied to give a drive activation score for each episode. The degree of repression increases as this drive activation score decreases. Repression is viewed as the obverse of awareness and implies the active inhibition of the drive. The concept of degree of repression is, therefore, a more

comprehensive construct than the degree of awareness.

Each symptom elicited by \underline{S} was scored according to its respective rank on the Stern-Reyher SRS.

RESULTS

Reliability

The interjudge reliability for the Burns-Reyher Drive Activation Scale was computed by Spearman Rho for ten subjects picked at random. A correlation of r = .82 was found between two independent judges who had no prior interjudge training sessions. Utilizing the revised Reyher Drive Activation Scale, an interjudge reliability of .90 was found based on prior collaboration and training on scoring.

Experimental Hypothesis

The experimental hypothesis could not be tested because \underline{S} 's responses on the CMI could not be grouped into the exclusive symptom groups under investigation (e.g. \underline{S} 's with headaches also had respiratory complaints, etc.)

Unexpected Findings

Although only a few symptoms were expected because of the uncovering properties of emergent uncovering psychotherapy, we were surprised and amazed by the profusion of symptoms that were produced (Appendix A). Three illustrative protocols are given below, two of which depict

high drive scores and corresponding high symptom scores, while the remaining one is indicative of the extensive repression and low drive scores.

Code: Q-l How are you feeling?

Q-2 Are you having any bodily sensations?

Q-3 In what part of your body?

Drive Score rank #24 f-symptom rank #25

SUBJECT #10201

(Silence)..should I do it right now?..shall I describe the story again? .. (E repeats the instructions) ... I'm walking down a lonely street..dark..kind of coldness, being upstairs in the room with her. starting to make love with her..kinda nervousness..very nervous.. my hand is very shaky..eyes kind of jumpy..(Q-1) kind of nervous and kind of relaxed..(Q-2) no..my arms seem kind of stiff..my biceps.. ummm the room being very dark and drabby.. I kind of picture myself being in the room kind of out of place..hands in my pockets, shoulder kind of inwards..arms feel real tight.. legs feel that way too and uh that's about it, can't think of anything else..(Q-1) tired..(Q-2) my chest seems heavy .. head seems kind of high or light..feel like..can't seem to think of any more images. (Q-1) very tired and kind of small..feel like the chair is bigger than I am..throat seems kind of tight and clogged up and it's cleared my head .. seems very weird .. seems heavy .. hard to describe .. eyes seem nervous..arms seem to be quivering..football stadium... I see a few people in the upper deck..a blue car..an old one, 1949 or something like that..slanty back top..a big thing..big tires..all the leaves on the trees and different colors..(Q-1) very tired..hard to describe..speechless sometimes I can't get the words out..seems as if I'm going up and down..next thing you know I'm high and then I'm sinking in this chair..back up and back down..my room ..pretty nice place..kinda drabby..over on Abbott Road.. really nice place, kinda quaint..thinking of the Collingswood entrance..it's a big mess over there..have to walk around it..weary..arms seem to be just there..head is sinking slowly up and down..legs feel stiff, that's it..(Q-2) a lump in my throat..hands feel funny the way they're gripped.

Drive Score rank #15 f-symptom rank #24

SUBJECT #1000

A big eyeball.. one lonely eye out in space..now I see stars..stars moving around..trees..in background.. sidewalks completely empty..early morning sun rising up.. (Q-1) hot..warm, very warm.(Q-2) no feeling from the waist down.. I feel comfortable..tall building..city..lots of people..dark clouds..thunderstorm..lots of rain..lot of water over the sea..black sea..huge waves..submarine below the sea..diving and swimming now..(Q-1) no change..(Q-2) no..flying..flying in a helicopter..now I feel like I'm turning around..like I'm spinning..how I'm diving down into a field..closer and closer to the field..back up again..(Q-1) I'm moving back and forth..(Q-2) excitement like I'm full of electricity..it's completely dark..I'm floating in a void...nothing in anyway at all..I'm spinning around faster and faster..twirling..feels like my whole body is spinning head over heals..nothing anywhere but me. getting dizzy. now I'm laying flat and spinning around..(Q-1) dizzy tense..(In what way?)..in my toes and in my head. I'm spinning around still. one half is going one way and the other half is going the other way..it's uncomfortable..I don't want to leave the black void..there's nothing around.. I hate getting a bearing.. I don't want to see anything or I'll get a bearing and stop seeing anything.. see the sun..just the sun and the dark, it's pulling me.. getting closer and closer .. room is vibrating back and forth .. still spinning around..(Q-1) almost sick, in my head..(Q-2) fingers are cold, chest is sweating, still feel like I'm vibrating.

Drive Score rank #11
f-symptom rank #5

SUBJECT #1001

Patterns....starting to go around...nothing in my head right now just thinking what this room is like... I can't really remember it..(Q-1) OK..(Q-2) my feet feel feel cramped...thinking of the tape recorder...thinking of my accounting...trying to think of my stereo at home.listening to it.......(Q-1) a little warm...(Q-2) in my upper half...thinking of the car again... it is still white ..my eyes don't see anything...now I'm thinking of trees...(Q-1) fine..(Q-2) no..thinking of a girl...thinking of walking over here...see Pat...trees...people....(Q-1) fine...(Q-2) no...thinking of the river now...watching it go over the falls..and the ducks..football field...just walking around the campus.

Twenty-three out of the 25 <u>S</u>s made comments scorable as symptoms on the Stern-Reyher SRS, ranging from 0 to 20 with a mean of 5.7. Table 1 is a correlation matrix for the five dependent variables.

TABLE 1

Spearman Rank Order Correlations Between Average Drive Scores (Drive), Frequency of Cornell Medical Index Symptoms (CMI), A-State and A-Trait Anxiety, Total Frequency of Symptoms (f-symp), and Frequency of Different Types of Symptoms (f-type)

	CMI	A-STATE	A-TRAIT	f-symp	f-type
DRIVE	•09	• O1+	•07	•39**	• 30
CMI		•07	•42**	•27	•33**
A-STATE			.48**	•16	•11
A-TRAIT				•16	•15

*p < .05 **p < .025

A significant (r = .39, p<.025) correlation was found between the total frequency of symptoms reported and the average drive score (degree of repression), thus supporting the previously cited studies. However, the frequency of different types of symptoms (f-type), which was computed by scoring only once the appearance of the same symptom just missed reaching a significant correlation (.05 level of confidence equals .33) with the degree of repression.

The frequency of CMI symptoms correlated significantly (r=.42) with trait anxiety but not with state anxiety. The significant correlation was expected from evidence which has previously demonstrated the relationship between anxiety and medical symptomatology. (Spielberger 1960). A significant .33 correlation between the frequency of symptom types elicited in the laboratory and the frequency of CMI symptoms was found. Subjects endorsing more symptoms on the CMI tended to have a larger variety of symptoms in the lab.

Since neither measure of anxiety correlated with frequency of symptoms nor with frequency of different symptom types, the experimentally activated symptoms, therefore, cannot be merely attributed to consciously experienced anxiety reactions. The significant inter-test correlation of the state and trait anxiety (r = .42) was consistent with findings reported in the test manual (Spielberger).

Degree of repression: The obtained profusion of symptoms afforded us with another opportunity to verify the relationship between the degree of repression, frequency and type of symptoms. Burns scored the degree of drive activation (repression) for the visual episodes before, during and after the appearance of symptoms. Unfortunately, this degree of precision was not possible in

the present investigation because the manifestation of symptoms was usually reported only after a fixed period of time (one minute) when the subject was queried. lack of such precision in the present investigation presented a serious problem because average drive scores from this fixed interval would not reflect the wide and rapid fluctuations in the degree of drive representation. Imagery depicting sexual intent towards an older female can be followed immediately by remote images such as geometrical forms, etc. The average drive score for these two visual episodes might be the same as another subject whose drive score is based on visual episodes depicting intermediate degrees of drive. If the relationship between degree of repression and type of symptom holds for these data, then the former subject should have manifested a symptom which is higher on the SRS than the latter sub-Therefore, the most rational procedure was to compute the correlation between the highest drive score and the highest SRS score of the total five minute period of free imagery. As expected, the obtained Spearman Rho correlation between highest drive score and the highest SRS score was .75 which is significant at less than the .01 level.

The relationship between degree of repression and the number of symptoms was assessed by correlating the highest drive score with the range between the lowest and

the number of symptoms was assessed by correlating the highest drive score with the range between the lowest and highest symptom on the SRS. As the drive achieves greater er representation in awareness, it nevertheless still produces psychosomatic symptoms as well as symptoms produced by the drive itself no matter how high their value is on the SRS. The obtained correlation of .65 was significant at the .01 level.

Table 1 represents the same analysis using less precise mean scores instead of highest scores and shows that the .39 correlation between the mean drive activation score and the frequency of symptoms is, as was expected, substantially smaller but nevertheless significant at the .03 level of confidence. The .30 correlation between mean drive and type of symptom just missed achieving the .05 level of significance.(.33).

DISCUSSION

The experimental hypothesis could not be tested since all subjects reported either a variety of symptoms or symptoms which were not being investigated. In order to test the experimental hypothesis, thousands of <u>S</u>s would have to be screened with the CMI to locate enough <u>S</u>s to fill each of the mutually exclusive symptom groups we had set out to study.

The extremely pathogenic nature of the procedure was not only surprising but remarkable. The subject merely is asked to close his eyes without ado and to visualize a story that is read, revisualize the story after E was finished, and then report five minutes of free imagery. There are several ways to account for the abundance of symptomatology. One is that the procedure is an indirect hypnotic induction and that the absence of intent to create conflict kept S's defenses at a minimum. Recent investigations (Reyher and Wilson, 1973) have shown that indirect means of hypnosis are just as effective as formal methods. All that is required of S is to remain passive while the operator directs his attention and behavior. In all previous investigations in this line of inquiry, a formal hypnotic induction was performed, during which S was instructed to push the story (paramnesia) to the back of his

mind and that upon awakening he would be overwhelmed by impulses upon the presentation of certain cue words. The paramnesia implanted during hypnosis consequently places <u>S</u> in an acute conflict since the female object in the paramnesia (an attractive older woman) is too blatant a derivative of his mother. <u>S's spontaneous derivatives</u> of Oedipal strivings such as experienced in dreams and fantasies, are usually much more remote. This explanation is consistent with the fact that most of the subjects did not depict a continuation of the paramnesia, nor always depict females, during their five minutes of free imagery. Females appearing in imagery were usually girl friends or other females in non-sexual circumstances. (This is similar to observations reported by Burns.)

An alternate explanation is that hypnosis was not involved. Having \underline{S} visualize himself in a situation with such strong Oedipus complex overtones, stimulates his own unresolved Oedipus strivings which produce anxiety and psychopathology. The capacity of directed visual imagery as well as free imagery to produce affective responses is well known and is the basis for its use in systematic desensitization and emergent uncovering psychotherapy.

Another explanation for the present data is that the demand characteristics of the research were responsible for the symptomatic responses of $\underline{S}s$. In support of this explanation is the fact that \underline{S} was given the CMI be-

fore he was run through the experimental procedure and that he was queried five times as to his feelings and sensations. He might have erroneously inferred that we wanted him to act as if he were expected to have symptoms even if the procedure and other aspects of the instructions were not obvious in this regard and the experimenter was not expecting very much psychopathology. Opposed to this explanation are the results of Veenstra (1969), Karnilow (1971) and Wolfe (1971) in what turned out to be the use of an ineffective paramnesia (Karnalow 1973); they failed to produce any psychopathology in their hypnotized Ss despite their intent to do so by using obvious conflict-producing procedures which have been standard in this line of research. Larison (1973), using the same ineffective paramensia, incorporated an amnesia versus noamnesia condition and queries versus no queries condition and found no differences between them on the dependent variables. Even though some symptoms were produced, the paramnesia was obviously less pathogenic than the others that have been used. Using the same design and procedure as in his earlier investigation (the ineffective paramnesia), Karnilow (1973) employed the same Odeipus paramnesia used in the present investigation and produced many symptoms. Thus, the productions of symptoms appears to depend upon the paramnesia, not the experimenter, the amnesia, or the inclusion of queries by E. Finally, the most important consideration of all is that the type and frequency of

symptoms entered into systematic and significant relationship with the degree of repression. Most of the symptoms elicited by \underline{S} during the experiment (such as shrinking in size, floating, depersonalization, somatic delusions, spinning around and anesthesias) are clearly of a different quality than those on the CMI.

The transparent symbolism of some of the protocols warrants discussion because of their intrinsic interest. In the protocol of Subject #1021, the subject saw himself starting to make love to the woman during the first minute of free imagery. Inferences of the underlying psychodynamic processes are as follows: the generation of anxiety is indicated by the psychosomatic symptom of being nervous and shaky. His repugnance for his Oedipus strivings is represented by the room becoming dark and drab. the older woman in the paramnesia was much too blatant a derivative or representation of his Oedipus complex, he was no longer able to see images. Further evidence of S's Oedipus complex was provided by the concomitant feelings of inadequacy manifested by feeling small, his shoulders turning inwards, and his hands in his pocket. Other facets of the Oedipus complex emerge as intimidating symbols of a potent, phallic father in his imagery. These are the big 1949 car with big tires followed by the image of trees, and by his inability to talk (aphonia). Unconscious wishes for intercourse with mother were expressed somatically by

the delusion of his body moving up and down followed by further expressions of repugnance, viz., drabness, and the Collingwood entrance to the university being a big mess. The wish for intercourse also was represented somatically by his legs feeling stiff and the resulting guilt was represented by the hysterical symptom of a lump in his throat.

The S's sensation of moving up and down, the stiffness of his arms and legs, feeling heavy, the turning inward of his shoulders, speechlessness, and the lump in his throat are all indications of hysterical symptoms.

Protocol #1000 also is of marked interest, as are most of them. Our inferences for this one are that the stimulation of his Oedipus complex produced a feeling of being alone or abandoned (lonely eye, empty sidewalks) as a consequence of his incestuous wishes symbolized by the rising sun (growing erection). At this point the initial symptom of being warm was psychosomatic, indicating that anxiety was being generated, followed by a hysterical anesthesia, including the classical labelle indifference, from the waist down. The tall building, submarine, thunderstorm, huge waves, diving and swimming and rain symbolize the erect penis, intercourse, ejaculation and semen. The helicopter diving and pulling up and the moving back and forth also are symbols of intercourse; and the feeling of excitement and electricity reflect the activation of

lust or libido. The spinning sensation is an hysterical, somatic delusion representing intercourse; the sensation of being dizzy in his toes is another of the many illustrations in this and the other protocols of the appendages of the body being used as phallic symbols. One of the most remarkable symptoms in all our protocols occurred when he felt that one half of his body was spinning one way and the other half was spinning in the opposite direction; that is, in a clockwise and counterclockwise direction concurrently. This has only occurred twice in our experience with emergent uncovering in psychotherapy and it strongly suggests that one side of the body, the left, symbolizes the bad, repressed impulses and the other side, the right, symbolizes good conscience or superego. The activation of Oedipus strivings stimulates both sides of the conflict simultaneously, thereby producing the feeling of turning in both directions at the same time. This symptom was followed by his statement, "I don't want to leave the black void" which suggest the womb or uterous and a desire of not wanting to get out by getting a bearing. Retrospectively this explicates the initial space analogy. Finally he experiences the somatic delusion of being pulled by the sun (attracted by his mother), vibrating back and forth (intercourse), an intensification of psychosomatic symptoms (feeling sick and sweaty), along with the hysterical reaction of his fingers being cold.

Protocol 1001 is indicative of subjects having a relatively low drive score and a paucity of symptomatology. In this subject we can see the instant activation of repression as depicted by the remote derivatives (patterns) which immediately followed S's revisualization of the paramnesia. The onset of the first symptom (feet is cramped) appears to follow the image of the room which may be considered symbolic of the womb. Images appear to dissipate into thoughts of his activities at home. approaching closer to the Oedipal object). The symptom changes to a sensation of warmth (sexual arousal) which corresponds to his approach to his mother at home. The images suddenly shift to the car and trees (phallic objects which can be considered derivatives of father). Subsequent to the phallic images there is the appearance of a more acceptable sexual object than the mother in the representation of a girlfriend (Pat) and the symptoms disappear.

As transparent as these remarkable protocols may be to some observers, in emergent uncovering psychotherapy many clients eventually achieve blatant depiction without the benefit of interpretations of making love to his mother along with the retaliation of the opposite sexed parent, sometimes with mutually murderous confrontation. These often take very regressed expression in the form of infantile oral, anal or cannabalistic fantasies; however, these

repressed fantasies emerge generally only after months of psychotherapy. Because of the relative blatancy of visual depiction and the outcropping of vivid psychopathology after only five minutes in experimental subjects, we plan to use this paramnesia at the very beginning of psychotherapy with clients hopefully to accelerate the process of uncovering. Administering a variety of paramnesas designed to stimulate different commonly encountered repressed conflicts may operationally define areas of conflict that need to be resolved in psychotherapy. Psychodiagnosis therefore would become more objective and relevant.

The data of Sommerschield and Reyher (1973), Burns (1972), Karnilow (1973) and the present research all are consistent with Freud's observation that hysterical symptoms represent a fixation at an early genital stage of libidinal organtion reflecting an unsuccessful repression or resolution of the Oedipus complex. These investigations have in common the use of the same Oedipus paramnesia. This is particularly impressive when considered in relation to the other investigations (Karnilow, 1973; Larison, 1973; Perkins and Reyher, 1971; Reyher, 1958, 1961, 1967; Sommerschield and Reyher, 1973) in this line of inquiry which used an anger-aggression paramnesia exclusively, or in addition to the Oedipus paramnesia, and only produced a few hysterical symptoms.

Two of the items on the questionnaire considered the ethical issues of this technique which activates symptoms. The subjects' responses apparently reveal that this procedure was not particularly stressful or upsetting. Eighty-four percent (21) of the subjects reported they were treated "very well" or "fairly". Sixteen percent (4) reported some negative feelings about the experiment; however, these reactions do not appear to be uniquely attributable to this procedure: "treated like a statistic", "guinea pig". Criticisms of the experiment were distributed as follows: seventy-two percent reported no criticisms, twelve percent complained of some frustration of the task to report images, and 16 percent (4) felt uncomfortable with equipment in the room or with the presence of the E.

Suggestions for Improving Design and Future Research

Since \underline{S} 's usually did not report symptoms spontaneously, but rather waited until queried, some accuracy in assessing the degree of repression was sacrificed. Additional instructions which would facilitate the timing of \underline{S} 's responses may be ameliorative. Since it has already been shown that demand characteristics for symptom production are minimal, the additional instruction of "describe any feeling or bodily sensation you have immediately" may clarify the procedure for \underline{S} and increase the preciseness

of repression scores.

Previous research, Sommerschield (1973), has shown no significant differences for Oedipal as compared to anger conflicts. A duplication of this study utilizing non-hypnotic techniques as employed in this experiment appears to be in order. Furthermore, the Oedipal conflict per se must be viewed as not merely a sexual conflict but rather a complex constellation of conflicts: drives towards opposite sex parent, aggressive and hostile fantasies toward same sex parent, fear of loss of love and retaliation, feelings of inadequacy. Which components or combinations of these conflicts are attributing to the symptom production remains unanswered. The use of a series of paramnesias is indicated for comparison of relative pathogenicity. Mahl's (1971) discussion of objectively unpleasant stimuli offers some suggestion for future paramnesias: frustration, threat to physical integrity, loss of love object, separation, loss of self esteem, etc. A comparison of various paramnesias can provide further data on the role of drive constellations on symptom etiology.

Expanding the subject population to include females, clinic populations, and increased age ranges are
some logical extensions of this research. Perhaps a large
N study to collect normative data on symptom frequency,
types, and repression would be another step towards a
systematic study of experimental psychopathology.

Since the CMI excludes many symptoms appearing on the SRS and many psychogenic symptomatology, no adequate comparison could be made between the symptoms appearing in the laboratory and those in S's everyday life. Future research is planned which will utilize the SRS and a psychological symptom checklist as a subject feedback questionnaire which will be administered after the experimental procedure. Interesting comparisons could also be investigated between degree of repression, experimentally activated symptomatology, and physical disease patterns reported by subjects.

Clinical Validation

Clinical validation of theoretical constructs developed in the laboratory is always desirable. Fortunately, this researcher was engaged in psychotherapy training during the course of this research project. The following protocol provides a quite dramatic verification of the degree of repression theory. The client, male, age 26, seen 5 times per week for psychodynamic psychotherapy, quite spontaneously elicits a complaint about a recent change in symptomatology:

Session #35

Client: "....psycho-somatic like symptoms are coming up...
my skin is giving me more problems now...more so
than my anxiety..

TH: could you tell me more about that?

Client: I've been breaking out more often...scales on my skin...since about Friday... I guess I've got them all over my body now...completely scaled over this weekend...itching all over...least I'm rid of some anxiety..I haven't notice my pouncing up and down in my belly..I wonder what happened to that.... I'm feeling a little bit of that (anxiety) right now...

TH: What can you make out of that?

Client: I think they're (stomach feelings-anxiety) being crushed more then ever...(I) feel pressure of work and school..

TH: Crushed?

Client: As I begin to got more self control I say to myself-get to work!...I'm putting aside all my
anxiety feelings...making them subservient to my
feelings of get to work! do my thesis! get up!..
the way I'm dealing with my feelings..I'm suppressing them (during the day) then I deal with
them during therapy...the pressure and tempo
feels that instead of dealing with my feelings
and spending time on them I brush these anxiety
feelings aside... the anxiety comes on but I brush
them aside....I still don't read the newspaper...
..still anxious about my kid..(etc.)

The client's presenting problem was massive and diffuse anxiety, guilt, and concerns about hospitalizing himself. As free imagery proceeded to uncover more specific sources of anxiety (Cedipal strivings towards his mother, incestuous impulses towards daughter, hostility towards father and wife), he reported that he was gaining more control over his anxiety and was becoming his "old self" again, though this time he is aware that feelings of anger and tenderness are not spontaneously available to him. It appears that the course of therapy has definitely altered the degree to which his Cedipal and anger aggression conflicts were repressed.

REFERENCES

- Alexander, F. Psychosomatic medicine: Its principles and applications. New York: Norton, 1950.
- Broadman, K. et al. <u>Cornell Medical Index Health Questionnaire Manual</u>. New York: Cornell University Medical College, 1949.
- Burns, B. The activation of posthypnotic conflict via free imagery: A study of repression and psychopathology. Unpublished doctoral dissertation, Michigan State University, 1972.
- Fenichel, O. The psychoanalytic theory of neurosis. New York: W. W. Norton, 1945.
- Karnilow, A. A comparison of Oedipal and peer sex through the use of hypnotically implanted paramnesias. Unpublished doctoral dissertation, Michigan State University, 1973.
- Larrison, G.R. Spontaneous repression of impulses and psychotherapy. Unpublished master's thesis, Michigan State University, 1973.
- Karnilow, A. An attempt to produce psychopathology: the posthypnotic stimulation of hypnotically induced conflict. Unpublished master's thesis, Michigan State University, 1971.
- Mahl, G.F. <u>Psychological Conflict and Defense</u>. New York: Harcourt Brace Janovich, 1971.
- Matarasso, R. The relationship between medical and psychiatric cymptomatology in medical and psychiatric patients. Acta Psychologica. 19, 1961, 863-864.
- Perkins, K.A. & Reyher J. Repression, psychopathology and drive representation: An experimental hypnotic investigation of impulse inhibition. American Journal of Clinical Hypnosis, 1971, 13, 249-258.

- Reyher, J. A paradigm for determining the clinical relevance of hypnotically induced psychopathology.

 <u>Psychological Bulletin</u>. 1962, 59, 344-352.
- Reyher, J. Free imagery: An uncovering procedure. <u>Journal of Clinical Psychology</u>. 19, (4), 454-450.
- Reyher, J. Brain mechanisms, intrapsychic processes and behavior: A theory of hypnosis and psychopathology. American Journal of Clinical Hypnosis. 1963, 7, 107-119.
- Reyher, J. Emergent Uncovering. Paper presented at meeting of American Psychological Association, Washington, D.C. 1969.
- Reyher, J. & Basch, J.A. Degree of repression and frequency of psychosomatic symptoms. Perceptual and Motor Skills. 1970, 30, 559-562.
- Reyher, J. Hypnotically induced conflict in relation to subception, repression, antisocial behavior and psychosomatic reactions. Unpublished doctoral dissertation, University of Illinois, 1958.
- Reyher, J. Posthypnotic stimulation of hypnotically induced conflict in relation to psychosomatic reactions and psychopathology. Psychosomatic Medicine. 1961, 23, 384-391.
- Reyher, J. & Wilson, J.G. The induction of hypnosis: indirect vs. direct methods and the role of anxiety. American Journal of Clinical Hypnosis. 1973, 15, 229-233.
- Sommerschield, H. & Reyher, J. Posthypnotic conflict, repression and psychopathology. <u>Journal of Abnormal Psychology</u>. 1973.
- Spielberger, C.D. et al. STAI Manual. Palo Alto: Consulting Psychologist Press, Inc., 1970.
- Veenstra, G.J. The effectiveness of posthypnotically aroused anger in producing psychopathology. Unpublished master's thesis, Michigan State University, 1969.
- Werner, H. & Kaplan, B. Symbol Formation. New York: Wiley, 1973.

- Wolfe, A.M. Critical factors in the artificial induction of conflicts: A hypnotic paradigm for repression. Unpublished master's thesis. Michigan State University, 1971.
- Wolffe, H.S. Life stress and bodily disease: A formulation. In <u>Proceedings of the Association for Research in Nervous and Mental Disease</u>. Baltimore: Williams & Wilkins, 1950.



APPENDIX A

VERBATIM PROTOCOLS OF FREE IMAGERY

Subject #101

In my room, I've been working all nite and I'm sound asleep, that's the way I'd like to be... I see a picture of my girlfriend..not doing much just sitting there.. (pause)...at the ocean...just sitting and letting my mind wander..thinking Johnathen Livingston...(Q-1)..not too bad I feel kind of peaceful inside..(Q-2)no..groggy head haven't been sleeping (sigh)...back at the ocean...just sitting on the rocks watching the waves come in..not doing very much..just sitting and watching grey..warm inside.. I suppose ... I'm thinking ahead to my chem class. got a quiz today..not doing much..(Q-1) queasy inside.. its our first test..wondering how I'm going to do on it (Q-2) nervous stomach, I suppose..at home now..sitting and having dinner with my parents...just sitting and talking..not really doing a whole lot just talking...feeling kinda good inside...back to the ocean, I'm afraid all my thoughts end up there..just sitting on the rocks..(Q-1) warm inside, feel good (Q-2) kind of feeling good and happy..nothing but the ocean comes to mind..afraid I could sit there all day and not do much of anything, I

could probably think about it all day too...thinking about the concert now..(Q-1) good inside..real good inside...the inner rhythm is starting to go..um.. (Q-2) well just a warmth (Q-3) in my stomach...High School football game... watching it, the game where I get hurt...a lot people on the sidelines...just excrutiating pain, rain on my face.. (Q-1) shoulders just twinged...that's what happened to me that day...(Q-2) should is sore.

Subject #120

I'm supposed to do this now?..(silence)...(Q-1)

I feel really relaxed (Q-2) no....(silence) (Q-1) really

relaxed (Q-2) no....see a football game going on...MSU is

being beaten...(silence) (Q-1) same (Q-2) no....(silence)

....(Q-1) same (Q-2) no.....(silence) (Q-1) no change..

floating on a cloud, relaxed...(Q-2) numb in the foot...

feel really relaxed.

Subject #105

(Silence for one minute)....(Q-1) little nervous, what's going to happen..(Q-2) no...(silence)...(Q-1) all right...(Q-2) no....(silence for one minute) (Q-1) fairly relaxed, little bit uneasy trying to think (Q-2) feel pretty comfortable...I'm thinking of the next class I'm in - it's a pretty big class, thinking about every time you go into class everyone goes in and sits down and pulls

up their newspapers; thinking that it gets kind of repetitous...(Q-1) all right; nothing really..about the same...

(Q-2) no..silence...(Q-1) about the same (Q-2 no

Subject #146

(Silence..all I visualize is the bus stop..feel very relaxed...no images...no one at the bus stop...(pause) ..(Q-1) Relaxed. (Q-2) Not that I can perceive..still seeing that bus stop..the neighborhood seems to be 1920's, old style buildings..beat up asphalt street..like narrow streets in New York..there's a fire hydrant near the bench near the bus stop..the bus stop sign..seems to be fall...there are leaves near the bus stop. (Q-1) relaxed. (Q-2) NO..(pause)..seems to be a very gray day like today.. cool..I'm looking at the bus stop from the window of the apartment..from the distance of a block or two..people at the bus stop..the bus is there..it's silver and green. (Q-1) Relaxed. (Q-2) No.. my view is moved back from the window of the apartment.. I see the wall that the window is on .. a smoky gray wall with dark wood on the sill ... old type of register..there's a desk on the adjacent wall. (Q-1) Really relaxed. (Q-2) NO. . piece of paper on the desk..placed as if someone is going to write a letter.. little figurines above the desk cabinet..nothing specific.. just nebulous figurines..there's a very monotone type of painting..dull color..vague images. (Q-1) Relaxed. (Q-2) No.

I don't really have any .. (silence for one minute). (Q-1) Fairly relaxed. (Q-2) No. (Just wait for images to come to your mind's eye and describe them to me)...only thing I was thinking about was the story..the picture of the woman as I described her before..thinking of us dancing again..thinking that once I left I'd feel sad and lonely..(Q-1) Sad when I'm thinking about the story.. (Q-2) None in particular. I was just going over the story again..my arms are isolated from the rest of my body..it kinda feels like I'm floating..(Q-2) Tingling in arms..seems like my arms and legs are very long and heavy..seems like the room is much bigger than I remember it being..(Q-1) Still pretty relaxed. (Q-2) Still tingling in my arms..seems like I'm very small..when compared to the room..seems like I'm laying flat on my back and floating..seems like my legs feel long and heavy.. still tingling sensation in my arms..legs feel weak.

Subject #141

I'm thinking about how weird the story was..

(Q-1) OK. (Q-2) Not really, maybe I'm a little nervous..

(just wait for things to come to your mind's eye and describe them to me)..(silence)..am I supposed to be thinking about the story?..(silence)..(Q-1) OK. (Q-2) No..

(silence)...I really can't think of anything..(silence)...

(Q-1) OK. (Q-2) No.. I'm a little thirsty..(silence)...

just thinking..really not seeing anything...I just saw

that car..just thought about that story again..trying to

put things together..(Q-1) OK. (Q-2) NO..(silence)...

just thinking about that story. (Q-1) OK. (Q-2) No.

Subject #148

(Silence)..What am I supposed to do? (E repeats instructions) (Silence)...(Q-1) Pretty relaxed. (Q-2)

Legs feel spaced..head is kinda dizzy. I see a pelican.. see a bird..see the ocean..a tower in it.. one of these lighthouses..(silence)..I see a fog..(silence)..I see a rectangle just floating in space. (Q-1) Dizzy. (Q-2) No.. I see a nude body of a girl..(silence)..(Q-1) No. (Q-2) just feel light..just revisualizing the story..see the guy making love to her..see the pelican again..see the sun setting in the ocean..now I see..now I see a plane, a jet (Q-1) Same. . the Jet's going around in circles. (Q-2) Dizzy.

Subject #123

(Silence) I'm not sure exactly what you want me to do. (E repeats instructions). Right at this moment you mean? I see face of an older woman. the thoughts keep coming back of whether I should have left or stayed

and how much I would have done, if any. (Q-1) Warm. (Q-2) I seem not so much sexually bodily more like.. I feel far from that situation.. I seem to see her expressions when she was trying to keep me to stay..image of her putting record on record player..casual talk..see me running out again..thoughts should have stayed or gone, that's pretty predominant. (Q-1) I feel that I'm further.. I feel like that situation wouldn't happen. (Q-2) I feel I wish it would happen.. I wonder what it would be like.. I see her with a soft voice but still somewhat of one that can control you..more or less being able to tell you what to do without saying anything. (Q-1) Wishing that situation would be at this moment. (Q-2) (Pause) I'm not sure what you mean.. (Do you have any sensations in your body?) Warmth. (Q-3) Upper parts. I keep seeing situation of me going out the door..it seems to occur over and over..I can see her reaching out and saying "come back".. (Q-1) Warmer. (Q-2) I feel stronger towards her, like I know her better, like a close personal relationship... I see us walking through the door just arriving at her apartment..just talking casually as we were good friends for a long time..it seems like we've known each other for a long time. (Q-1) Like I have some sort of affection for this person. (Q-2) Wanting to be near or with her.

Just anything? Right now I see inside of a volleyball court, a handball court. I like to play handball...I was looking around for someone to play handball with but most of the kids were home so I did my laundry and my homework... I still thinking about doing handball today or some tennis.. I saw someone playing tennis on the way here.. I see the tennis courts.. I see the gym... stadium..inside the stadium..reminds me of the crowd. (Q-1) Alright. (Q-2) Nothing. There's a lot of people. crowds make me feel so insignificant..my roommate's one of the football players.. I see the party we had last night..hundreds of kids..everybody stands around the football players. (Q-1) Funny, I don't know just funny. (Q-2) Starting to sweat. (Q-3) In my hands. I see my room..my stereo is in the window..open view..I've got to get a ladder..it's an old rickety thing to fix the room. (Q-1) More relaxed than just a few minutes ago. (Q-2) Nothing other than sweaty hands..the ladder, kind of a shaky thing.. when I was making the loft, I slipped with the hammer and put a hole in the wall .. I see the hole in the wall, carpeting in the room..it's kind of dirty..I forgot to vacuum. (Q-1) A little nervous, running out of things to say. (Q-2) Feet are going to sleep. See the cafeteria.. I go to breakfast every morning.. I see the same kids there every morning..the food is lousy..I see one of those Sunday afternoon

dinners, it's really appetizing...I see a turkey.. I like turkey, it makes my mouth water. (Q-1) Hungry. (Q-2) No.

Subject #145

Just thoughts of my roommate..not getting enough sleep..still thinking about that last story.. worrying about home..it's hard to visualize.. (Q-1) Relaxed, but not seeing anything.. (Q-2) No.. (Just wait for images to come to your mind's eye and describe them to me) ... (Pause)..there's a girl about 5 feet one, brown hair.. I see a basket ball.. I see all my roommates sleeping.. I see all my teachers giving a lecture. (Q-1) Jumpy. (Q-2) What do you mean? No. . I see one of my teachers lecturing..for some reason I see a toilet stool.. I see a long corridor .. a door .. looking out the window .. see everything out of our window..riding along on a bicycle... see trees and nature. (Q-1) Relaxed. (Q-2) NO..noticing people..see people..football stadium..I still see the front of my dorm..cars.. (Q-1) Relaxed. (Q-2) No... I see the dorm across the street .. I see the girl walking .. I give this girl a ride on my bike.. I see my classroom. (Q-1) A little tense..in my muscles. (Q-2) No.

Just red...see person's face..flipping on and off..probably person from that story..the car..trying to see that lady..the old lady..see books..lots of books.. (Q-1) Good. (Q-2) Just, ah, kind of a nervous chill... seems to be just more tense from waist down..my arms are relaxed.. I see a friend.. she has black hair.. chubby face.. her arms..red..see the sky in the planetarium..the Mars thing..see visions of things that happened this morning.. just passing real fast through my mind. (Q-1) Relaxed.. ... Probably a little tense. (Q-2) Feel like I'm hotter... probably because I'm struggling and trying to think ... my hands are sweating a little .. a water bottle .. I have to drill a hole in it and put a gold fish in it..I'm doing an act in Shakespeare.. I see the characters in it.. I'm blocking out a scene I'm doing an act in..football.. frizbee in the hall..stereo. (Q-1) Really relaxed..some of the tension has eased. (Q-2) None that I can describe.. I see a bicycle..it's racing..made out of light metal.. I see books that I haven't read this year .. I see my room .. (Q-1) Relaxed..kinda tingling.. (Q-2) in my shoulders and arms.. I see a stereo system..it's a combined two sets with a lot of wiring .. I feel the light that's on in the room .. mental images are passing rapidly..school..campus.. (Q-1) Relaxed. (Q-2) None.

(Silence).. I see a watch.. see a taperecorder.. I see you... I see Olds Hall.. See some guy taking pictures of his wife..(Q-1) A little tired. (Q-2) Just feel relaxed..my eyes closed in a comfortable chair..see that car again..see my room..see a refrigerator..my, I sort of have a little body sensation..my head is sort of turning around a little bit cause of that noise.. (Q-1) Getting progressively tired.. (Q-2) I get the feeling that things are coming in and out of me like I'll see a light coming in and out..sort of half image, half sensation..sort of makes my head feel like its moving when its not..see the stadium..see all the cops come by..see an alarm clock.. see chemistry building..see my house..(Q-1) About the (Q-2) Not really... I see the tape recorder.. (Mumbles) and the bed.. I see the room.. I feel sort of like when your leg goes to sleep and wakes up..tingling, I sort of feel like that..(Q-1) I feel like my whole body is asleep and waking up. (Q-2) Just that. I see all those school buses and bands.. I see the library..administration building.. I see the river. (Q-1) I feel more tired. (Q-2) They come and go.. I sort of feel like I can feel the blood rushing through my body. (Q-3) My arms.

I feel warm..I can see like an overcast sky where there's like verticles in the clouds..it isn't raining..it's just one of those overcast days where there is nothing happening..it's cold and dismal..wind's blowing just slightly..it looks like it's winter..or fall.. late fall or early winter .. all the leaves are off the trees and I can see the trees...you know, just without any foliage on them..then there's the river, (Q-1) I feel not as warm as I did before.. (Q-2) for some reasoning, I have a tingling in my calves, warm in my chest.. There's that river and it's flowing like over a lot of rocks and stuff rather fast..it's a rapid stream..fast moving stream..it isn't so rapid that there are white caps or anything..it's going over a lot of rocks..water itself looks kind of dark..it matches the sky..it's dark and dismal..you can't see the bottom row..(pause)..I think there is little patches of snow around, but there isn't anything that's strange..it's just a slight breeze..there isn't anyone around..it's in the forest. (Q-1) I still have that tingling feeling in my calves..um.. (Q-2) don't feel any different..there's dead leaves..it's kinda muddy.. like it just got through raining..there isn't anything I can say offhand.. I see a cave..like the river could have gone into a cave or something..it reminds me of the time

I went into a cavern in Arizona..it reminds me of it.. all the stalagtites and stalagmites and stuff..how dark it is..it's really dark.. total darkness. (Q-1) All the pains are gone. (Q-2) My stomach still hasn't settled from that walk that I just finished .. I walked here after lunch..still hasn't settled, but I don't feel that my toe feels hot..I'm in this cave..it's really total darkness..I feel there is like a path..it's like Jules Verne's voyage to the Center of the Earth.. (pause).. that's enough of that story..flash back to that car..this time it's a blue car..it's a Datsun 240Z and it's got a black interior and it seems like I'm driving it down the road .. a four lane highway and it's in Kentucky or Tennessee..the grass is really green..(Q-1) I have a warm sensation. (Q-2) Around my stomach and chest..going down the highway..everything looks healthy..the trees look healthy and stout... the grass is thick and green and it's a nice drive.. a nice sunny day..not much traffic at all..I have a tape player on..it's a really good thing.. I see a picture of me driving..it must be Kentucky..it reminds me of the mountains in Arizona.. I used to live there.. that's where my parents are right now. (Q-1) No different..still feel a little bit warm. (Q-2) Tingling in my calves still, warm in my chest.

(Silence)..Am I supposed to say anything? repeats instructions). Right now it's a little blank as such. (Q-1) A little hot in my arms..all over. (Q-2) Heartbeat is kind of (mumbles loud or low) .. (silence) .. I'm a blank..I'm not sure exactly what to think..I see a face. (Q-1) Relaxed. (Q-2) Nothing..(laughs)..a blurred face..there's not real form to it as such..there's a lady. (Q-1) I don't know.. (Q-2) No..it's an old lady as such..it's starting to get foggier..my mind is starting to wander..that's strange, I kind of visualized a watch.. still kind of hyperactive..I've had a lousy day..haven't calmed down as I should..heartbeat is still going up.. I had a Bio test and right after the Bio lab, it takes time to wind down. (Q-1) Basically the same. (Q-2) I still feel very warm, maybe it's because of the sweater, I don't know .. (silence) .. I just saw my parents very close ... (silence).. (Q-1) A little warmer. (Q-2) Heart is up a little.

Subject #204

First thing I notice is my hands are sweaty..my mind seems to be drifting back, I don't know why, and kind of chills are running through my body..I don't know why either..I'm not really focusing on anything..like looking at a white wall or something..a blank wall. (Q-1) Feel

kinda warm. (Q-3) Stomach. (Q-2) No. (Silence) It seems to have gotten brighter..see myself getting up out of bed.. (silence). (Q-1) Pretty good, I usually get up out of bed feeling dead. (Q-2) Yeh, I'm feeling warm all over instead of just my stomach. I seem to be going over to turn off the TV..I don't know why it was on though..there's a girl in the room too.. I'm talking to her.. I don't know what we're talking about. (Q-1) Kinda embarrassed. (Q-2) warmness has left. We're leaving the room, going outside... now we're fighting..that's why I'm embarrassed..I'm shaking now, I don't like to get mad..it looks like we're having a fight. (Q-1) Angry. I'm still embarrassed. (Q-2) I'm not warm any more. (Pause) Switch to a dance... everybody is dancing except me..now I'm dancing...I don't like to dance.. I feel like I'm drifting..like I'm a lot higher than I am..I'm sitting here in this chair..I'm way up above you..it's strange. (Q-1) Really light and airy. (Q-2) Hard to describe. feeling that I could do just about anything, fly or anything...it's so light.

Subject #116

(Silence-one minute)..(Q-1) feel kinda hot and sweaty..(Q-2) can't feel my body right now, my head is spinning..see myself studying this afternoon..see a football game..don't have any tickets..see rain..cloudy, dark.. see myself in a room while the house is quiet..(Q-1) same.

(Q-2) more relaxed..feel in my stomach just ate lunch.. continue walking in rain..get wet..everything keeps going back and forth..football game..studying..see my roommate.. see my friends..gathering together in room..to have a party..(Q-1) kinda high..like my body is floating..(Q-2) numbness..(Q-3) in my feet and hands..I can see the whole school quarter pass by .. going home at Christmas .. I see myself ice skating..playing in the snow..now I'm looking way ahead to next year .. (Q-1) down, sad and depressed ... I know what's going to happen next year..probably go to summer school..can't find a job...(Q-2) can't feel my hands and feet ... I can see my girlfriend back home.. I can see her at her house..go out and have a good time on the weekend..seeing ourselves goofing around..playing around in the spring.. (Q-1) better, happier, not depressed..(Q-2) feel high, like my body is floating..

Subject #128

(Silence-one minute)..(What's happening?) getting bored..listless..(Q-1) relaxed..(Q-2) no...see girls walking and talking..playing football now..(silence)..(Q-1) cool.. (in what way?)..my skin feels cool..(Q-2)no..running around on a football field catching a ball..riding a motorcycle..laying in bed resting..(Q-1) tired..(in what way?)..muscles seem tired and relaxed..(Q-2) sorta hot...

(Q-3) neck and back..cleaning up the room..sweeping it out and straightening everything up..collecting the garbage.. playing music..drinking beer..(Q-1) cool again..(Q-2) um, sweaty..(Q-3) in my legs..walking around the dorm..looking at everything..looking in the mailbox..getting some mail.. reading letters..going back to talk to friends..(Q-1) cool and relaxed..(Q-2) No.

Subject #102

(Silence)....See a train. . It's got 25 cars..out of state railroad..it's going to Pennsylvania..(Q-1)..Fine. (Q-2) No. ... (silence)...I see some lightning...it struck a tree and fell. (silence)...(Q-1) OK...(Q-2) No bodily sensations..I see a comet..yellow and streaking through the sky..getting smaller and smaller..going out of the solar system..(silence)...(Q-1) Ok... (Q-2) No..see a bus load of people travelling to New York City..get side swiped by a truck..everyone is killed except the bus driver..(silence)...(Q-1) OK... (Q-2) No.. see a burglar..outside in back of house, trying to get into the windows and the doors..he cannot get in..the police come but he's hiding..they go away..(Q-1) OK... (Q-2) No..

Subject #127

(Silence)..don't see anything..just kinda relaxed..

I feel relaxed and comfortable..no images..(silence).. (Q-1) fine.. (Q-2) no, just comfortable, not tense.. nothing particular, I just visualize myself here.. as part of the experiment..for a second I sorta tensed up.. no particular visions are coming..maybe it's just being here not knowing what to expect..maybe I'm nervous or something..I'm not as relaxed as I was a couple minutes ago..(Q-1) OK.. (Q-2) maybe just a little bit of tingling all over..(Q-3) not specific..nothing particular.. (silence lasts one minute)..(Q-1) I don't know, can't seem to picture anything ... can't figure anything out ... (Q-2) sweat a little bit but no bodily sensations... (silence)..sorta picture someone walking..(silence).. (Q-1) nothing formulates, maybe I'm trying to formulate, that's why I'm not getting anything..(silence)..(Q-1) OK..(Q-2) nothing in particular.

Subject #100

See the river by the dorm as I walked by this morning how it is brown and polluted..runs like molasses hardly moving at all..see all around a dark gloomy day.. the bridge over the river I think it's Farm Road..just walking along the bridge looking to either side seeing on the right an open field where everyone plays football and people walking along all the time..but no one was there today..and just the emptiness as I walked over here

in the streets..classes hadn't gotten out yet..hardly anyone was around..(Q-1) strange sensations..I'm used to seeing people all around .. I don't know, couldn't describe. (Q-2) just feel a little numb in the back...I remember walking past Bessie Hall and I don't remember the rest it isn't as clear as by the river..(silence)..there isn't any images I get right now while my eyes are closed that are really distinct...(Q-1) same as before.. (Q-2) my back is numb, very relaxed..ah, right now I see the bicycles..before classes let out..examining numbers how 20 to 30 come right after class lets out by you..big crowds of people by Shaw Lane where everyone is trying to cross the street..a lot of people on bicycles but mostly people walking...it's a very crowded scene..quite often during the day.. I see myself walking to class.. (Q-1) same as before.. (Q-2) back and shoulders are very relaxed, so are my legs from the knees up..below the knees just feeling very normal..my head is just not moving at all .. I haven't moved it in either direction for a long time cause my eyes are closed..it's different, I don't even know if I opened my eyes where I'd be looking..my whole body is very relaxed..thinking of the football game last Saturday, how I put on all these clothes to sit in the rain, then it stopped raining then I had to take off my rain gear and it made where I was sitting more crowded and I can't remember everything..(Q-1) ah, a little more

sorta twinge around my facial muscles where I am talking..

(Q-2) overall numbness especially in my back and shoulders..

ah, I remeber I was back home in Massachusetts just driving along Route 9..looking at all the things..remembering all the things on the sides of the roads..shopping centers..

which I haven't seen for quite a while and the traffic lights along the way from my house into Boston..(Q-1) same as before..(Q-2) numbness.

Subject #1000

A big eyeball..one lonely eye out in space..now I see stars..stars moving around..trees..in background.. sidewalks completely empty..early morning sun rising up.. (Q-1) hot..warm very warm..(Q-2) no feeling from the waist down, I feel comfortable..tall building..city... lots of people..dark clouds....thunderstorm..lot of rain.. lot of water over the sea..black sea..huge waves..submarine below the sea..diving and swimming now. (Q-1) no change..(Q-2) no...flying..flying in a helicopter..now I feel like I'm turning around..like I'm spinning..now I'm diving down into a field..closer and closer to the field.. back up again..(Q-1) I'm moving back and forth..(Q-2) excitement like I'm full of electricity..it's completely dark..I'm floating in a void..nothing in anyway at all.. I'm spinning around faster and faster..twirling..feels like my whole body is spinning head over heels..nothing

anywhere but me..getting dizzy..now I'm laying flat and spinning around..(Q-1) dizzy tense (in what way?) in my toes and in my head...I'm spinning around still..one half is going one way and the other half is going the other way..it's uncomfortable..I don't want to leave the black void..there's nothing around..I hate getting a bearing..I don't want to see anything or I'll get a bearing and stop seeing anything..see the sun..just the sun and the dark it's pulling me..getting closer and closer.. room is vibrating back and forth..still spinning around. (Q-1) almost sick..in my head..(Q-2) fingers are cold, chest is sweating...still feel like I'm vibrating.

Subject #126

(Silence for one minute)..(Q-1) my eyes are twitching.. (Q-2) no..(what's happening?) (silence-one minute)..(Q-1) ok, relaxed and comfortable..(just wait for images to come to your mind's eye)...imagining a football game..(Q-1) OK..(Q-2) no.. bunch of football players running back and forth every which way..(silence)..(Q-1) Ok, a little more excited..(Q-2) heartbeat increased...looks like the team is more orderly..in line..set for play.. all the people starting up and cheering..(Q-1) ok.. (Q-2) no.

APPENDIX B DRIVE ACTIVATION SCALE

Eurns and Reyher (1972) developed a scale for the express purpose of determining the degree to which the aims and objects of drives implanted in S under hypnosis were depicted in his visual imagery during a subsequent post-hypnotic period of free imagery. Since the paramnesia that was implanted was designed to activate S's Oedipal complex, the scale was generalized to better suit the purposes of the present research as well as preserving its distinctive ability to tap Oedipal strivings. We felt that it was particularly important for the modified scale to retain this capacity because almost all of our clients undergoing emergent uncovering psychotherapy sooner or later become involved in pathogenic unresolved oedipal strivings. This is true for all the client-sub-jects in Group C.

The modified drive activation scale includes all those drives which have been shown to be capable of producing psychopathology in the context of emergent uncovering psychotherapy. Unlike the Oedipus Complex Activation Scale of Burns and Reyher, the present Drive Activation Scale includes inferences concerning covert drives as well

as the scoring of drives expressed overtly in \underline{S} 's visual imagery.

The particular advantage of these scales over the Holt scales is an assessment of the degree to which the aims and objects of drives are gratified in S's visual imagery, the ultimate gratification being the acting out of S's sexual interest in the opposite sexed parent. The scale also assumes that spontaneous imagery is regulated by repressed drives. This assumption is based upon several considerations. Visual images, unlike words, are not consciously shaped or formed; they are unbidden and present themselves without apparent meaning. Visual imagery is not a vehicle of representation, like words, but a vehicle of presentation. Visual images, therefore, are not involved in semantic relationships with their referents for the apprehension of meaning. They do not exist as lexical units in a semantic-syntactic field in which meaning is presented linearly by symbols (words) that are clearly differentiated from their referents. The aims and objects of repressed drives constitute the referents of visual imagery which are fused with the images, and are presented simultaneously rather than linearly as in language. The particular form of the images is determined by gradients of stimulus and response similarity which includes such analogical mechanisms as metaphor, simile and allusion as is commonly found in dreams.

In psychoanalytic terms, formation of images is under the sway of primary process.

In their scale, Burns and Reyher (1972) weighted the component drives of the Oedipal complex in accordance with their presumed pathogenicity. These were Sex (16), Anger (8), Feelings of Inadequacy (4), Guilt (2) and Anxiety (1). We thought that we could widen its applicability by adding love and placing guilt and inadequacy together in a category comprising affects stemming from a reduction in self-esteem. The affective dispositions to love and receiving love from hated, rejecting parents is -- in our experience with emergent uncovering psychotherapy--the last and most disturbing repressed affective disposition to emerge. Nevertheless, we decided that a tanking of drives in terms of their relative pathogenicity is premature in a more naturalistic situation wherein particular conflicts are neither implanted nor selectively piqued. Although anxiety is both a symptom of conflict and a drive, we have treated it only as a symptom. our present purposes a pathogenic drive is defined as any response-producing affective disposition that can generate sufficient anxiety to impair cue functions and organized, adaptive behavior. Repression is conceptualized as a neurophysiological, negative feedback mechanism that inhibits the intensification of a pathogenic drive (Reyher, 1963; Sommerschield and Reyher, 1973) which, therefore,

permits the individual to sustain an optimal level of cue functions and maintain adaptive behaviors necessary for physical survival.

Visual Episode Defined

Each visual episode is scored for one or more of the drives below, a visual episode being a cohesive sequence of images demarcated from adjacent episodes by a change in either objects (animate or inanimate) and/or situation. Whenever a situation remains the same and the objects change, as in a walk on campus, each new object is scored as an episode; or in a bar scene, the focus may change from the bar, to the stage, to the people sitting around a particular table.

Degree of Drive Representation (R)

A drive may be inferred (di) or implicit in S's imagery or it may be depicted quite explicitly (dp) without S recognizing its nature. Then again S may recognize the nature of the drive (dr) or he might even experience it as an affect (de). Consequently, each scorable drive is weighted according to the degree it is represented in awareness: di=1, dp=2, dr=4 and de=8. These four degrees of drive representation are weighted in a geometrical series to insure that the product of lower degrees of drive representation is never larger than the weight of the next higher degree of drive representation.

Scorable Drives

Only those drives which are subject to repression are scored for degree of drive representation. In addition to receiving any one or more scores for degree of drive representation (di, dp, dr, de), each scorable drive is multiplied by a factor of 2 to distinguish it from non-scorable drives which will be discussed later on. Since dr and de are objective in S's frame of reference, scoring presents no problem; however, this is not the case for scoring di and dp for which criteria are needed for determining what is explicit or implicit (inferred). These criteria are given below:

Sex (S). Any genital or pregenital expression of the sexual drive is scored.

Implicit depiction (di):

penis: any protuberance or long, slim object; either animate (ant-eater, snake, goose, etc.) or inanimate; any object that grows bigger; dots, pellets, rain or aggregates of small objects denoting sperm, particularly if they are mobile; anything that rises such as a bird, helicopter, sun, baloon; objects in groups of three.

vagina: any hole or enclosed space such as a vase, purse, tunnel, cave, entrance, hallway; a small furry animal such as a pussy cat and a beaver.

breast: any rounded object or rounded feature of terrain.

intercourse: ascending steps; swimming or similar physical, rhythmical activity, more vigorous than walking.

additional criteria: incidental physical contact; a pleasant, exciting or sensual, physical sensation; bed, bedroom, bathroom, underwear, tight fitting clothes.

Explicit depiction (dp):

nude body(ies), genitals, two figures dancing, kissing, embracing; seductive expressions or poses; such comments as "I feel groovy, horny, or sexy." The context determines whether physical contact should be scored as love-tenderness (i.e., holding hands).

Anger-aggression (AA).

Implicit depiction (di):

an accident or mishap, or the result of same befalling some object, including himself; contact
sports; the situation depicted by the imagery
implies anger-aggression (i.e., the boys in my
class are devils, I can see them jumping up and
down).

Explicit depiction (dp):

any action that physically or psychologically hurts some object (inanimate or animate); or himself; person or organism marring, defacing or destroying inanimate objects; angry or disagreeable facial expressions; any human behavior, animal or object (i.e., gun, tank, bomb) that has the potential of hurting, doing harm or destroying; a disparaging remark.

Self-esteem (SE). This affective disposition is not a drive that can be depicted or directed towards other people; other people do the rejecting and this behavior is scored for dp and dr. The effect here is feeling despised, unlobable, not being good for anything.

Implicit depiction (di):

compensatory images of being exhalted such as being king or astronaut; audience applause for a good performance; caricatures such as images of elves, dwarfs, etc., or crippled or incomplete animals and humans which depicts S's negative self-image; images of an object being avoided or left out by other objects.

Objective score:

any situation or behavior wherein S's self-image is negatively affected such as a loved person

turning away; being discharged by an employer; looking ugly, fat, tiny or skinny; making an error or mistake.

Love-tenderness (L).

Implicit depiction (di):

images of the symbol of S's alma mater or a fraternal, political or professional organization; mementoes, letters, scrapbook of an intimate friend or family member; someone doing something that implies admiration and respect; verbalized admiration.

Explicit depiction (dp):

images such as hugging, tucking in bed, grooming and feeding; watering plants; washing, polishing and tinkering with car, motorcycle or some machine. These must be differentiated from sex by context.

Since most behavior is overdetermined, it is permissable to score an episode for more than one drive.

Nonvisual Scorable Drives

When an object is aluded to verbally but not visualized, it is assumed that visual depiction at the moment is
associated with a prohibitive degree of anxiety. In this
case, only the Drive and Drive Representation scales are
scored, as if it were visualized. The Derivative scale is
scored to prevent zero values for the visual episode.

Nonscorable Drives (NS)

If none of the above criteria apply to an episode of visual imagery, multiply the degree of drive representation (R) by a factor of 1 (NS=1).

Anxiety itself is not scored as a drive because marked increases in electro-physiological activation in connection with drive laden material usually is not accompanied by verbalized anxiety. We therefore consider these spontaneous periods of arousal (orienting responses) during free imagery to be an indicator of signal anxiety; that anxiety which is sufficiently intense to activate repression, a negative feedback mechanism, to reduce the intensity of the drive that is producing the anxiety. Cognitive mechanisms dissociated with consciousness (Freud's censor), perhaps similar to those of REM sleep, mediate the degree of distortion necessary to keep the intensity of anxiety below a definite limit. The fluctuating changes in degree of drive representation in S's visual imagery coincidentally with transitory periods of electrophysiological activation illustrates the dynamic interplay between repressed drives pressing for gratification signal anxiety and the inhibitory mechanism of repression.

Remoteness of Derivatives (Dr)

The remoteness of the derivatives serving as a vehicle for the expression of the drive was assessed by

referring to the generalized derivative scale below. Since the repressed aims and objects of S's drives, including the Oedipus complex, involve S's parents and originate in childhood, the scale begins with geometrical forms and ends with S himself and his parents.

```
1.
     Geometric and nongeometric forms
 2.
     Words (seen not just heard)
 3.
     Inanimate objects
 4.
     Plants
 5•
     Non-human, animate objects or parts including
     blood.
 6.
     Person of unidentifiable sex
 7.
                                       caricature
                                       "icon" (snap shot.
 8.
     statue)
9.
                                       body part
       Ħ
                        11
10.
                                       person
11.
     Unknown person of identifiable sex
12.
                                         caricature
       11
                 Ħ
                               11
                                         "icon"
13.
       Ħ
                 11
                               Ħ
14.
                                         body part
                 Ħ
       11
15.
                                         person
16.
     Known person's name
17.
                       caricature
18.
       Ħ
               11
                       "icon"
       11
19.
               11
                       body part
       11
               11
20.
                       person
     Friend's name
21.
22.
                caricature
       11
23.
                "icon"
       Ħ
24.
                body part
25.
                person
26.
     Cousin's name
27.
                caricature
       11
28.
                "icon"
       11
29.
                body part
3Ó.
       **
                person
31.
     Sibling's name
32.
                 caricature
       11
33.
                 "icon"
34.
       Ħ
                 body part
35•
       11
                 person
     Son or daughter's name
36.
37•
                          caricature
38.
       11
           11
                          "icon"
39÷
       Ħ
           Ħ
                          body part
40.
       11
           11
                          person
```

```
41.
      Girlfriend's, boyfriend's, or spouse's name
42.
                                                       caricature
43.
           11
                                                       "icon"
           11
44.
                                                       body part
45.
           11
                                        11
                                               11
                                                       person
46.
      Aunt or uncle's name
            11
                          caricature
47.
48.
       11
                          "icon"
49.
                          body part
50.
       11
                          person
51.
      Grandparent's name
52.
52.
55.
55.
55.
55.
56.
                        caricature
           11
                        "icon"
                        body part
           11
                        person
      Employer, supervisor, or teacher
57.
58.
                                                caricature
           11
                                  Ħ
                                        11
                                                "icon"
59.
                      11
           11
                                  Ħ
                                        11
                                                body part
60.
                                                person
61.
      Experimenter or psychotherapist
62.
                                                caricature
           Ħ
                      11
                                  Ħ
63.
                                                "icon"
           11
                      Ħ
                                  Ħ
64.
                                                body part
                                  Ħ
65.
                                                person
66.
      Subject's, parent's,
                                or paramnesia's object name
                                                caricature
67.
           11
                      11
                                      11
                                 Ħ
                                                "icon"
68.
           11
                      Ħ
                                 11
                                      11
69.
                                                body part
           #
                      11
                                      11
70.
                                                person
```

Each visual episode is scored for three or less objects constituting the family oedipal triangle (the subject and his two parents). Since there may be a variety of scorable objects (o) in a given visual episode, score those three with the highest values on the derivative scale. Only one object in a group of the same or similar objects is scored (crowd of people). If S describes a situation in which he must be present, such as driving a car, in a room, on a boat, walking in the park, etc., but he does not say that he sees himself, the Sa/2 (S absent) category is scored rather than the Sp (S present) category

where \underline{S} describes seeing himself in the situation. Sa/2 is not scored if the images are not part of some physical setting or context, such as a fleeting image of mother. If \underline{S} is describing a scene from the perspective of an onwatcher, like being in the audience, do not score Sa/2. Score Sa/2 if he is on stage, in the set as part of the scene. Sa/2 takes account of the distancing involved in the imagery of himself. If S changes his mind about the identity of an object, this may either be an intensification or weakening of defense. Only score the higher of the two, e.g., \underline{S} reports a bird and then changes it to an airplane.

There are affectively toned dimensions to some objects that reveal cogently the true object of the subject's imagery. Whenever Sees fierce, large or powerful machines, animals or humans or sees very tall phallic symbols, such as the Washington monument, or makes comparisons between the size or power or status of objects, he is alluding to feelings of inadequacy vis a vis parents and/or fear of them. An allusion to an object being old or a setting in past time once again alludes to parents. These added sources of information are utilized by increasing S's derivative score. The score of the object seen is subtracted from the score of a parent on the derivative scale and the difference divided by 2 and then added to the score of the object. In this way, the score of the object ap-

proaches but never equals the image of a parent. For example, if \underline{S} sees a huge, fierce monster 300 feet tall approaching him, its score of 5 is subtracted from 68 (68-5 = 63) and the difference is divided by 2 (63/2 = 31.5). The new derivative score for the monster is now 36.5 (5 + 31.5).

Necessary Conditions for Drive Satisfactions (NC)

For a drive to be "satisfied" in S's visual imagery in terms of its aim and object, the S's visual imagery must be kinetic rather than static and the images must be embedded in an interpersonal relationship. Kinetic images indicate that a drive has achieved motility and is closer to being gratified, therefore, kinetic images are multiplied by a factor of 2. Since drives can be gratified only in an interpersonal relationship or encounter, images that interact are multiplied again by a factor of 2 (2 x 2 = 4). An interaction is scored for any combination of inanimate and animate objects such as lightning hitting a tree, a dog shaking a collar, a man shooting a gun and two people talking.

The Activation Score (A = D x R x Dr x NC)

The activation score (A) for each drive in a visual episode is the product of the drive (D), its degree of representation (R), the remoteness of the deprivative (Dr), and conditions present for drive satisfaction (NC). When

two or more drives are involved, the activation score for the visual episode is the highest of the drive activation scores for each of the component drives. Let us take the following example: if S reports that he sees a nude female acquaintance lying on a bed (D = 2; dp = 2) whom he approaches and caresses (dr = 4), then says that he feels sexually excited (dp = 8), D equals 2 and R (2 \times 4 \times 8) equals 64. If she becomes carried away with laughter over his clumsy attempts at love-making and falls out of bed, knocking herself out, Anger-aggression is inferred (D = 2; di = 1). The three objects are S himself (68), the woman (18) and bed (3); therefore, Dr (68 + 18 + 3) equals 89. Since the images are kinetic (2) and interactive (2), NC (2 x 2) equals 4. NC and Dr are the same for both D_{sex} and Danger. Thus,

 $A_{sev} = (2)(64)(89)(4) = 45568$

 $A_{anger} = (2) (1) (89) (4) = 712$

Since the value of A_{sex} is larger than A_{anger} , the value of A is 45568.

APPENDIX C

FEEDBACK QUESTIONNAIRE

Very often, subjects in this experiment visualize images which they feel reluctant or embarrassed to describe to the experimenter. These images appear to the subject as either too unusual, silly, ugly, sexual, etc. Every image you visualize, however, is very important for this research. This questionnaire is for the purpose of permitting you the opportunity to report any imagery you may have visualized but did not report to the experimenter, for whatever reason.

Please describe any imagery you did not report to the experimenter during the session.

- 1. 2. 3. 4. 5. 6. 7. 8. 9.
- 10.
- (1)What symptoms did you have during this experiment?
- (2) Describe what you think this experiment is about.
- (3) What criticisms do you have about the experiment?
- (4) How do you feel you were treated as a subject?
- (5) Are there still some images that you have chosen not to describe either on this form or during this session?

YES	NO	
		#

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