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TIVE COLLEGE DEPOSITORY

ENHANCING IMAGING ABILITY: A DESIGN, IMPLEMENTATION, AND EVALUATION OF A SHORT-TERM TRAINING PROGRAM

A Dissertation Presented

Ву

PAULA ANN NOWICK

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 1986

School of Education

ENHANCING IMAGING ABILITY; A DESIGN, IMPLEMENTATION, AND EVALUATION OF A SHORT-TERM TRAINING PROGRAM

A Dissertation Presented

Ву

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My warmest thanks go to all those who offered me their encouragement and support during the long, sometimes-despairing and often-exhilerating years of study and writing this research. To my chairperson, Doris Shallcross, I owe particular gratitude for she taught me how to think expansively and research narrowly. To Jack Wideman, I send my admiration for his brilliance and concern. To Doris Abramson, I deeply bow for modeling for me elegant creativity.

To my husband and children, mother and father, and friends near and far: your belief in me made all the difference. May I love the way I have been loved.

ABSTRACT

Enhancing Imaging Ability:

A Design, Implementation, and Evaluation
of a Short-term Training Program

May 1986

Paula A. Nowick, B.A., Hofstra University

Ed.D., University of Massachusetts

Directed by: Doris E. Shallcross

This exploratory study was designed to evaluate the degree to which the imaging ability of people could be enhanced through a training program of approximately four and a half hours of interactive and individual imagery sessions. In addition, the research sought to study the individual differences in people's ability to image and to propose some hypotheses to explain the reasons for those differences. Changes in imaging ability were assessed quantitatively by means of a preand post-administration of the Betts' Questionnaire on Mental Imagery and qualitatively by means of case study analyses of the seven participants' responses and feedback during training.

Results from the Betts **QMI** indicated that five of the seven particpants' imaging ability was enhanced after the training program. Two participants' scores showed a slight deterioration. Patterns of improvement among the seven imaging modalities measured by Betts QMI were not discernible, but rather each person produced a unique pattern of enhancement or deterioration in modality The subjective feedback and responses during the training were analyzed from the persepctives of Kelly and Rogers' psychological theories in order to suggest some of the factors which may have facilitated or blocked the enhancement of imaging ability. The data led to the speculation that certain factors within the construct of the self contributed to the success or failure of the training, and among those factors were the sense of self as a rigid or permeable construct and the degree of ease with which present feelings were expressed. The range of responses to this training design led to the conclusion that this training is very successful with people with permeable self-constructs, and inappropriate with those in less developed stages of personhood.

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CHAPTERI

INTRODUCTION

Background

In the last thirty years an explosion of neurophysiological research has revived interest among educators and psychologists in the nature and function of imagery both cognitively and therapeutically. Whether images are "epiphenomenal" or "functional," that is, whether the production of mental pictures is a quintessential operation of the human personality, is still unanswered and being experimentally researched today. (Block, 1981; Dennett, 1981; Yuille, 1983; Kosslyn, 1981; Pylyshyn, 1981.) As more definitive answers to the question of imagery's roles in human development become available, teachers and psychotherapists can become more skilled than they are now in selectively designing and utilizing appropriate imagery-based interventions.

Presently, most curricula and therapies do not systematically incorporate imagery into their practices;

imagery seems to be regarded as peripheral to the intellectual and emotional processes of the self. On the other hand, there are a few practioners and scholars who have touted the positive power of imaging for everyone; from lowered blood pressure to phobia cures, claims have been made attesting to the transformational powers that mental pictures have on the restructuring of personality. (Bandler & Grinder, 1975; Gallwey & Kreigel, 1977; Houston, 1982; Sommer, 1978; Lazarus, 1978)

Some of the claims for imagery have been supported by controlled laboratory experiments. For example, in the Journal_of_Clinical_Psychology, an experiment comparing electromygraphic biofeedback and imagery as relaxation strategies found that imagery had the greater effect on reducing physiological tension and three tension-related personality dimensions. (Schandler & Dana, 1983) Covert modeling, a therapy technique in which individuals imagine a model-person engaging in the behaviors they wish to develop, has succeeded in reducing or eliminating phobias that were intractable through other therapeutic interventions.

(Cautela, 1971; Kazdin, 1973) A study involving fifty-three college women supported the hypothesis that imagery could be helpful in interrupting the negative thought processes of depression (Jarvinen & Gold, 1979).

These studies and others have demonstrated imagery's effectiveness for some clients, but other evidence seemed to suggest that not every client found this mode of therapy successful. Early in the twentieth century, cognitive psychologists noted that significant differences existed in people's ability to vividly image in various modalities (visual, auditory, kinesthetic, olfactory, etc. (Galton, 1883; Griffith, 1927; Betts, 1909; Fernald, 1912; Carey, 1915) These psychologists attempted with difficulty to correlate the vividness of one's waking imagery with intelligence and creativity, but when positive correlations were not found, interest waned.

More recently, the differing degrees of people's ability to image has found renewed attention. Singer has reported certain populations are significantly poorer in their imaging ability; obese people, drug and alcohol abusers, and hyperactive children score very low on standard tests on imaging ability. (Singer, 1976). Indeed, the success of certain kinds of therapy was correlated significantly with the client's vividness of imagery during therapy (Dyckman & Cowan, 1978). Lang's research (1977) confirmed that the quantity of details in the imagery of the client was the most significant factor in imagery-based therapy's outcome.

Other contemporary psychologists, however, are suggesting that control of one's imagery is of greater therapeutic interest than the clarity of images. The ability to willfully switch back and forth between different modes of thinking seems an essential feature of emotional health, and the capacity to replace negative images with positive ones has been frequently identified as the hallmark of the creative, growing individual. (Ellis, 1976; Goulding, 1979; Lazarus, 1979; Sommer, 1978; Gendlin, 1978). Thus the degree to which a person can purposively create richly elaborated mental images varies within the population.

The usefulness of the ability to image has also been emphasized by specialists in the fields of creativity, education, health and stress management, and sports.

"Fantasies and daydreams, far from being irrelevant and insubstantial, may be the foundation of serenity and purpose in our lives," concluded one of the foremost researchers in this field. (Singer, 1976, p. 32). Since, however, not everyone seems equally as capable of clear, fluent, and detailed mental imaging, this study investigated the question of whether imaging ability could be enhanced through short-term training. The focus of the research

centered on intensively studying individual processes in imaging, seeking to understand in depth the factors which facilitated or blocked the enhancement of the imaging process in seven adult participants as they underwent an imagery training program.

Purpose of Study

The primary purpose of this study was to evaluate the effectiveness of an original design and implementation of an imagery-enhancement training program on a group of adults who identified themselves as poor imagers. In addition, the research aimed to study the individual differences in the ability to image and to propose some hypotheses to explain the reasons for those differences. In order to more clearly follow those imaging processes as they were occurring, the participants were asked to provide feedback after each training session on how they assessed any changes in their imaging capability. After the data was gathered, the researcher found the psychological theories of George Kelly and Carl Rogers the most helpful in explaining the wide variety of participants' responses to the training.

The study was guided by the following research questions:

- How vividly could the participants image spontaneously and could the vividness of images be improved through training?
- To what degree could the participants switch from one image to another and could the fluency of generating images be improved?
- What were the participants' feelings towards their imaging ability and did the participants attribute any other behavioral or attitudinal changes to the imagery training?
- What personal characteristics seemed to facilitate or block the ability to image?

Selection of Participants

Participants were chosen from the population of graduate students in the School of Education, University of Massachusetts, for several important reasons. One was that imagery techniques were reported to be effective tools for change which leaders in the educational field might want to use professionally and personally, and that this training program was appropriate for these graduate students who were probably encountering references to imagery in their readings, but who had little opportunity in formal classwork to explore and develop their personal imaging skills.

Another reason was that their motivation and intellectual curiosity made them superb subjects in an innovative study such as this which demanded sustained attention and time.

Significance of study

Through the critical review of the literature on imagery and the experimental imagery training intervention, the present research helped contribute to the development of theory of imagery, particularly in the area of trainability, individual differences and the construct of self. results of this study, which suggest that people with rather rigid self constructs find it difficult to identify and work their images, could aid counselors and teachers by alerting them to be selective with whom they employ imagistic techniques. As importantly, the findings appear to confirm the significant impact that imagery processes have on people with more permeable constructs of self, and thus imagery could be an efficacious technique in many phases of education and psychotherapy for some. The results of this study can contribute to a more sophisticated application of imagery in schools, in counseling, in athletic and artistic training, and on health and stress management programs.

Definition of terms

Imagery: the mental process of creating sights, aromas, noises, and sensations independent of any actual stimuli.

CHAPTER II

REVIEW OF THE LITERATURE

Literature Review on the Imagery and the Psychological Study of the Self

The gift of internally creating sights, aromas, noises, and sensations independent of any actual stimuli from the environment was largely ignored by behavioral psychologists during the first half of the twentieth century. Those behavioral psychologists, not able to measure and validate these intensely private experiences, discounted them in favor of observable behaviors that could be studied in the classical tradition of methodology in the physical sciences. Outside the laboratory, of course, many psychoanalysts and other therapists investigating the less observable components of personality explored dreams and fantasies of their mentally distressed patients and reported back the often deranged or distorted inner visions that symbolized the repression of painful memories. A few, like Jung, hypothesized that some dreams and artistic visions were more than remnants from unhappy childhoods; rather, these images were positive symbols of the self which gave spiritual meaning to human existence.

Contemporary neurophysiological research has revived interest in imagery as an encoder and transformer of information in the brain and how these unique imagery patterns result in personality differences. This review will highlight the major psychological studies that have used imagery as one of the essential ways of understanding personality and will also explore the role that imagery is thought to play in the development of self.

Types of Mental Images

One of the most comprehensive analyses of types of mental images has been undertaken by Horowitz (1983), a psychoanalyst at the Langley Porter Neuropsychiatric Institute. Based on twenty years of therapy, he has devised a system of four broad categories of images.

- 1. Images categorized by vividness:
 - A. Hallucination an image of internal origin that seems as real, vivid, and external as the perception of an object.
 - B. Pseudohallucination an inbetween type of phenomenon in which images are very vivid yet lack the sense of reality found in hallucinations.

- C. Thought image a moderate to dim image that is always localized internally. Its content ranges from fantasy to visualizations of logical problems in geometry.
- D. Unconscious image a term from psychoanalytic literature referring to an image that once was conscious, but because of psychological conflict is deliberately forgotten.
- 2. Images categorized by context
 - A. Hypnagogic image one that occurs in the twilight state between wakefulness and sleep.
 - B. Dream image and nightmare visual experiences during REM cycle of sleep.
 - C. Psychedelic image an image evoked from extraordinary conditions such as drug use, fever, starvation, or trance, that often begins with unusual perceptions such as fluorescent colors or scintillating effects, moves into pseudo or true hallucinations.
 - D. Flashback an image reexperienced after a druginduced state.
 - E. Flickering image one of a series of rapidly occurring images which interrupt normal thought processes, but which are difficult to recall in detail.

- 3. Images categorized by interaction with perception
 - A. Illusion an image which occurs when a perceiver transforms an outside stimulus into a significantly altered object.
 - B. Perceptual distortion an image that results from a change in shape, size, or outline of a stimulus. It is common during auras of persons with epilepsy or migraine headaches.
 - C. Synesthesias blends of images from more than one sense whereby images from one mode of representation is translated into another mode, e.g., color hearing.
 - D. Deja vu an image that gives the person an illusion of familiarity even though the person is encountering the scene for the first time.
 - E. Negative hallucination a phenomenon which occurs when a person is "blind" to something which is in the field of vision.
 - F. Afterimage an image that is a residue that persists even after the external stimulus is removed.
- 4. Images categorized by content
 - A. Memory image an image that is a reconstruction or resurrection of a past perception.

- B. Imaginary image an image whose content has never be actually perceived before, but which is derived images of past experiences and recombined to form new concepts and fantasies.
- C. Entopic image an image which arises from stimulation of optic structures within the eye or in some portion of the optic neural circuit. Seeing stars after a blow to the head is an example.
- D. Body image an image that is a hypothetical construct of usually unconscious images that operate as a specialized, internal, analog data center for information about the body and its environment.
- E. Phantom limb an image and subjective experience of a part of the body removed by amputation.
- F. Paranormal hallucination or vision an image which is related to mystic, religious, extraterrestrial, or supernatural experience.
- G. Imaginary companions an image of a playmate, human or animal, which always accompanies a person, usually a child.

H. Number forms and diagram forms - an image that is a characteristic schema that a person uses to form visual images of numbers. It is a rather unusual phenomenon which involves animation, color, and stories.

Any of these forms of images may be expressed by clients in therapy or by students in the classroom as they exhibit their self in response to the environment.

Psychoanalysis and Imagery

Frued was one of the first psychologists to systematize the unseen qualities that comprised the self. The recollection of dreams and the spontaneous recitation of mental pictures became for Freud the most fruitful access into that hidden self because all the repressed ideas, wishes, and instincts sought substitute satisfaction in dreams and fantasies. In sleep or in waking-dream states while on an analyst's couch, when the ego and super-ego are off duty, vivid images appeared. However, just recalling and reporting these dreams was not healing, for self-interpretation was usually impossible. The larger nature of the meaning of the dream/image could best be understood by

the trained outsider, a psychoanalyst, who pieced together the images in terms of the patient's childhood memories.

The psychoanalyst, while urging the patient to forego organized thought and to passively allow these images and associations to freely enter her or his consciousness, encouraged the verbalization and reexperiencing of these early traumas. With the guidance of the therapist, the patient experienced a catharsis, which promoted recovery, relieved neurotic symptoms, and resulted in a feeling of wholeness. (Freud, 1955, 1960)

The process of becoming aware of repressed images from the unconscious and then being healed by that discovery is called the "automatic function of images." (Samuels, 1975) Images were considered more primary, therefore, more powerful than thought.

... it is possible for thought processes to become conscious through a reversion to visual residues. Thinking in pictures approximates more closely to unconscious processes than does thinking in words, and is unquestionably older than the latter both ontogenetically and phylogenetically. (Freud, 1960, p. 19)

More contemporary research corroborates much of the importance that Freud placed on imagery. Klinger has

presented neurological evidence that the production of mental images is at the center of a person's capacity for adaptive action as he/she experiences the world. (Klinger, 1981) He arrived at this conclusion by examining the neural processes from the first sensation of raw sensory data interfacing with a sense organ through memory and invention. The electro-chemical stimulations on the retina or chochleas are too changeable and too complex to be useful. In order for organisms to interpret these signals, they must learn to focus, distinguish and compare isolated patterns.

Since raw information remains meaningless unless it can be referred to an internal pattern inside the organism that gives it meaning, many theorists deduce that the brain constructs and stores models or schema in terms of images so that it can later compare them with new, incoming sensations. (Tomkins, 1962; Neisser, 1967; Leuner, 1980)

The critical idea is that people are able to perceive new data only if it can be fit onto schemas or images they have previously constructed. What we perceive is our own model. Moreover,

it is also plain in our studies of stimulus effects on thought content that stimuli evoke not simply

memories of scenes associated with the stimuli but often imagery of present, past, or future situations linked to actions, reflections, expectations, mental note-taking, etc., on the part of the subject. Thus it seems likely that stimuli evoke both representations of stimulus input and representations of those operant acts that might get us to the goals of our concerns. (Klinger, 1981)

During mental conditions when external sensory input is diminished, such as in sleep, daydreams, hypnosis, meditations, etc., mental imagery representing these schema gains prominence. Thus neurologists have presented a model that supports Freud's speculations that imagery reveals the self's primary structures. Reconstruction or transformation of those images is basic to any significant change in future thought and behavior of the self.

In Europe, many psychoanalysts and psychiatrists elaborated on the dream interpretation and free-association techniques pioneered by Freud. Binet asked his clients to engage in "active dialogue" with their images (Binet, 1912); Hoppich combined relaxation techniques with set scenarios in order to produce more fruitful imagery (Hoppich, 1934); Caslant experimented with "up/down imagery" in order to more vividly expose the id and superego (Caslant, 1938); and Anna Freud used free and directed imagery exercises with children (Freud, 1946).

In the United States many therapists with psychoanalytic training explored their patients' imagery beyond the realm of dreams. For example, Shorr, founder of the Institute for Psycho-Imagination Therapy in Los Angeles, has favored imagery as a primary avenue to the self because, unlike other modes of communication, the ability to form images usually has not been censored. Thus imagery provides the therapist and the client with readily accessible, undistorted information about repressed conflicts.

Imagination is viewed as the central kernel of consciousness and an important means of access to the uniqueness of the individual's world. The active introduction and conscious use of imaginary situations is used as a stimulating investigative tool, a way open to action possibilities. It allows the patient to explore more safely and openly, to differentiate, to experiment with, and to integrate fantasy and reality, all within the context of a cooperative therapeutic alliance and encounter. (Shorr, 1978, p.95)

For Shorr, there are dual purposes in asking patients to construct imaginary situations. The information gathered from such imagery allows him to see how the patient views his or her reality, and more importantly to open up to change the previously closed internal world of the patient.

Singer, another therapist and experimental psychologist

using extensive modes of imagery, has outlined additional benefits of using imagery. (Singer, 1978) The client's imagery gives information about unspoken and unrealized resistances and defense mechanisms of the self. Another major function of imagery is that it encourages a directness of communication without excessive verbal dodges and rationalizations. This is true for the therapist as well as the client. The therapist can become very effective in joining in the imagery, empathizing, concretizing, and clarifying by revealing his or her imagery to the client.

Emergent Uncovering Psychotherapy, as developed by Reyher, continues the psychoanalytic method of exposing repressed information by the classical free-association method. However, Reyher uses images rather than verbal associations, much as Freud did in his early days in Vienna. (Reyher, 1978) In the course of therapy, Reyher asks the client to recline on a sofa and report everything that comes to mind. The hesitancies and resistances are more important for Reyher than the words themselves, for these reality-avoiding maneuvers prevent self-awareness and authentic behavior. In addition, an uncovering of anxiety-

producing drives is directly expressed in imagery. Bizarre images become a way for repressed impulses to surface, bringing with them expressions of guilt and anxiety. However, once these images are verbalized and accepted by both the client and the therapist, there is a therapeutic increase in ego-strength.

Jung and Imagery

In analysis Freud was interested in those visions and memories that were associated with childhood trauma, but subsequent psychiatrists, such as Jung, expanded the types of images that revealed the self. At first, Jung asked his patient to "translate emotions into images, that is to say, to find the images which were concealed in the emotions." (Jung, 1963) The more images the patient could transfer from the unconscious to consciousness, the less neurotic he or she would become because the unexposed emotionally—ladened images which were left in the unconscious could continue to poison the patient's life.

However, as he began to explore his own images, writing them in journals or drawing them, Jung went beyond

spontaneous, free-associating images by inventing elaborate scenarios, such as descending into caves and dialoging with creatures he met there. Even though the initial settings of the visualizations were planned, the flow of images seemed to emerge from a personal, dynamic, creative center that was incredibly richer than he had been taught by Freud.

Jung's use of images differed from Freud's in that the most evocative had nothing to do with his personal history, but seemed to emerge from a source beyond childhood events. Later in his writings, Jung hypothesized that the images of reverie revealed how the primary dynamics of the self worked. These images were conveyers of primordial wisdom: the collective unconscious.

Indeed, many of his and his patients' images were found later to be in art works, myths, and literature throughout the world. They were archetypal images that once held powerful positions in primitive people's attempts to understand life and death. To the modern person, these primal archetypes expressed symbolically the same life-and-death situations that haunted everyone's mind, and once these images were surfaced, expressed, experienced, and reflected upon, the person felt reconnected to the great

forces which gave meaning to his or her life. This reconnection to forces beyond gave increased energy and dedication to the person's search for his or her uniqueness.

Progoff, following in the traditions of Jung, was struck also by the rich symbolic nature of free and directed imagery which, once experienced by the client, expanded her or his capacity to react more creatively in everyday life. This growth of complex responsiveness was due, in large part, to Progoff's encouraging of the client to evoke an image almost as a sacred thing which should not be analyzed into decipherable bits, but nurtured, encouraged, and drawn forward into a life of its own. (Progoff, 1963)

Allowing images to unfold in their own style and time gave the client a contact-point with an active principle of growth deep within the person. By attending to the rhythms and patterns of images, a person became sensitive to and respectful of the nature of his or her consciousness.

Progoff uses an imagery method called "twilight imaging," wherein the patient relaxes, closes his or her eyes, and allows a flow of images to appear on a screen of the mind's eye. The flow is like a kaleidoscope, presenting

one form after another in a pattern that, after awhile, has a unique movement. Conscious interpretation by the client or the therapist is discouraged; rather an attitude of attentiveness and waiting for a felt sense of meaning is appropriate. Inevitably, Progoff found that these processions of images opened up a sense of cosmic awareness, a shared connection with forces greater than his or her personal existence. From this perspective, the patient regained strength to endure frustrations, saw a goal and purpose in existence, and found significance in the details and rhythms of everyday life. Images seemed to have the power to transform emotional misery into emotional health.

Hillman, a contemporary Jungian psychoanalyst, works almost exclusively with images, labeling his role as a therapist as a sort of poet-spirit who frees the client to fly, take fire, become psychologically creative. He resists interpreting the fantastic, spontaneous images of his client into shallow and frozen words.

The images are where the psyche is. People say, "I don't know what the soul is." ... To me the place to look when you feel that way is immediately to the images that show where you are with your soul. ... The place to look is not only to your feelings, not to your interpretations, not ask help from a third person necessarily, but ask yourself what were you in the image? (Hillman, 1983)

Attention to images is the way to transcend the limited forms into which we place our lives and to find the essential self.

Behavioral Psychologists and Imagery

Certain behavior therapies utilize private imagery in order to alter anxiety patterns of the self, such as phobias. Wolpe, for example, developed a visualization technique that enabled highly phobic patients to escape the hysteria they felt at specific situations, such as fear of heights or meeting people. (Wolpe, 1958) In his "systematic desensitization," clients engage in a series of hierarchically-structured encounters with the phobic object, starting out with the very most obscure engagement (imagining a friend, a mile away, looking at a picture of a snake.) As that image brought on beginning stages of panic, the therapist would guide the client through relaxation procedures. When the client could remain totally relaxed even while imaging that scene, the client would be asked to image a situation where the feared object was slightly more evident (a snake in a cage a mile away). Relaxation

strategies were begun again as that image evoked anxiety. This imagery conditioning proceeded until the actual physical encounter with a snake could be experienced in a state of calm. For the behaviorists, imposed images from the outside were able to free the self from its misinterpretations of reality.

Singer, drawing conclusions from a series of experiments, found that the critical factor in desensitization was the use of imagery. (Singer, 1974) Even when no relaxation techniques were used, or when the intensities of imaginary phobic encountered were not hierarchically arranged, "cures" resulted. What Singer concluded was that for many phobics, the thought of fear about the situation prevented the individual from ever coming anywhere near the feared object or situation and therefore finding out that the object could indeed be tolerated. Imagery made the encounters possible. The evidence seems to indicate that it is not so much the conditioning effect that eliminates the fears, but more probably the inner dialogues within the self.

Implosion technique is a therapeutic imagery exercise developed by Stampfl. While working with phobic patients,

he suggests that the patients vividly image the most terrifying circumstances associated with their terror. Patients were to elaborate the most dire consequences of being in their feared, but imaginary, situation, and once their most horrid dreads were imagined, they found that the imagined experience was less anxiety-producing than they had supposed it would be. Stampfl found that patients who experienced their phobic fears in imagery were able to pass through and escape their anxieties. (Stampfl, 1967) The self of these phobic patients seems conceptualized as whole and healthy, but temporarily dillusioned by the fear of fear itself.

Hemispheric Information-processing and Imagery

Several contemporary theories by some neurophysiologists studying the brain's dual-hemispheric processing of information suggest that images are of equal importance to words in the self's complex creation of meaning. (Bogen, 1969; Sperry, 1968) Pope's studies have suggested that humans may spend more time in subjective processing of fleeting images, fragments of memories, imagination, and the

anticipation of the future than to actual attention to stimuli in the environment. (Pope, 1977) The right hemisphere appears to be the source of most images, permitting ongoing information-processing after perception. The right hemisphere seems to give sensory configuration to emergent ideas and feelings, as it provides instantaneous, whole-pattern configurations that may then be verbalized by the slower, sequentially functioning left-brain. (Horowitz, 1983). Images get encoded into abstract language, thereby losing their emotional impact. (Singer, 1981)

The immediacy of right-brain functioning is, according to Tomkins, the basis for experiencing emotions. (Tomkins, 1962) In the steps between feeling and expression, much of the impact of the original feeling can be lost. "Once language becomes a medium for the translation of experience, there is a progressive release from immediacy." (Bruner, 1968). The self gets more and more remote from its immediate apprehension of reality as it advances from images into words.

Other neurophysiologists, mapping the reticular activating system of the brain, have confirmed the shifting,

cooperating, intermingling process of brain function.

(Pelletier, 1978) The different types of informationprocessing between the hemispheres, for example, is less a
struggle for dominance than a coordinated movement of
cooperation which is sensitive to the kind of reponse that
is most appropriate.

Thus terms such as repression, defense mechanisms, and catharsis are being replaced by many psychologists of a more transpersonal persuasion by terms such as integration, harmony and expansion. This integration suggests a dimunition of the verbal left-brain activity and a return of the imagistic right-brain activity. Left-brain does not use right-brain to find out "what went wrong," but cooperatively both halves are explored in order "to make things better."

From the neurophysiological sense, imagery becomes an information-process that allows the self to become sensitized to inner processes and rhythms. Images, originating from the right-brain, integrate with the articulation of the left-brain producing

a feeling of movement, a feeling of a master cycle of life, which proceeds within the person and includes tensions and rhythms, doubts and dynamics of many kinds. (Progoff, 1963, p. 97)

Gestalt Psychology and Imagery

Gestalt therapy stresses the need for healthy individuals to integrate their perceptions into meaningful whole. Moreover, they need to become or actualize themselves with other people or the environment. Most emotional or physical distresses are the result of incomplete processing of experience, and the Gestalt therapist uses, among many other techniques, the tool of imagery to sharpen the client's awareness of the totality of the physical and emotional experience of "here-and-now."

For example, Perls would ask a person to imagine a scene, and then direct him or her to visualize him or herself as each object and person in the scene, reporting each's viewpoint. In that way, fragmented elements were brought into dialogue, and as the client experienced and acknowledged the uniqueness of each element, he or she could begin to see them meld into a blended whole. (Perls, 1969)

Another frequently used imagery technique used by Perls was the Identification Imagery. The client was asked to identify with many different parts of a dream or fantasy. For example, he or she may be asked to "become" and

"elaborate on" how it feels to be a ship, a wave, the wind, a pirate in an imagined dream with those elements. Since it was assumed that each element in the image represented a part of a person, the therapist helped the client acknowledge and respect each of the elements so that they could be integrated into a harmoniously functioning whole instead of warring with each other.

Clients were often asked to dramatize their imagery, and thereby were forced to confront and overcome the warring portions of his or her self. Imagery becomes an important, though not exclusive tool, in that process of reowning the self.

Psychosynthesis and Imagery

Psychosynthesis can be categorized with the growing number of contemporary psychologies that have been deeply influenced by Eastern traditions. Assagioli maintained that people suffer from repressing the sublime urges by failing to fulfill their deepest dreams. As a therapy, psychosynthesis seeks to heal those sufferings by helping the self get in touch with an awareness above the ordinary,

everyday level of awareness. One of the methods used to attain this higher consciousness is imagery. (Crampton, 1969)

Assagioli postuated "psychological laws", some of which involve the role of imagery in the development of the "whole" human being.

- 1. Images or mental pictures and ideas tend to produce the physical conditions and external acts that correspond to them.
- 2. Ideas and images tend to awaken emotions and feelings that correspond to them.
- 3. Emotions and impressions tend to awaken and intensify ideas and images that correspond to or are associated with them.
- 4. Needs, urges, drives, and desires tend to arouse corresponding images.
- 5. Attention, interest, affirmations, and repetitions reinforce the ideas, images, and psychological formations on which they are centered. (Assagioli, 1965)

Mental imagery exercises are employed to transform the physical and emotional realms into higher, spiritual ones.

For example, imagery is used to dramatize the subpersonalities or to demonstrate the observer-self within an individual. A frequently used visualization is projecting alternating images on a "mind-screen" in order to allow the person to experience the difference between the contents of consciousness (the image) and the center of consciousness (the "I" that wills to hold the image in place.) Through such efforts the person begins to experience the self as the center of power capable of becoming whatever the person deeply desires.

Another method, adapted from Buddhist meditation, uses imagery to train the observer-self. The person is instructed to observe the stream of consciousness without passing judgment in any way, thereby learning to disidentify from the flowing images. In that way, the person realizes that there is a witness that is separate from the thoughts, feelings, desires, sensations, and outer roles. This experience allows the person to transform and integrate these separate selves through willpower and conscious direction. (Crampton, 1969)

In subsequent exercises, the person is able to use imagery to experience a "peak experience" or "transcendance" wherein feelings of love, joy, and oneness with life infuse consciousness.

Among the imagery techniques used by Crampton to achieve this transcendent state is one involving imaging the personality as though it were a series of concentric circles with various layers from the most obvious on the outside and the most inner in the center. On the outer circles people report encountering images symbolizing conflicts and defenses on an interpersonal level, but in the inner rings, they find images of love or intense light.

Assagioli used the image of the "Temple of Silence" in which people are asked to imagine themselves slowly climbing a mountain on top of which is a temple of silence and in which they allow all the cells of their bodies, hearts, and minds to be filled with silence. They are then asked to bring this silence down the mountain and radiate it to the world. People have reported incredible ecstasy from the exercise, and have found an altered perspective from which former problems become solvable. (Assagioli, 1965)

Transpersonal Psychology and Imagery

Transpersonal psychotherapists often use imagery techniques similiar to those of Assagioli in order to awaken in their clients a sense of their divine potential. Among the many imagery techniques used by Huxley are those in which people are asked to experience imaginatively the life energies of the universe as manifest in the sun, air, water, earth, plants, and animals and to sense this lifeforce flowing through the body. They are then instructed to recall an incident in the past when they felt creative and vital. After that, they are to recall a memory of destructive personal energy, and by alternating the positive and negative, the subjects begins to intuit how to direct their energies in ways that bring them joy, not unhappiness. (Huxley, 1965)

In another type of visualization, Shapiro asked people to imagine what their lives would be like if they could live without any negative feelings, such as guilt or fear. They were to elaborate in visual detail special scenes from their present lives in which they experience only harmony, openness, love, etc. He reported that his clients are able to formulate more creative solutions to their previous problems and can begin to live in the more positive ways that their imagery has suggested to them. (Shapiro, 1966)

"Evolutionary exercises" are Masters and Houston's phrase to describe the "complex and evocative procedures movements, imagery, intense concentration and creative intentionality" that they had developed in order to move people towards higher consciousness. (Masters and Houston, 1972; Houston, 1982)

Among the hundreds of imagery exercises in Mind Games, Listening to the Body, and The Possible Human, there are a great number which aim to extend awareness to "the cosmic connection, a living sense of the nature of reality, a theology of the Way Things Work." (Houston, 1982) Houston explains the possibility of the union of each individual psyche with the universal mind in terms of the model of the holographic universe as hypothesized by Pribam and Bohm. that model, light and/or sound waves, layering upon each other in intricate, modulating patterns, strike the human sense organs where they are converted into electrical signals which interfere with each other, establishing a pattern in the electrically pulsing brain neurons. As these pattters repeat and become more set throughout the brain, memory gets spread throughout. Some neurologists conjecture that each neuron could contain the totality of all memories, but even more startling are speculations that our mind

shares patterns and information of all reality. We normally are not aware of our connections to others, to nature, and beyond. But at certain moments, when our brains are in special synchronizations, Houston suggests that we are perhaps in resonance with the simultaneous-everywhere matrix.

Ericksonian hypnosis and a condensed version of Masters and Houston's Mind Games were combined by Havens to induce "cosmic consciousness" in a selected group of volunteers who had no previous experience with meditation. "Cosmic consciousness," as Havens defines it, is a condition wherein the subject reports an ineffable experience of oneness, timelessness, perfection, beauty, and truth. (Havens, 1982) He sought to provide procedures to more systematically enable therapists to move people toward improved functioning, self-actualization, or transpersonal experience. Imagery and relaxation are the core techniques.

Havens views cosmic consciousness as a condition preceded by destruction of an individual's acquired conceptual and response systems which typically are tightly controlled and carefully differentiated, back to "an approximation of the conceptual, perceptual, and behavioral openness, flexibility, spontaneity, and naivete of a

child." (Havens, 1982) That destruction is similar to the process that Erickson used in hypnosis.

However, cosmic consciousness does not automatically follow disintegration, and for the next step, Havens relied on the guidance of Masters and Houston's imagery exercises. In his four sessions, some of the imagery techniques he used were a sense of growing larger, loss of body boundaries, unity with an imagined natural environment, moving in time and space, body changing composition to wood, hard stone, warm wax melting, body slowly dissolving into individual atoms, and spontaneous rebirth as a new creative person.

Havens concluded that the use of a hierachical presentation of suggestions within an Ericksonian hypnotic approach was extremely helpful in ameliorating anxiety that may accompany the destructing of learned conceptual and perceptual patterns. Many subjects self-reported greater self-assurance, among other gains.

Conclusion

This literature review of the ways in which imagery is included in many traditional and innovative psychotherapies

was intended to highlight the relationship between imagery and personality. This brief overview only begins to show how powerful the imagination is in reviewing and reframing events in one's life and in understanding specific aspects of one's personality. Imagery has been found to be helpful in changing emotional and cognitive mindsets through positive visualization and in contacting ultimate levels of one's being in a spiritual sense. None of the literature reviewed here discussed the universality of imagery's use for the total client population or the success rate of imagery-based therapies versus verbal therapies, yet studies designed to measure people's ability to image have revealed broad differences in ability, and thus call into question the usefulness of imagery-based therapies for all clients. Some further questions that seem to require answers would include:

- Is imaging an ability which can be improved with training?
- What significance do individual differences in personality have on a short-term training in imagery?

Review of Literature on the Testing and Measurement of Imaging Ability

One of the first scientifically designed attempts to quantify the differing imaging abilities of people was published by a cousin of Charles Darwin, Sir Francis Galton in 1883. (Galton, 1883) He asked his subjects to describe the clearness and coloring of their image of that morning's breakfast. His questionnaire, administered to his academic colleagues, revealed that less than 10% of them reported keen imaging ability; the same questionnaire when presented to a non-professional population showed that 88% of those respondents had good imagery recall, leading Galton to conclude that high-level thinkers did not rely as heavily on the more primitive pictorial form of conceptualizing as their minds became more abstract and conceptual.

Betts (1909) also attempted to evaluate the vividness of people's imagery in different sensory modalities with an even more extensive questionnaire than that developed by Galton. He asked his subjects to rate their imagery experiences on a seven-point scale, from (1) "perfectly"

clear" to (7) "no image." Included were exercises in visual, auditory, cutaneous, kinaesthetic, gustatory, olfactory, and organic imagery. Few subjects reported vivid imagery in one mode exclusively, but rather, vivid imagers usually had sharp imagery in many modalities and dim imagers reported indistinct images across the board. The correlations between the various types of imagery were calculated; the highest correction (.90) was cutaneous with kinaesthetic, while the lowest was between auditory and organic (.67).

Betts also tried unsuccessfully to correlate scholastic ability and imaging ability. His two experiments contradicted each other, for on the first investigation he found a slight positive correlation (.095), but on the second a negative correlation (-.149). He concluded that imagery was only a by-product of thinking, an epiphenomenon.

Fernald (1912) continued the experimentation by revising the method of analysis; she sought to categorize imagers into groups according to their predominating modality and then measure their perfomance on specific cognitive tasks. Her findings were negative also, for there

did not seem to be any significant correlation between performance and modality. For example, memory tasks were no better for high visual imagers than for poor imagers.

This negative correlation between intellectual performance and imagining ability was also confirmed by large-scale studies with school children performed by Carey (1915). In addition, no correlation could be found between tests of general intelligence and imaging ability.

Although the attempt to scientifically measure subjective phenomenon was under attack by the behaviorists (Watson, 1913), a few experiments continued which seemed to contradict Betts' conclusions about the irrelevance of imagery to thinking. Comstock (1927) redesigned the imagery experiments, putting the questions of imagery after subjects were administered a series of eighty-three tasks, such as arithmetic, general information problems, and judgment assessments. After each answer, subjects were asked to reflect on the experience upon which the solution was based, and therein the phenomenon of imagery was studied. Comstock found that the most frequently occurring use of imagery was that mental pictures were used as the material for working out the task. Secondly, imagery was used as an anchor for

holding the essential parts of the problem as it was being worked on. The next most frequent use of images were as illustrations which seemed to reassure the subjects that their reasoning was on track and accurate. The last notable function of imagery for the problem-solvers was that of regulation or correction of errors. Comstock concluded that imagery was an essential function of problem-solving, and that there was no irrelevant imagery. If imagery was reported, it seemed to be relevant.

Comstock, Fox (1914), Titchener, (1910), Woods (1915), and Bartlett (1921) worked on the problems involving the functions of imagery and conditions under which imagery was most prevalent, rather than trying to evaluate an individual's degree of imagery competence. These experimenters uncovered significant information that partly explained the failure of Galton, Betts, Fernald, and Carey to find measurable differences in imaging ability. Fox, for example, found that imagery was not involved in problems or tasks that involved immediate comprehension, straightforward or unimpeded reasoning, and unconflicted agreement. Fox concluded that a difficulty, a challenge, greatly facilitated production of images. Titchener's work showed

that novelty in thinking was most conducive to imagery, and that Galton's and Betts's negative findings were due to their posing of routine or mechanized problems. Woods corroborated Titchener's experiments in a series of experiments which showed that imagery was richer when the stimuli was very unfamiliar, and as the stimuli became more predictable, imagery disappeared. Finally, Bartlett's investigations linked imagery to the function of change in thinking. Every one of Bartlett's subjects who produced original inventions in cognition reported heavy reliance on imagery, leading Bartlett to surmise that imagery and the creation of new details and unusual combinations were closely connected.

Besides the difficulty of finding the most appropriate kinds of tasks on which to assess a subject's imaging capacity, there is the additional problem of the methodology of using subjective self-reports in comparing many people's abilities. First of all, rating the vividness of mental images is in itself is confusing for many subjects for the standards between a "3" (somewhat clear) and a "5" (somewhat unclear) are ambiguous and shifting. With practice, however, Kaufmann (1979) found that his subjects could

produce internally-consistent self-ratings, reducing the within-subjects error rate. However, even if each subject was consistent, the between-subjects analysis was prone to errors for there was no way to equate and then compare each subject's self-report. Kaufmann concluded that the rating scale approach to the study of imagery is unreliable and invalid when used to correlate imagery with another variable, such as intelligence or scholastic achievement.

Review of Literature on Training for the Improvement of Imagery Ability

A search of the literature on training for the improvement of imagery ability revealed a dearth of experimental evidence on the feasibility of improving mental imagery. Most of the literature reflected anecdotal comments by experimenters.

Most of us seem to be naturally good or bad at certain components (of imaging), for whatever reason. ... Comfortingly, however, in most of our imagery experiments people definitely improved with practice. If practice underlies the lion's share of individual differences an isssue that has yet to be fully examined - then there may be hope for those people who see things poorly in the mind's eye. (Kosslyn, 1983)

Despite the lack of empirical evidence to corroborate their claims for improving imaging ability, many educators have written manuals detailing exercises which should advance vividness and control of imagery. These include Hooper's Imaging and Visual Thinking, (1976), DeMille's Children's Imagination Games (1955), McKim's Experiences in Visual Thinking (1972), Parmenter's The Awakened Eye, (1968), Lazarus's In the Mind's Eye 1977), Master and Houston's Mind Games (1972), Stevens's Awareness (1972), Gawain's Creative Visualization (1977), and Hendricks and Wills, The Centering Book (1975).

Many of the exercises developed by these authors are highly imaginative, but lack verification that they do, indeed, cultivate and improve imagery. This study will explore the effects of a training intervention in order to assess the effectiveness of such training on fluency, vividness, transformation and control of images.

CHAPTER III

METHODS AND PROCEDURES

This study presented a design, implementation, and evaluation of a short-term imaging-training program in order (1) to evaluate the effectiveness of the training design and (2) to explore the emotional and intellectual processes involved in attempting to enhance one's ability to achieve more vivid mental images. The training program consisted of a variety of experiences which exposed the subjects to increasingly more complex imagery exercises. Since the study was interested in the difficulties, adjustments, and successes encountered throughout the training, the program was administered individually, with frequent opportunity for feedback and processing. The trainer reserved the right and responsibility to alter the sequence and nature of the exercises when the subject's needs require such adjustments in the course of the training, but none of the deviations were significant enough to be noted and explained.

The research was both quantative, statistically measuring imagery improvement, and qualitative, collecting

phenomenological data about the varieties of internal dynamics of subjects seeking to improve a skill.

The Design

Selection of subjects

Seven graduate students from the School of Education at the University of Massachusetts were recruited by invitation made by the trainer in graduate classes in the School of Education. The trainer asked for volunteers who would like to participate in a training program designed to enhance their imaging skills. From an initial pool of twelve volunteers, five were not included because they reported extensive experience in meditation/imagery groups and were judged by the trainer to be already trained. A group of seven subjects were selected as research subjects and given the Betts/Sheenan (1967) Questionnaire upon Mental Imagery.

Implementation of Training

Each subject met individually with the trainer for two hour-long interactive training sessions which were scheduled

approximately one week apart. The third session, a final evaluation and post-test, was held a week or so after the second session.

The first session included an interview to assess the subject's interest in, knowledge of, and experience with imagery, followed by an introduction of the purpose and procedures of the imagery-enhancement training. The subjects were then asked if they still wished to participate in the training; all agreed and signed a Participants Agreement Form (Appendix 1).

The first administration of the Betts/Sheenan (1967)

Questionnaire upon Mental Imagery was orally administered by the trainer. (Appendix 2) The remainder of the session included a series of guided imagery exercises that were designed to facilitate relaxation and to recreate positive affective experiences of childhood. The scripts for these are included in Appendix 3. The concluding ten minutes were reserved for processing the behavioral and emotional experiences, or lack of successful experiences, during the training session.

The subjects were given two assignments for the following week: listening to pre-recorded imagery exercises

for five fifteen-minute sessions and tape-recording their reactions to each session. The scripts for the five imagery-enhancement sessions on tape are included in Appendix 4.

The second session began with a debriefing on the previous week's training and the collection of self-reports on tape. That was followed by a second set of guided imagery exercises which also accented relaxation and problem solving via imagery. (Appendix 5). The last ten minutes included processing of the session. A second set of five fifteen-minute guided imagery sessions, a blank tape for self-reporting were given to the subject. The scripts for the taped sessions are in Appendix 6.

The third session consisted of a debriefing of the previous week's work, collection of self-reports, and a readministration of the same Betts/Sheehan Questionnaire upon Mental Imagery that was given during session one.

Evaluation of Training

Part of the evaluation of the effectiveness of the imagery-enhancement training was based on a comparison of the Betts/Sheehan QMI pre-test and retest of the $\overline{\rm QMI}$.

The evaluation of the program included statistical analysis of the differences between pre- and post-test data.

The Psychometric Properties of Imagery Measures

Reliability

From the research by Shor, Orne & O'Connell (1966) and Juhasz (1972), the Betts/Sheehan QMI was found to be internally consistent, that is the individual items making up the inventories related positively to each other.

Shor, Orne & O'Connell, testing 25 undergraduates and graduate students, found a .91 occasion 1 and .93 occasion 2 using a split half estimate. Juhasz, testing 67 undergraduate and graduate students and 12 professors, obtained a .95 and a .99 correlation using Cronbach's (1959) coefficient alpha estimate.

Test-retest reliability data for the QMI range from moderate to high as reported in the following table as reproduced in White, Sheehan & Ashton (1977).

Test-Retest Reliability Data for the QMI

	Sheehan	Evans &		White, Ashton &	
	(1967)	Kamemoto		Brown (1977)	
Modality		(1973)			
Visual	.78	.67	.58	. 42	.52
Auditory	-	.74	. 49	.44	. 46
Cutaneous	-	.82	.53	. 42	.51
Kinesthetic	-	.74	. 29	.32	.32
Gustatory	-	.75	.51	.42	.51
Olfactory	-	.72	.60	.58	.59
Organic	-	.61	. 49	. 48	.51
Total	.78	. 91	.63	.54	.59
N_	62	35	89	162	251
Subjects	American	American	Male	Female	Combined
	students	students		Australian	
	male	male and		students	
		female			
Test/retest	-				
Interval	X 7 mths	s 6 wks		12 mths	

Note: All coefficients are significant at p .01 level

Validity

Critics of subjective tests, and especially imagery self-report evaluations, have noted the difficulty involved in assessing whether the tests actually measure the production of mental images. Factor analysis has been the main statistical tool for analyzing the validity of imagery tests such as the Betts QMI.

Sheehan (1967) found a large general factor and seven smaller ones that were modality specific. Richardson (1969), Wagman & Stewart (1974), and White, Ashton & Law (1974) confirmed the existence of one predominating factor, with Sheehan and Richardson labeling the factor as a "general imagery trait," and Wagman & Stewart calling it "general suggestibility," and White et al., "social desirability."

Researchers have also conducted studies comparing scores from two different imagery tests, the Betts QMI and Gordon's test of imagery control. For both tests, correlational evidence shows both significant relationships (Lane, 1974; Moprris & Gale, 1974, Starker 1974, White & Ashton, 1974) and insignificant relationships (McLemore, 1972; Morelli & Lang, 1971; Rossiter, 1976; Spanos, Valois, Ham, & Ham, 1973). Correlation among the test scores were

low; with the highest being r=.36 (Starker 1974). Morris and Gale (1974) tested a smaller sized subject sample and obtained a coefficient of -.58 between the combined visual, auditory and kinesthetic scores from the QMI and Gordon's test. In conclusion,

Present questionnaire tests of imagery ability appear to be internally consistent and reliable, and varying degrees of construct validity have been determined by both factor analytic methods and intertest studies. (White, Sheehan, & Ashton, 1977, p. 154))

Application of Betts/Sheehan QMI

The QMI differentiates seven imagery modalities within the thirty-five item test; five items each test ask the participants to rate themselves on their visual, auditory, cutaneous, kinesthetic, gustatory, olfactory, and organic modalities. One of the ways this research used the QMI was to measure the difference between the pre and posttest scores in each of the seven modalities in order to judge the comparatiave degree of improvement after training.

participants' use of the rating scale. Each person had a choice of rating her/his image:

- 1 Perfectly clear and as vivid as the actual experience.
- Very clear and comparable invividness to the actual experience.
- 3 Moderately clear and vivid.
- 4 Not clear or vivid.
- 5 Vague and dim
- 6 So vague and dim as to be hardly discernible.
- 7 No image present at all, you only "knowing" that you are thinking of an object.

The number of times each participant used a number rating on the scale on the pre- and posttest was recorded in order to determine the range of self-rating in relation to the degree of success or failure to enhance imagery.

The total number of points scored in the pretest were compared with the total from the posttest, and the difference, or change after training, was calculated and graphed in order to demonstrate (1) the magnitude of each participants' change in relation to others and (2) each individual's total score position in relation to others.

Qualitative Evaluation of Imagery Enhancement

In addition to the statistical measurement of imaging improvement, data on the development of the skill of imagery

came from (1) from the comments and feedback during the training sessions, (2) from the closing evaluative interview, and (3)the subjects' self-reports after ten athome taped sessions.

(1) Evaluation from the comments and feedback during the training sessions

Periodic evaluations were conducted while the training was still in progress in order to appraise the activities and the reactions of the subjects. These evaluations elicited information about the learning process and the subjects' feelings about the training procedures. These ongoing evaluations involved the subjects in their learning process and encouraged them to become aware of their feelings and to express them.

Some of the following questions, or ones similiar to them, were asked:

How are things going?

What seems to be going well? What's not working out?

Are you having any difficulty with any exercise?

Are you ready to move on?

Would you like any more information or instructions?

(2) Self-reports after ten at-home taped sessions

In order to assess the momentum, successes, and difficulties of the daily fifteen-minute training, subjects were asked to write or tape-record their reactions to the training sessions. They were asked to make any comments that they wished, including comments about the contents of their mental imagery scenarios. However, they were also given a list of the following questions about the learning process, and were encouraged to answer any or all of the following questions:

In general, how do you feel this training session went compared to the one before? Better? Worse? The same?

What seemed easy or natural for you in this session?

Was there any one part that was much more successful

than other parts? Can you offer any explanations why
that would be so?

What seemed difficult or strained for you in this session?

Was there any one part that was less successful than other parts? Can you offer any explanations why that would be so?

Could you recall any feelings or attitudes you experienced during the session?

What would be one or two words you'd use to describe feelings right now?

(3) Concluding Evaluations

The final evaluative interview tried to determine whether the training fulfilled the objective it was designed to meet: were the subjects now able to image more vividly and with greater control. Some of the questions that were asked were:

What kind of changes in your imaging ability do you find?

What are some skills or understandings that you now have that you did not have when this training began?

Rationale for the Case Study Approach

The decision to utilize a case study approach to collect data on the effects of a particular training design to enhance imaging ability was made because of the difficulty of evaluating an entirely private, objectively unverifiable nature of the psychological processes involved in imaging. Yet it was the purpose of this researcher to work within the scientific traditions and to examine the mental phenomenon in ways that are compatible with experimental and empirical research. To this end, this qualitative section of the research design has established a limited definition of the process to be investigated and a controlled series of operations to test the reactions of individuals while they engaged in imagery processes. One of the purposes of this inquiry is to obtain more information about the conditions which facilitate or impede the acquisition of imaging skill

and a second purpose was to "generate rich subjective data that can aid in the development of theory and empirically testable hypotheses."

(Stake, 1978, p. 6.)

The information on which these case studies are based come from three sources: (1) two interactive imagery training sessions which were tape-recorded to document the individual responses to training procedures, (2) participant feedback to each of ten imagery training sessions completed individually away from the trainer, and (3) a direct evaluation question about the effectiveness of the training for them at the last, post-test session. From this information extensive descriptive data on each individual's responses to the training were accumulated.

people's own written or spoken words... allow us to know people personally and to see them as they are developing their own definition of the world... Qualitative methods enable us to explore concepts whose essence is lost in other research approaches. (Bogdan and Taylor, 1975, pp. 4-5)

The scripts for the two interactive training sessions were structured prior to the beginning of any

of the training sessions, but the trainer was willing to depart from the scripts according to the needs of the participant. This "flexible strategy of discovery" as outlined by Lofland (1971, p. 76) permitted the elaboration of the individual's imaging process in a permissive and highly individualized style, allowing the researcher to gain a quality of information that would have been impossible if one, standard training script had been administered to each participant.

After the training of all seven participants was completed, the researcher reviewed all the data, both rereading all the transcribed tape-recordings and relistening to the tapes. Both processes were important for several reasons: they allowed the researcher to compare and contrast the vocal inflections and timing of participants as well as the cognitive information provided by the participants. During this review, the researcher began to test out "categories of analysis" (Glaser and Strauss, 1967, p. 105) in search of certain themes which were common to all the participants and which would elucidate the imaging process.

There obviously are innumerable perspectives from which the data could be analyzed, and finally the choice among the potential themes must be selected by the researcher based on the nature and intent of the study.

The issue resolves largely into personal preferences of the (researcher), the intent of the investigation, the available resources, and the (researcher's) decision concerning what type of interaction he desires. (Denzin, 1970, p. 132)

The intent of the study was to evaluate the effectiveness of a training design to enhance imaging, and for this researcher the outstanding result of the study was the marked difference between the self-reported successes of four of the subjects and the lack of self-reported success of three.

In review, a factor which seemed to distinguish those who found the training successful from those who did not were the participants' goals, specifically, their sense of how this training might make a difference to their future.

Each of the four who evaluated the training positively stated at least one of their goals in subjective terms, that is, how they hoped to explore knowledge of themselves. Three who did not find the training helpful stated their goals as outside themselves, that is, how they desired to improve objective knowledge.

Rationale for Case Study Analysis Using Kelly's Personal Construct Theory

The critical influence of a person's anticipation of the future on how one experiences new information was of particular interest to psychologist George Kelly, and thus this researcher chose to use part of his personal construct theory to try to understand the cognitive processes of each participant in this training program and why the new experiences in the training were comfortably assimilated for some and unmeaningful for others.

In brief outline, personal construct theory proposes that people make meaning out of their experience by forming rules or constructs that help give shape to novel events which they are constantly encountering.

The universe is real; it is happening all the time; it is integral; and it is open to piecemeal interpretation. Different men construe it in different ways. ... Thus man comes to understand his world through an infinite series of successive approximations. (Kelly, 1963, p.43)

These constructs provide helpful mind-sets or channels that sort out new phenomena quickly so that people can predict and control their futures.

...man seeks prediction. His structured network of pathways leads toward the future so that he may anticipate it. This is the function it serves. Anticipation is both the push and pull of the psychology of personal constructs. (Kelly, 1963, p.49)

Participants in a training experiment are no exception to these procedures in that they encounter unfamiliar events and find them either compatible with pre-established constructs or incongruent with their constructs.

Now it so happens that a person must occasionally decide what to do about remodeling his system.

... How much can he tear down and still have a roof over his head? How disruptive will a new set of ideas be? ... Here is the point at which he must choose between preserving the integrity of the system and replacing one of its obviously faulty parts. (Kelly, 1963, p.58-59)

If the unfamiliar events do not conflict with their constructs, the information can be assimilated and checked to see if it does indeed help them predict or control their future, e.g. fulfill a goal. If it does, learning takes place. On the other hand, if the new data cannot easily fit within the constructs and/or does not facilitate their ability to anticipate the future, learning will not take place.

In order to explain the differing degrees of ease or rigidity with which people respond to new information, Kelly theorized that constructs were hierachically organized. Higher level or superordinate constructs "contain other constructs as one of the elements in its context" (Kelly, 1955, p. 564), and changes (new information or behavior) in the lower or subordinate constructs can be more easily accomplished without threatening one's identity or sense of self.

Suppose a person starts to revise his constructs. He can expect some clutter about his household while the process is going on. A

semblance of organization can be maintained, however, if he has some superordinate structure to his life which is permeable enough to deal in a general fashion with the strange and unruly elements for which is is seeking some precise structure. ... The permeable structure of his "long-range goals" - his life-role structure, his philosophical position - keeps him from collapsing in complete anxiety. (Kelly, 1955, p. 847)

Kelly did not extensively define these hierarchical levels of constructs, but Carl Rogers has proposed seven stages in the continuum of personality change (Rogers, 1961, p.132) which can be seen to elaborate the hierarchical schema of constructs of Kelly.

The first stage is characterized by <u>fixity</u> and <u>remoteness</u>. Characteristics include

- (1) unwillingness to communicate self.
- (2) communication is only about externals.
- (3) feelings and personal meanings are unowned.
- (4) no desire to change.
- (5)personal constructs extremely rigid.

The second stage is characterized by <u>slight</u>

<u>loosening of symbolic expression</u>. Characteristics
include

(1) expression begins to flow to non-self topics.

- (2) problems perceived as external to self.
- (3) feelings described as past objects.
- (4) differentiation of personal meanings very limited.
- (5) personal constructs rigid, and unrecognized as being constructs, but are thought of as facts.

The third stage is characterized by <u>further flowing</u>

of <u>symbolic expression</u>: Characteristics include

- (1) freer flow of expression about the self as an object.
- (2) expression about self-related experiences as objects.
- (3) descriptions of feelings not now present.
- (4) differentiation of personal meanings less global.
- (5) personal constructs are rigid, but may be recognized as constructs, not external facts.

The fourth stage is characterized by gradual loosening of constructs. Characteristics include

(1) description of more intense feelings of the

- "not-now-present" variety.
- (2) little open acceptance of feelings.
- (3) experiencing less bound by the structure of the past.
- (4) increased differentiation of feelings, constructs, personal meanings.
- (5) loosening of the way experience is construed; some discoveries of personal constructs; questioning of the validity of current constructs.

The fifth stage is characterized by freedom_of_
organismic_flow. Characteristics include

- (1) feelings expressed freely as in the present.
- (2) quality of acceptance of self-responsibility for the problems being faced.
- (3) increasing ownership of self feelings, to be "real me".
- (4) tendency toward exactness in differentiation of feelings.
- (5) discoveries of personal constructs as constructs; critical examination and questioning of these.

The sixth stage is characterized by experiencing as a process. Characteristics include

- (1) present feelings directly experienced with immediacy.
- (2) quality of living subjectively in the experience.
- (3) internal communication free and relatively unblocked.
- (4) differentiation of experiencing is sharp and basic.
- (5) relevant personal construct is dissolved in each experiencing moment, and person feels cut loose from his/her previously stablized framework.

The seventh stage is characterized by a <u>quality</u> of <u>motion</u>, of <u>flow</u>, of <u>changingness</u>. Characteristics include

- (1) new feelings experienced with immediacy.
- (2) continuing basic trust in his/her own process.
- (3) experiencing has almost completely
 lost its structure-bound aspects, becomes
 process experiencing.

- (4) internal communication clear, feelings and symbols well-matched, sense of effective choosing.
- (5) personal constructs tentatively reformulated, to be validated against further experience, but even then, to be held loosely.

People who identify themselves in direct and indirect ways as construing themselves at the upper stages can make many kinds of informational and behavioral changes without endangering their identity. On the other hand, people who identify themselves at the lower stages may find that any informational and behavioral changes are potentially catastrophic to their sense of self-consistency. If they choose to retain, or "learn" the new, disruptive information, they will have to eventually reform their superordinate construct (Kelly's terminology) or evolve to a higher stage (Roger's terminology).

It is within this theoretical frame that this study will examine training experiences of all seven participants. For, as Kelly notes, it is helpful to

identify the personal construction of the "self", and then seek to understand the controlling effect that self-construct has on his/her ability to assimilate new information and broaden constructs.

construct. It refers to a group of events which are alike in a certain way and, in that same way, necessarily different from other events. The way in which the events are alike is the self. ... The self, having been thus conceptualized, can now be used as a thing, a datum, or an item in the context of a superordinate construct. ... When the person begins to use himself as a datum in forming constructs, exciting things begin to happen. (Kelly, 1963, p. 131)

They react to new experiences with freedom and confidence as

The self becomes increasingly simply the subjective and reflexive awareness of experiencing. The self is much less frequently a perceived object, and much more frequently something confidently felt in process. (Rogers, 1961, p. 153)

In terms of this research, it was discovered that the participants who felt themselves successful in this imagery training program seemed to use themselves as data: that is, they were construing themselves as a process. They identified their goals in personal-change terms. Their subjective processes and objective societal roles were systems open to

remodeling as evidenced by their defining themselves as the focus of change in their answers to the trainer's question, "Why do you want to enhance your imaging ability?" Both their superordinate constructs and their subordinate constructs were open to revision, or were "propositional," and "permeable." These participants seemed to be at stages five, six, and seven.

Those participants who identified their goals in terms of profession or society may be said to be construing themselves at lower stages, and are classified by Kelly as using "object-referenced" processes. If the construct of "self" is not clearly differentiated from other events and if, for example, the identification of a social role is included in the definition of self, changes, such as those which might result from introspecting the internal images which arise from the training sessions, are potentially more threatening to the way he/she has construed meaning from the world.

One may ask why a particular client is so insistent in construing the elements in such a way as to make them threats. The answer to this lies in the inherent nature of constructs

themselves. One maintains his construct system by clarifying it. Even one's own system is stabilized or controlled in the manner in which outside events are controlled. This means, among other things, that one controls his system by maintaining a clear identification of the elements which the system excludes as well as those which it includes. The moment one finds himself becoming involved in any way with the excluded elements of his system, he becomes aware of the onset of incompatibility and sees those new clutching associations as threats. (Kelly, 1963, p. 167)

This study proposes that the goals the participants set for themselves suggested an important indication as to how readily new experiences and new events could be added to their existing constructs.

One of the prominent conceptual categories which emerged from an intensive review of the subjects' participation and feedback data was the implicit attitude or position of the participant regarding the outcome of the training. Whether the anticipated change would occur in the self or in other-than-self seems, in retrospect, to have an influence on the course of the training and on the effectiveness of this training program. To this end, each of the case studies will be analyzed by asking the following questions:

- 1. How did each participant phrase his/her goals for the training?
- 2. What does such a goal suggest about the construct of the self?
- 3. What internal evidence from the participant's training sessions and feedback is there to support the researcher's understanding of the construct of the self?
- 4. What is the participant's final evaluation of how the training sessions affected his/her imaging ability and how might that correlate with his/her construction of self?

CHAPTER VI

Presentation of the Data

This chapter presents a description of the results of this study. Topics covered in the quantitative analysis section include changes in the cumulative imagery scores of each individual as measured by the Betts/Sheehan QMI before and after training in comparison to group cumulative scores, the individual and group changes in the seven modalities of imagery, and changes in the use of the rating scale before and after training. Qualitatively, seven case studies are presented, detailing participants' intellectual and emotional processes that accompanied the imagery training.

Quantatative Analysis

Changes in Participants' Overall Imaging Ability

Five of the seven participants recorded improvements in their overall imaging ability as

measured by the difference between their scores on the Betts/Sheehan QMI before and after training. The greatest improvement was registered by Participant F (50 points), followed by A (42 points) by C (36 points), by E (33 points), and by B (27 points).

Two of the participants' posttest scores deteriorated from their pretest scores: Participant G by 3 points, and D by 7 points.

According to the standard procedure of administering the QMI in the test-retest protocols conducted by Sheehan (1967), Evans and Kamemoto (1973) and White, Ashton & Brown (1977), which were reproduced in Chapter 3, participants took the retest without being able to see what they had recorded on the pretest. Three of the participants in this study remarked during the posttest that they wished they could remember what values they assigned to each question in the pretest so they could more accurately indicate on the posttest the degree of vividness

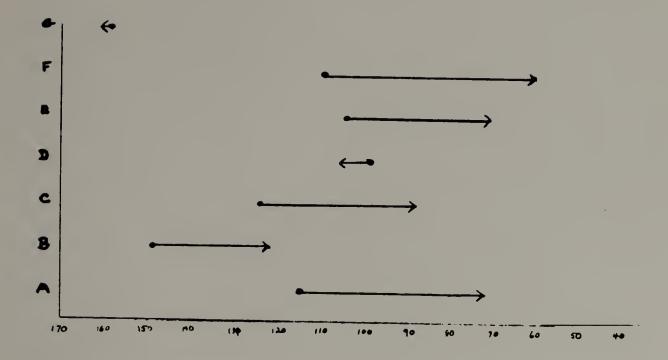
change they presently sensed. That was not possible, of course, according to this study's evaluation design, but it certainly would be valuable to pursue the hypothesis that self-reported changes would be different if participants were able to see their pretest during the posttest.

Table 1 graphs the magnitude of each participant's change in imaging ability and shows the pre-training and post-training positions of each individual on the Betts/Sheehan scale. Note that the scale starts at 35 which would be the ultimate performance of 1 for each of the 35 items on the QMI. Note also that the lowest numbers represent the best scores, 1 being the rating for an image that is as clear as the experience itself and 7 being the rating for no image at all.

In nonparametric samples such as the one used in this exploratory study, it is suggested that average performance be calculated from the median (Borg & Gall, 1983, p. 364). The median individual improvement was 33 points.

Table 1

QMI Score Change for Participants Before and After Training



Key: Dot at end of line indicates score on pretest
Arrowhead at other end of line indicates score
on posttest

An interesting discrepancy arose between the results of the changes indicated by $\underline{\mathsf{QMI}}$ test score results and the subjective analysis of performance by the participants during final interviews. Participant D said she felt she "definitely improved," but her $\underline{\mathtt{QMI}}$ showed her imaging skill deteriorated. F did not complete the training because she said she felt it harmful to her artistic processes, yet her posttest score showed that she made the greatest improvement of any of the seven participants. Other factors which may have influenced the posttest are discussed in her case study, but the findings are unusual. E said she wasn't sure whether her imaging ability improved after the training, but the positive changes in her scores indicated improvement. Only G was consistent: she felt her imaging ability did not improve, and her QMI scores corroborated her assessment.

One of the prominent features of the \underline{QMI} is its seven subcategories measuring imagery in sensual

modalities, and an analysis of changes in each of the modalities is included. Table 2 presents the pretest and posttest modality scores of each of the participants, showing the differences or changes. Minus scores represent improvement, while plus scores represent deterioration.

Table 2

Difference in pre and posttest according to modality

Numerical Data

Modality	_1	_2	_3	4	_5	_6	_7	Total
Participan A (pre)(post)differ.	t 17 - <u>8</u> 9	11 5	17 	11 -5 -6	18 16 -2	19 - <u>22</u> +3	22 -12 -10	115 <u>73</u> -42
B (pre) (post) differ.	21 13 -8	18 15 -3	18 <u>15</u> -3	20 15 -5	26 -16 -10	31 <u>30</u> 1	15 <u>18</u> +3	149 122 -27
C (pre) (post) differ.	12 -7 -5	1 0 -5 -5	13 10 -3	13 - <u>7</u> -6	21 18 -3	26 25 -1	29 <u>16</u> -13	124 88 36
D (pre) (post) differ.	17 14 -3	12 <u>15</u> +3	1 1 13 +2	13 14 +1	1 4 17 +3	17 <u>18</u> +1	15 <u>15</u> 0	99 <u>106</u> +7
E (pre)(post)differ.	13 9	17 13 -4	17 -10	12 -11 -1	18 <u>12</u> -6	16 10 -6	11 <u>9</u> -2	104
F (pre) (post) differ.	19 10 -9	17 -10 -7	13 	17 - <u>7</u> -10	1 4 8	20 10 -10	10 - <u>7</u> -3	110 60 50
G (pre) (post) differ.	26 <u>24</u> -2	17 15	22 23 +1	1 1 19_ +8	26 <u>26</u> 0	27 <u>32</u> +5	29 <u>22</u> 7	158 <u>161</u> +3
Total Changes	-40	-27 + 3	-33 + 3	-28 + 9	-27 + 3	-18 + 9	-35 + 3	

Modality Key:

1 = visual

2 = auditory

3 = cutaneous

4 = kinesthetic

5 = gustatory

6 = olfactory

7 = organic

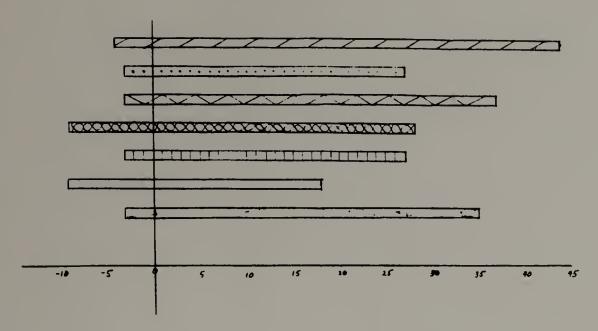
The greatest improvement in any modality was recorded by C in the organic mode (13 points), followed by A in the cutaneous mode (12 points). The modality which deteriorated the most after training was the kinesthetic, a loss of 8 points recorded by G, followed by the olfactory, a loss of 5 points, also recorded by G.

For the group, the largest total point change in a modality was in the visual category (42 points), followed by the kinesthetic (33 points). A graph showing total changes for the group is presented in Table 3.

However, only one participant showed the greatest change in the visual modality (D with 3 points); each of the other participants reported most change in five of the other modalities. Greatest change was recorded in the organic modality by two participants (C with 13 points and G with 7 points), in the cutaneous by two (A with 12 points and E with 10), and in the kinesthetic for two (E with 10 and F with 10). F also reported a 10 point change in the olfactory modality. The gustatory category showed greatest change for one participant (B: 10 points).

Table 4 shows the individual participant's changes graphically. From this small sample, the uniqueness of each person's pattern of improvement or deterioration in QMI test scores after undergoing training attests to infinite variety of personality and learning patterns. This diversity seems important to remember whenever standardized training is attempted.

Bar Graph Showing Group Total of Changes According to Modality



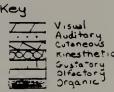
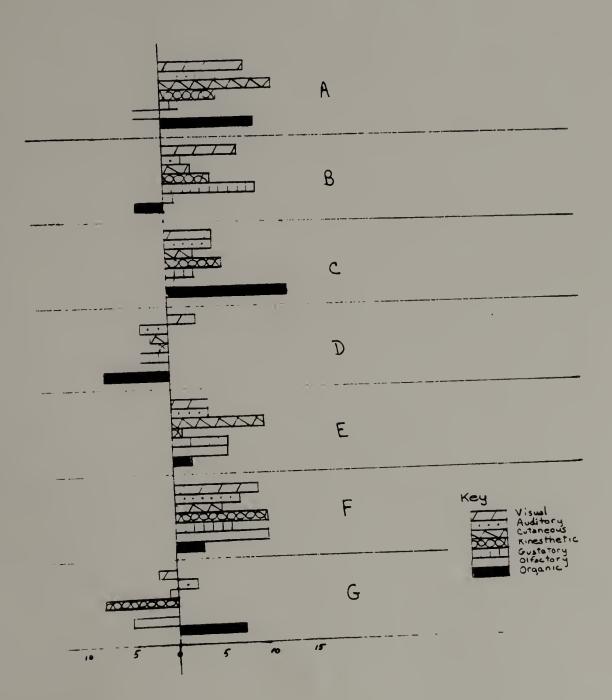


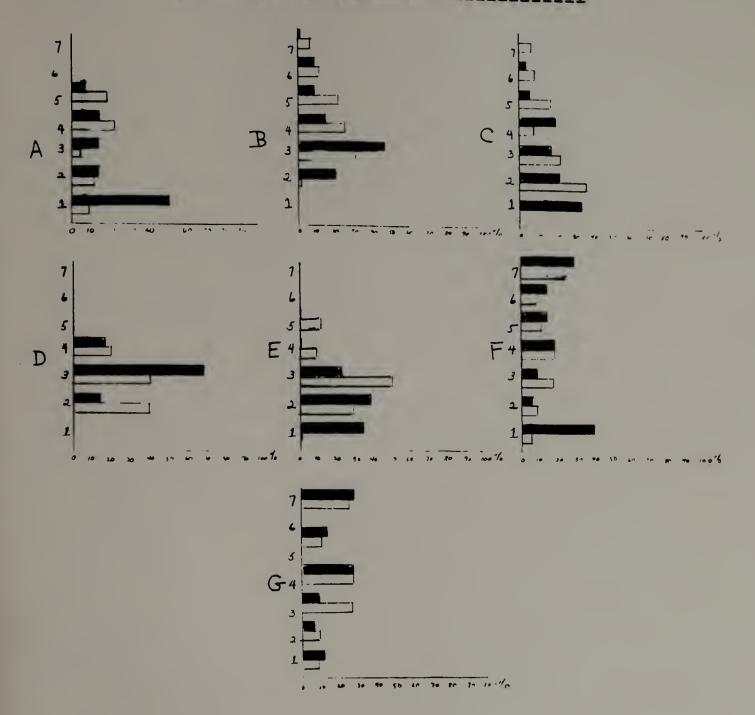
Table 4

Bar Graph of Participant's QMI Pre and Posttest Changes in Seven Imagery Modalities



Of unexpected interest and of unexplored significance is each participant's use of the possible range of ratings from 1 to 7. Examination of the preand posttest results showed a variety of rating ranges: D made all her ratings within three numbers only, 2, 3, and 4. In contrast, F and G, two of the participants who reported in interviews that they did not find the training helpful to their imaging ability, utilized the full range of 1 to 7 in both their pre and posttests, but they were the only participants to do so. The three participants who reported feeling successful and whose scores showed positive change in imaging ability never used the full range of ratings in either the pre or posttest; A never used 6 or 7 in either test, B never used 1 in either test, and C didn't use 1 in his pretest and didn't use 7 in his posttest.

Participant's Use of QMI Rating Scale



Key:
1=As vivid as experience
2=Very vivid and clear
3=Moderately vivid
4=Not clear or vivid
5=Vague and dim
6=Hardly discernible
7=No image

Further research is needed before any conclusions could be drawn, but some hypotheses to be tested might be:

People who rate themselves as having images that range from "as clear as the experience itself" to "no image at all" are less likely to find their imaging ability improved after a training program such as this one.

People who spread their ratings over six of the seven rating, but do not use the extreme at either end are more likely to find their imaging ability improved after a training program such as this one.

People who use a very limited range in both their pre and posttests may have test scores which do not match their subjective feelings of whether their imaging ability has improved or not.

In retrospect, this researcher regrets not having asked participants about their use of the rating scale, for significant predictive trends may be read into the process whereby people rate themselves.

Qualitative Analysis

Part of the purpose of this study was to explore the emotional and cognitive processes which accompanied a training in imagery, and to this end seven case studies are presented following the format described in Chapter 3.

The Case of A

1. How did each participant phrase his/her goals for the training?

The trainer asked A at the beginning of the second training session, "What use might you want to make of this training?"

A replied: I'd like to improve my imaging ability. First of all, it would be so much fun. I enjoy that. Another thing is that it is such an ordering. It contributes to my organizational ability. It increases the depth and the breadth of any relationship that I can put into it. If I get an image, then I can put it into a whole bunch of dimensions. It's like an analog. You can suddenly see relationships between previously unrelated concepts. So it would be terribly enriching. The more imagery you get, the better you are. Especially for art work... if I

could hold an image, if I could get some photographic... but that's different. One's photographic and the other is conceptual. ... I don't have to have that vividness, and I don't have the vividness. But on the other side, I certainly use it when I am upset emotionally. I think the same thing about this healing light. It's a marvelous, helpful way, and I'm not very skilled at it, but I think about it. That's a form of imagery. I think the most powerful way of doing it is acting "as if" something is taking place, and step into it. ... It's taking an image and putting it out there a little ways away from me. I image myself as having something, rather than not having it. Now I imagine myself as if I have it. Acting "as if" brings it about somehow. At least, it stops the negative.

2. What does such a goal suggest about the construct of the self?

A's construct of self seems, in Kelly's terms,

"permeable", that is, the construct is so constituted

that new experiences and new events can be

discriminately added to those it already embraces.

(Kelly, 1963, p. 81) Not only is there no sense of

threat in the experiences of the imagery training

sessions, but there is a sense of pleasure and

adventure in the exploration of the boundaries of

"self." Her comment, "The more imagery you get, the

better you are," seems to indicate that she construes

her self as a process capable of growth and

improvement. The upper limits are fluid and full of

potential, as she describes her imaging experiences as vehicles of empowerment and understanding.

A appears to be construing herself in the seventh stage of Roger's hierarchy of processes. At this stage

The self becomes increasingly simply the subjective and reflexive awareness of experiencing. The self is much less frequently a perceived object, and much more frequently something confidently felt in process. (Rogers, 1961, p. 153)

3. What internal evidence from the participant's training sessions and feedback is there to support the researcher's understanding of the construct of self?

The voluminous feedback data from the at-home training sessions and the lengthy elaborations expressed during the interactive training sessions attest to the articulateness of this subject. She mentioned during the training that she is very shy and reticient in public situations, but in more private circumstances she is exceptionally fluent about her psychological processes and seems aware of her awareness.

One of the most prominent features of her feedback is the freedom that she seems to experience

in examining the multitudinous aspects of her images, responding spontaneously to the feelings they evoke. Her construct of self, therefore, seems to possess very permeable and elastic boundaries that permit new material to come into consciousness without premature rejection or incorporation. Rogers would identify these qualities as those of a person at stage seven:

Personal constructs are tentatively reformulated, to be validated against further experience, but even then, to be held loosely.

...The ways in which he construes experience are continually changing as his personal constructs are modified by each new living event.

(1961, pp. 153-154)

A's feedback from the first training session was:

The sense that I had at the end of the session is a sort of hovering feeling, that the experience was pregnant with meaning that I couldn't quite grasp. Once I get the metaphor and its ramifications it seems so obvious, blatant even, that I can't stand back and judge them to be profound. I experience them as they unfold as being profound. It's a paradoxical conflict within my brain. One side is saying profound and important, and the other is saying trite and obvious!

The following passage follows one of the more complicated training sessions and her lively reaction underscores her unfettered responses, both negative and positive. More significantly, her affect is so cheerful and full of wonder at her very ability to

experience the "metalevels" of consciousness that her open construct of self seems very evident.

It's a wonderful beginning scene. It's a nice boat but who is in it and who brought it and steered it away? And I worried - would there be rapids and a waterfall down the stream? No, Paula, wouldn't let that happen. Why did I think of that? Because rivers are dangerous and movies often have a peaceful scene which is suddenly transformed into a horror? Why do I feel tense about peaceful imagery? Maybe this is a result of our fast-paced and not-safe world. I loved the scenes but had to keep checking which side was left, and if I was on the right side to do it right. And then I asked, Why is she doing this? Will there be a different effect and what can remember on one side over the other? Can I really do an image on one side only? I'll be asked to remember which ones I can remember or only those on one side! Do all the ones on one side have something in common? I'm not seeing that. How can I remember? There must be a way to make my mind remember." ... Why am I so competitive with myself because of this. So now I'm challenging myself. Perhaps I could do pretty well. They are really wonderful images to think about. I'll go to sleep thinking about them... getting a whole gallery of pictures. feelings right now? Amusement, most of all. How I complicate everything! How my mind went to meta-levels of "What is Paula doing?" and "What will happen next?", being prepared to hit a tennis ball from any direction. I was a rather unsatisfactorily relaxed subject, wouldn't you say? I did keep a part of my mind right on track, however, exactly what you asked.

She is gracefully able to contain quite different experiences and contradictions, quite unperturbed at discovering a changing self in a changing swirl of events.

Beneath all the multitude, though, is an integrity of feelings and experience. As Rogers expressed it,

Rather than to try to hold her experience into a form of a mask, or to make it be a form or structure that it is not, being herself means to discover the unity and harmony which exists in her own actual feelings and reactions. It means that the real self is something which is comfortably discovered in one's experience, not something imposed upon it. (Rogers. 1961, p. 114)

Another characteristic of the permeable construct of self is its sense of being a process, not a static product. Those subjects who felt themselves successful in this training program did not set goals outside themselves, but were motivated to explore, understand, and develop themselves without specific reference to societal goals. Participant A evinced this characteristic several times in her feedback and training sessions.

Then, it (imaging) gets exciting because I'm seeing all these different kinds of change, and they're all important. That's exciting - the multiplicity - to being it in into some marvelous, complex whole with all these facets balanced. I'd like to put it (the discussion in a class) into some kind of image, like a multifaceted globe. I don't know, but I'm struggling for it. I haven't got it yet, but it's going to be something like that. ... It's the only way I can relate all that's going around.

A's experiences, though often ambiguously undefined as she lives through them, are the building blocks of the meaning which she eventually will "put ... into some kind of image;" that is, meaning, for her, evolves from first being immersed in the experiences and then from a secondary effort to find an integrating gestalt that is encompassing enough to include the essences of all the experiences.

A client (in stage seven) has now incorporated the quality of motion, of flow, of changingness into every aspect of psychological life, and this becomes its outstanding characteristic. He lives in his feelings knowingly and with basic trust in them and acceptance of them. ... He values differentiation of his feelings and of the personal meanings of his experience. (Rogers, 1961, pp. 154-155)

For A, images, not words, have the capacity to contain the "multiplicity," because words, as she commented in a training session, are "linear," and when she tries to grasp the totality of an idea with words only by listing the concepts,

the first starts to fly away. ...but when I put it into a form, then it all goes together. ...If I can see it as a three-dimensional, geometric form, like a tetrahedran or something like that, that's good enough for me to tack on the verbal. It's a way of bringing my words by relating my words to the three-dimensional form. ... I put them into a symphony or into a simultaneous frame; then I can take any one of those aspects and not lose them.

Kelly noted that the way a person phrased his/her experiences was the key to understanding how the person construed the self. From these passages, it is possible to note the recurrent themes of A's construct of her self. The self here is purposely open in order not to miss events which could contribute to a deeper and wider opportunity to re-form more and more meaningful predictions about the future. Kelly often identified this type of self construct as that of the true scientist who understand he/she must observe phenomena with new eyes and experiment with innovative procedures.

Constructs, in the true scientific sense, are being "tried on for size." In fact, the seeing of constructs as proposed representations of reality rather than reality itself is propaedeutic to experimentation. (Kelly, 1963, p. 163)

4. What is the participant's final evaluation of how the training sessions were on her imaging ability and how might that correlate with their construction of self?

I'm feeling a little awed by this process of being all week with your guided imagery. I have a hovering sense of significance and importance of a treasure here, but I can't explain what I mean exactly... what I feel excited, and in some

way, I feel hungry, without knowing what I want or what I need to satisfy it... or maybe that's only what living is all about.

A's self seems keenly aware that her attempts at meaning are "proposed representations of reality" which are most accurately full in three-dimensional, symbolic images. It is for this permeable construct of self at stage seven that an imagery training program such as this one appears most suitable and successful.

The Case of "B"

1. How did each participant phrase his/her goals for the training?

The trainer asked B at the beginning of the second training session, "What use might you want to make of this training?"

B's response: No, I don't have any idea of any specific use other than this all seems to be coming along at a time when I'm also tuning into all the other extra-physical kinds of experience... the astral stuff... so this dovetails, in a sense. I don't know which is the chicken and which the egg, but I'm looking to integrate this stuff more into my life. I am. So whatever part imaging is to looking to the broader picture of routine, daily, functional living... yes.

2. What does such a goal suggest about the construct of the self?

The sense that "self" for B is evolving rather independently from certain phenomena he has defined as "other" is what strikes this researcher immediately. He has the separateness to "tune into" experience, even "extra-physical" experience, and the metaphor, "tune in," suggests a strong sense of control and mastery as though he could adjust the clarity, the volume, and perhaps even the on-off switch.

In the same sense-of-self-as-agent, he is "looking to integrate this stuff into my life," a phrase which suggests that he is at stage six, to use Roger's hierarchy. At this stage, people view themselves as flexible, open to new experience, and capable of readjusting existing constructs. The process of integration does not yet seem anywhere near finished for he is "looking to the broader picture of routine, daily, functional living" to see how his improved ability to image may prove helpful. He seems to suggest that he will be testing out his emerging skills to see if he can more comfortably predict and control future events.

B seems to be have the concept of himself as a person who

creates his own ways of seeing the world in which he lives; the world does not create them for him. He builds constructs and tries them on for size. (Kelly, 1963, p.12)

His position as an experimenter is corroborated by his opening statement that "I don't have any idea of any specific use...", connoting an absence of pressure to tightly fix these new experiences yet into any formal role. There is no expression of anxiety expressed explicitly or in the tone of the voice about this lack of application, leading this experimenter to conclude that his construct of himself is beyond attachment to limiting roles established by society or profession. Having this independence, he seems to find the new experiences involved in the imagery training as interesting and potentially useful.

(At stage six,) he neither perceives his problem nor deals with it. He is simply living some portion of it knowingly and acceptingly. (Rogers, 1961, p. 150)

3. What other internal evidence from the participant's training and feedback is there to support the researcher's understanding of the construct of self?

The following are comments made by B that are

supportive of this researcher's conclusion that B's construct of self includes a strong sense of agentry and process.

Early in the second training session, B remarked

I think what I'm more aware of is the value of taking that time out, and focusing on that, one can really change one's consciousness and feel rejuvenated and get in touch with other aspects of being alive.

Here is a powerful construct of self which is able to change its own awareness, thereby increasing its sense of pleasure and meaning. As Kelly noted, the self itself is the datum that is being processed.

From a recollection of a childhood scene, B told about a playground memory of hitting a homerun which won a closely-contested game.

I was playing ball in the schoolyard and I was in fourth or fifth grade, and I was the star on the team, and I was pitching a no-hitter in the last inning, and I hit a homerun and won the game. I was being carried off the field, everybody was carrying me on their shoulders because we won the game.

Even in a reconstruction of his childhood, his self is the maker of events.

Another indication of B's strong sense of self occurred when he was asked to "picture a place where you can feel secure and happy."

It's at a conference. When I did 609 last year, I was doing my workshop presentation in group dynamics, and I felt like I had total command, control of the entire group. I took everybody step by step through an experience that people really loved. I was relaxed in front of the group; it felt very intimate with sixty people.

The "self as creator" became evident several times in his feedback on the at-home training sessions. For example, he noted the images he experienced "were really beautiful, and it made me feel just like all the wonderful things there are in the world and really get lost in me," indicating that within him is the capacity to appreciate and enjoy beauty, and that his failure to encounter those wonderful things is because they get "lost in me." To recover them, he must redisover, or recreate, them himself.

As B became accustomed to creating images, he reported that it took less and less effort to create. Even against the competition of worries of real-life situations, he felt himself able to make vivid images.

It was hard for me to get into it (the session), because of my feeling distracted by all the other data that's going on, and that's pretty consistent throughout the session. ... However, what was interesting to note was in terms of the imaging, whether it be out in the fields or the

other imaging, even though I would fade out, when I would fade in, it was quicker for me to get the image. So I found I didn't need to be focused in for any extended time. I'd get it, then I'd lose it (I'd be distracted by a thought), then I'd come back in and plug right into what you were saying and be able to image.

Another noteworthy aspect of B's construct of self is that it stayed independent of even the process of imaging, and while in the middle of an image reflected on and evaluated the imaging process.

Then, in the winter scene, I really enjoyed being in the woods, and I was a little bit upset when the radio was singing, "Jingle Bells," and I found myself distracted by some of my own biases in terms of what I feel during that time of year-like being inundated by Christmas stuff and being reminded of my non-Christian status and being left out in all this - but other than that, definitely feeling the freshness, the crispness in the woods where I found myself refreshed.

In this sixth stage, "the incongruence between experience and awareness is vividly experienced as it disappears into congruence." (Rogers, 1963, 148)

At another time, he wondered if the imagery he was experiencing was part of the preparatory relaxation or part of the imagery exercise, and kept up the debate throughout the extension of the exercise. So even while vividly imaging, he meta-processed the process.

... the escalator image. First I thought it was part of the imaging. Then I thought it was part

of getting prepared for getting into the imagery, and either way it was wonderful to physicalize going down the escalator. When I got off it, I had to get my balance! So I physicalized it, and I really felt deeply relaxed, so I kind of felt like after that, it had been preparatory.

4. What is the participant's final evaluation of how effective the training sessions were on his imaging ability and how might that correlate with his construct of self?

B's final evaluation included the following:

It definitely enhanced my ability. There's no question about that. Some of the shapes... I could do that easier. And some of the stuff that I was able to taste.. the taste increased. ... my glands were going. The increase in my ability to physicalize as a result of the image was definitely enhanced. Just the whole entry into that state of relaxation was easier to do as time went on.

B's positive evaluation of the effectiveness of the imagery training program attested to the ease with which he could experiment with and incorporate new events into a strong concept of self, one that included the enhancement of a mental skill without strain.

At this sixth stage, imagery

is experienced acceptantly, with no attempt to push it to one side, or to deny it. (Rogers, 1961, p.146)

The Case of C

1. How did each participant phrase her goals for the training?

C replied: I'm interested in working in three areas. First I'd like to increase my ability to work with clients using hypnotherapy and imagery. Also, I'd like to broaden my own experiences with imagery, getting more vivid images. And lastly, I'd like to help a fellow graduate student get through her dissertation.

2. What does such a goal suggest about the construct of the self?

C is the only subject to list multiple goals which include changes to both self and other-than-self. His construct of self seems to encompass a vision of itself as "both a self-system as well as a not-self-system" (Kelly, 1963, p. 127), an advantageous flexibility which allows maximum predictability and control. (Kelly, 1963, p. 126) This immersion in and identification with objective events, here his clients and a fellow student, is complemented by an interest in expanding aspects of the self, or subjective events. Thus his construct of self appears to contain the ability to predict and control his internal and external relationships in an open kind of plasticity, characteristic of the class of

"which leaves its elements open to construction."

(Kelly, 1963, p. 155) His superordinate construct level appears to be in stage six, where "internal communication is free and relatively unblocked."

(Rogers, p. 148)

Kelly also notes that "social poise" results from such a self construct which incorporates elements from outer and inner phenomenon.

Now, since the construct is a way of holding its elements in place, the self is held in place by any construct by which the self is constructed. The self-governing construct, or, more specifically where other people's presumed constructs are elements, the role-governing construct, provides a way of anticipating one's own responses. (Kelly, 1963, p. 151)

3. What other internal evidence from the participant's training and feedback support the researcher's understanding of the construct of self?

One of the salient features of C's imagery processes during the training sesions was the nonchalant ease with which he altered suggested scenarios in order to be psychologically comfortable and productive. For example, he didn't like caves, and

so when asked to descend mentally into one,

Actually I changed it. Instead of being in a cave, I chose to continue to walk in a forest. Then I'd stop at a tree, and I'd look at the inside of a trunk of a tree. I found that easier to do than to worry about not liking a cave.

He understood that the meta-purpose of the cave imagery was to regress back through childhood memories, and so was easily able to substitute more personally suitable images to accomplish the same purpose.

I just felt that the point was that you wanted me to go back, so it seemed like the more natural way of doing that (i.e., looking inside a tree trunk). I didn't want to say, halfway through, that I don't like being in a cave because that would have made things awkward.

C, responding like a person at stage six, is not confused, for a person at this advanced stage finds that

incongruence between experience and awareness is vividily experienced as it disappears into congruence. (Rogers, p. 148)

Another example of how he was able to mentally work on the dual levels of accommodating the objective message with the internal message was in his description of listening to the trainer and his own feelings simultaneously.

There wasn't much room in the cave, but you kept describing it positively, and I wished I could have felt that way. So you were reframing that, and I was trying to go along with that, but feeling the discrepancy.

He seems to be merely noting the fact without impatience or resistance.

When he found it difficult to breathe in the colors of the rainbow ("because I stopped smoking and don't enjoy having something in my lungs"), he adjusted the bright colors to paler hues, and "therefore I could control them a bit better."

The second unique feature of C's imagery was his reference to relationships to other people within the imagery scenarios. This researcher is proposing that the dual levels that his construct of self incorporates account for his sense of connection with others.

In his first childhood memory, the kickball game was significant for him, not because he or his team won, but because he felt himself part of a happy playground group of children. His subsequent memory was

the first day I really successfully fell in love with someone, and that was at Howard Johnsons,

sitting at a table with one of those ice creams with the cookies on the side.

Frequently during the taped feedbacks, he would comment on how some image prompted him to think of someone.

When you asked me about Santa Claus and Christmas, I got the image of Santa Claus and the sleigh, but I quickly flashed it to somebody I wanted to give a gift to and I thought about the relationship and that process as I was going through the exercise. I was a bit locked into that.

and,

When you asked me to look into the pool of water, I had no difficulty seeing myself. When you asked me to look at my weaknesses, I found it difficult to gain a vision, but I kept thinking of other people whom my limitations and strengths might be affecting.

Like Subjects A and B, C construed himself as a process that welcomed new experiences and readjusted its governing principles based on the testing out of alternative viewpoints. One feedback comment especially corroborated this flexibility. He had learned about brain hemispheric specialization earlier, and when asked in the training session at home to visualize a scene on the left side of the brain or on the right side, his learned concepts created a template that tried to sort out why one

image was suggested for one hemisphere, not the other. But when he couldn't make sense from this preconception, he tried out another.

I was thinking left brain being linear, right brain being conceptual, so I was trying to separate the two. After a few presentations, I got the hang that it was basically like a stereo set with a left speaker and right speaker. It didn't mean that one was linear and the other conceptual, but I was somewhat disconcerted by the mental processes of having to try to figure that out.

This propositional construct of self recognizes the existence of many possible viewpoints and experiments with the appropriateness of any and all in the context of the problem at hand.

It is not what happens around him that makes a man experienced; it is the successive construing and reconstruing of what happens, as it happens, that enriches the experience of life. (Kelly, 1963, p. 73)

4. What is the participant's final evaluation of how effective the training sessions were on his imaging ability and how might that correlate with his construct of self?

C's final evaluation included the following:

It was very effective and I got more and more comfortable with the process, especially during the second imagery sessions at home. Most of the images were very vivid. I had trouble with placing four dots in the corners of the orange field. Kinesthetically and visually, some of the scenes were very, very powerful.

C seemed to experience much success in enhancing his imaging ability, and that would be expected in Kelly's conception of permeable superordinate constructs being able to incorporate unexpected information about subjective phenomena. In his encounters with his internal images,

the immediacy of experiencing, and the feeling which constitutes its content, are accepted. This is something which is not to be denied, feared, or struggled against. (Rogers, pp. 145-46)

The Case of D

1. How did each participant phrase his/her goals for the training?

I guess I'm thinking of it more in relation to my work. I'm looking at different types of therapy; transpersonal has the most attraction for me... things like hypnotic techniques, imaging, so I think I was thinking of it in terms of how it would help that rather than in particular changes in myself.

2. What does such a goal suggest about the construct of the self?

D acknowledges two areas where she anticipates applying any possible gains in her imaging ability, but foremost is her interest in improving her professional work. For her, imagery seems to fall into a class of techniques, like hypnosis, that could

be useful in therapy, and she is actively "looking" at different types of therapy in order to evaluate which would help best. Significantly, she is aware of the potential use of imagery as an agent of self-change, but for this training she has clearly separated the two goals and has selected to work on other-than-self goals.

In Rogers' hierarchy of seven stages, D's construct of self appears to be at stage four, a sort of pivotal stage where "there is a gradual loosening of constructs, a freer flow of feelings." (p. 137) At this stage, a person finds security in roles and conventional constructs, but

experiencing is less bound by the structure of the past, is less remote, and may occasionally occur with little postponement. (p. 137)

Hence she expresses her growing interest in "here-and-now" therapies that use present experiences rather than therapies that use insight-gathering from personal history.

In Kelly's terminology, D's construct of self has a preference for "object-referenced" knowledge, rather than "subject-referenced" knowledge. (Kelly, 1963, p. 155-157) People who construe themselves at this

level do not seem to include imagery in the essential operations of the self. Rather, imagery is more likely to be set apart and different from those events which constitute self, and thus is a tool that the self could apply in order to help others in need.

Importantly, however, D's statement about imagery having the potential of causing changes in herself places her on the edges of construing herself separately from her professional role.

In the second training session, D imaged the following scene in response to the trainer's question, "What comes into your mind now when you see yourself as free and unblocked?":

Well, I have a kind of a picture of myself at work and doing the kinds of things that I'm interested in doing, being able to try out new things. ... I'm hypnotizing Pat M. who is young, in his thirties, a chronic mental patient who is terribly, terribly unhappy. And I'd like to, when I get good enough at it, to try and see if I could possibly put the idea in his head to be happy about the things he can enjoy and maybe work on other things. ...So, I'd like to see in what way I might possibly be able to change things for him a little bit.

Her vision of her self seems to include those events in which she acts on external objects by applying other external tools, such as hypnosis or imagery. Images seem to be objects one imposes into

the self of another in order to alleviate suffering, but they seem to be tricky sorts of objects that one needs to get good enough at transmitting. She later substitutes the word "idea" for the hypnotic image; both seem to have the power to transform one's feelings but how that is possible remains unsaid.

Because D primarily defines images as other-than-self, they do not seem to have their source in her feelings and thoughts; thus, for D imagery is less basic, less powerful than the self and seems to be merely an outside stimulus capable of healthfully rearranging the a suffering self's feelings and thoughts, if administered skillfully.

3. What internal evidence from the participant's training sessions and feedback is there to support the researcher's understanding of the construct of the self?

This researcher conjectures that D's construct of self, at stage four, has occasional difficulties in directly dealing with feelings in the present, because "there is a distrust and fear of this possibility."

(Kelly, 1963, p. 137) This evaluation is corroborated by several of D's references to the difficulty of

"getting" and "keeping" images during the at-home training sessions.

I had to go back and do them (the third and fifth sessions) over, and I think that may be because I'm doing them at night, and I'm sort of dazing out. So I may try the next set in the morning or the middle of the day. I find that I have to work at keeping my attention, and not letting my thoughts wander.

Trainer: Do you get too relaxed, do you think?

Well, I think it's a matter of keeping my attention on the tape, staying with it. I have a tendency to daydream.

There seems to be a significant difference made between daydreams and imaging for she seems to experience them as different phenomena. In fact, she confessed at the start of the first training that she "couldn't see a darn thing" in the experiential portions of her class in Ericksonian hypnosis.

Other people, almost everybody, would say, Yes they could see that. And I don't know why that is. I think in a sense I think I can visualize ok such as in situations like when I daydram, and why I'm not able to respond to someone else's, you know, I really don't know why.

Since imaging seems to be a skill that needs to be carefully learned-how-to-do-the-right-way, she questions herself and the trainer frequently to check to see if she is "doing it right."

I could see (a pyramid) quite well, and then you mentioned "or it could be in your head," and then it changed to just being in my head. So it switched back and forth two or three times like that.... What you say changes things. I was picturing a big yellow circle and you said, "or it could be a lemon." And I immediately pictured a lemon. I don't know if that happens to everyone, but I picture what is being said.

Like the "scientist," Kelly's favorite descriptor of the person experimenting with events in order to predict and control more effectively, D attempts to measure her reactions against others in order to meet external standards of adequacy. As, through practice, she gets more accustomed to finding and transforming her images, she concludes that

I have a potential to be able to participate in this much better...

However, her internal psychological processes are still object-referenced:

if I can just get there. I can... I have the ability to really image and feel these suggested pictures much more clearly and vividly than I do, but I haven't quite learned how to do that.

And so, for D the imagery sessions have acted as a "psychological reflector," (Kelly, 1963, p. 126) by deepening her awareness of her inner processes, but her constructs are not as propositional as Subjects A, B, and C, who use those original inner processes as

In response to the trainer's question, "What use might you want to make of this training?", E replied

I'm curious as to whether or not it really does work because I've heard of it. They have all these tapes out on that, and I'm just curious on whether or not that can work. I'm in a hypnosis course right now and trying to integrate that into my practice, and self-imagery is one of the things you use. I need to know whether or not it works for me, and then to do it with clients and be able to say, "Yes, it works." And further along the line, I'd be curious as to whether this works for a group, working with black kids and their self-images.

2. What does the phrasing of that goal suggest about the construct of the self?

E has spoken of her goals upon entering this training in anticipation of primarily other-than-self gains, i.e., professional empowerment. E appears to construe her self in stage three, where there is beginning experimentation with alternative ways of viewing life. Her statement of goals in other-than-self terms suggests she is not as separated from role identity as some other participants, and thus new events are evaluated in a more cautious manner and are assimilated less easily into old constructs.

Especially if the information, as that introduced in the imagery exercises, involves exploring the very

definitions and boundaries of self, then that information might be regarded as unsettling.

The relationship between E's construct of the self and the process of imagery is described in cause-and-effect terms that suggest that the self's essence could be re-shaped by imagery, thereby according imagery a potentially greater force than the self.

The central difference between participants A, B, and C and participants D and E seems to be which factor - self or imagery -has more power and control.

For E, imagery seems to be the active force, not the self. The verbs which E uses when speaking about imagery attributes to it a potential power to affect the user. She questions whether or not it "works" (six times); she has been taught it is one of the things you "use"; she might "do" it with clients. The sense this researcher gets is that imagery is endowed with the power to determine the shape of the self, to "work with self-image," and improve the picture that one has of one's self. She seems grant greater agency to outside factors than to inner dynamics.

Kelly warned about the "danger of paralyzing effects" of undefined disruptive forces on the

by conversation about external events. For example, the source of the difficulty that E experienced listening to the at-home tapes was consistently attributed to the tapes. She started out the first feedback with

The music... I couldn't hear it very well. Your voice sort of overshadowed it. The imagery was fine up until you began the left-right, left-right imagery stuff, and it was like I could imagine them in my mind, but it seemed like the transition between them was too quick. There were too many in there to do. Maybe there should be less.

The next sentence suggests a sense of self that is attempting unsuccessfully to meet the demands of the external world:

For me, there were too many for me to get into the image..

followed by an explanation or excuse of this situation:

and I'm not sure that's what you wanted.

The second feedback began on a more positive note:

The second session was ok,.

but returned to the tape:

again the music wasn't loud enough. That would help.

There was no further comment on why that would help her. The next remark was on the difficulty she had

imaging cats, and again the researcher detected a passivity, a lack of an ability to control the reaction.

The only thing I had a problem imagining... I could do the horse, but when it came to the kittens underneath the sweater, basically because I don't like cats, and I'm allergic to them.

Finally, on the third and last feedback she completed, E stated a criticism of the tape and an "I don't know" for explanations of why the training session was so unsatisfactory.

This is imagery number three. I couldn't do... it was easier to relax, but I couldn't do the imagery. I don't know. I just couldn't concentrate and I kept losing it. It was like it was too wordy, or I don't know. I just couldn't do that one.

There is no self-defense, no self-questioning, and no self-validation.

Kelly theorized that people place interpretations on events and those interpretations build their constructs. Those constructs, those abstractions, are then used in dealing with new events, giving shape and meaning to the incoming information, and are necessary in order for people to try to predict or control elements of the future.

Indeed, people use these constructs to sort out which course of action or information would ensure successful dealings with ensuing events.

Here is where inner turmoil so frequently manifests itself. Which shall a man choose, security or adventure? Shall he choose that which leads to immediate certainty or shall he choose that which may eventually give him a wider understanding? (Kelly, 1963, p.64)

Thus people make choices of whether to include or exclude information based on whether it is safer to open and extend or to limit and maintain their systems.

We might call this 'a seeking of selfprotection,' or 'acting in defense of the self,'
or 'the preservation of one's integrity.' ...
Thus we hope it is clear that what we assume is
that the person makes his choice in favor
of elaborating a system which is functionally
integral with respect to the anticipation of
events. (Kelly, 1963, p.67)

This researcher proposes that E's choices not to actively pursue the imagery training and, moreover, not to actively explore the reasons for her lack of imaging success makes sense in light of how E anticipates the future. If her construct system involves a self that is defined by the external events surrounding it, that is, if the self's definition seems determined in a significant degree by outside

forces, then she would be wary of new information that might force her to remodel her construct system.

Faced with the threat of remodeling, it would make sense to close down in order to protect the fragility of the self.

He may fear that the conclusion of the experiment will place him in an ambiguous position where he will no longer be able to predict and control. He does not want to be caught with his constructs down. (Kelly, 1963, p.14)

Several of the descriptions of images experienced during the training sessions suggested, metaphorically, descriptions of E's self in this precarious predicament.

E's first view of herself as a rosebush is pessimistic.

Tr: Does it seem to be summer?

E: Fall ... the roses are dying...

Tr: Let's take that scene through to October. What sort of changes are happening?

E: Eveything is dying...

Tr: And your roses?

E: They're gone ... a long time...

Tr: Let's go through to winter. How can you see yourself as a rosebush now?

E: There's plastic over me...

Tr: How does that feel?

E: Confining...

Tr: Let's move up to April, May. The sun is getting warmer. What are you like as a rosebush then?

E: When?

Tr: In the spring... the beginning days of May.

E: I can feel the sun through the plastic.

Tr: How does that feel?

E: Hot.

In the pleasant memory of childhood session, E experienced an unsatisfying memory. Her scene involved playing cowboys with her younger brother. The picture included both of them sitting on the ground shooting each other, but the activity was not fun but anger-producing.

Tr: Angry? Tell me about that.
E: He was supposed to die when I said, "Bang, bang!" but he wouldn't lay down.
Tr: Oh, I see. So what did you do then?
E: I didn't want to play with him no more..
Tr: What did he do?
E: Nothing... just sat there.
Tr: What happened when he shot you?
E: Nothing...

Tr: And when you got up, what happens? E: Nothing.

The lack of the ability to cause a desired effect to happen, even in a memory, seems to cause E to despairingly shut down to a state where "nothing" happens.

At stage three, Rogers found that

Personal choices are often seen as ineffective. The client "chooses" to do something, but finds that his behaviors do not fall in line with this choice. (p. 136)

Immediately after this scene, E reported a spontaneous image which was more ominous:

E: I just had a real strange image...
Tr: Could you tell me about it?

E: I was sitting somewhere... and a bunch of people came in and a cup ... I had a cup... and some guy leaned over and spit in it.

Tr: Uh huh...

E: I was thinking... bluck!

Tr: Uh huh...

E: And I'm wondering how it got there...

Tr: Right...(long pause) Any other images?...

E: I was thinking I'm not hungry now.

First an assault, then a puzzlement, and then a shutting down, this time of a physical function.

Kelly explains this sort of reaction as "constriction."

If one wishes to view constriction positively, he can see it as a way of making one's world manageable by shrinking it to a size he can hold in his own two hands. A person finds that he knows more than he can understand. That is an anxiety-provoking state of affairs. It constitutes a problem. He tries to solve this problem by keeping himself ignorant of any further knowledge until his understanding can catch up. (Kelly, 1955, 901)

4. What is the participant's final evaluation of how effective the training session were on her imaging ability and how might that correlate with her construct of self?

E's evaluation was, "I really don't know. I really couldn't say."

If the researcher's interpretation of E's construct of self is valid, that is, if E's definition

of self is in large part undifferentiated from the forces which define it, then her evaluation is appropriate in that it is, indeed, difficult for E to concisely evaluate where she was and where she is now. The process of attending to her images could, in this situation, be unacceptable for it might eventually lead to a breakdown of established constructs and might involve changes that she did not feel appropriate or possible at this time.

When a person must move he is confronted with a series of dichotomous choices. Each choice is channelized by a construct. As he reconstrues himself he may either rattle around in his old slots or he may construct new pathways across areas that were not previously accessible. When he is under pressure he is not likely to develop new channels; instead he will tend to reverse himself along the dimensional lines which have already been established. (Kelly, 1963, 128-129)

As is usually the case, this researcher gained unexpectedly valuable insight into imaging processes through investigations of how the training seemed to have failed. Further elaboration on how the training might be altered in view of E's processes will be found in Chapter Five.

The Case of F

1. How did each participant phrase his/her goals for the training?

Being an artist, I wanted to see more clearly what I did before I did it. I wanted to be able to visualize the art piece before I painted or sculpted.

2. What does such a goal suggest about the construct of self?

F's construct of self seems to occupy dual stages as it seems split between the self that is spontaneously creating and the self that is watching that creation from the outside. Her goal is phrased from that outside-self orientation, focused on wishing to better observe an activity that arises from her inner self. It is important to note that she does not want to improve her painting and sculpting; she just seems to want to better predict what is going to occur. Her object suggests an interest in control and definition, perhaps to reduce the anxiety involved in the inchoate artistic working-out of the product or perhaps to provide her with an external source of evaluation. Thus this outside-self seems best located at stage two where, according to Rogers, "It seems as though she were holding her

her experience at arm's length. (p. 134)

Since her goal for the training does not suggest a search for innovation or improvement in the creator-self, it is possible to assume some degree of satisfaction with the growth and production of that part of the self; in those terms of acceptance, the creator-self seems at a stage five. The creator-self seems to construe itself as spontaneous, original, and able and free to express its here-and-now feelings.

The difficulty might be described as one of communication between the observer-self and the creator-self, and that she hopes that the communication gap may be bridged via imagery.

3. What internal evidence from the participant's training sessions and feedback is there to support the researcher's understanding of the construct of self?

If F's construct of observer-self is correctly placed at stage two, then the transcripts from F's training and feedback should contain references to limiting strategies that serve to maintain the rather rigid boundaries of her construct of self, for stage two is centered on maintenance.

F reported that the at-home imagery training tapes were disturbing to her emotionally and possibly artistically, for she began "seeing things she did not want to see." She kept falling asleep during the tapes and therefore couldn't respond as requested. After several cancelled appointments, almost four weeks elapsed before we remet, and at that point she had decided to discontinue the training. She said she felt her sense of pleasure in doing artwork would be diminished if she continued.

I realized that when I paint or when I sculpt, I really appreciate the element of surprise of things that appear that I did not know would be there, so consequently I think one of the things that I am feeling is that for me to directly imagine would remove that.

Her term, "directly imagine" as the descriptive phrase for imaging is interesting; the researcher interprets that term more as "imagine in order to direct" in the way she contrasts it with the free-flowing artistic process she enjoys.

Moreover, the artistic procedures she used seemed incompatible with the experiences she encountered in the imagery training.

What is a creative process that grows in such a way that a leaf grows, that to turn it into an

intellectual process with a completed image and working backwards, whereas I work with a seed and have it grow into a flower.

The observer-self, judging the imagery training in the rigid boundaries of stage two, feels imagery to be intellectual, that is, "completed" and finished. It is as though the observer-self misconstrued the training, seeing it in the black and white terms with which it sets apart anything unfamiliar. The impermeable constructs of stage two does not entertain the possibility of multiple ways of working and does not welcome intrusion of alternatives, for they threaten and are best shut out.

Recognizing that this was within me, I've done something that was important for me which was to make a choice not to continue.

She seems to have rejected the imposition of the "intellectual" or rigid constructs in favor of the more permeable constructs of the stage five creator-self.

In her third and final feedback, she underscored the unsettling effect that the imagery training tapes were having on her life.

I've been doing a lot of thinking about the visual imagery training, and I've noticed that within myself there's a lot of resistance. My

tendency was to try to fight with this resistance. I realize now that it is necessary for me to work with it.

Kelly was extremely familiar with this tendency to shut down in the face of disruptive data because

...he dreads the outcome. He may fear that the conclusions of the experiment will place him in an ambiguous position where he will no longer be able to predict and control. He does not want to be caught with his constructs down. (1963, p. 14)

Or, as F succinctly expressed it, "One of the problems
I have with imaging is the fear of seeing. So I avoid
what I might be seeing."

In contrast with this fear and reluctance experienced when F worked alone with the tapes, the one interactive training with F evolved into a fluent, detailed visualization session that extended forty minutes beyond the hour it typically took other participants. One particularly noteworthy imagery scene involved F, as a child, taking a terrifying risk of climbing onto the top of a boxcar on a sidetrack across the street from her home.

It was real scary because one slip and you could fall off those things. Like my hands are sweating with the memory. I remember drying my hands on my clothes so I wouldn't loose my

gripping on that metal, because if you just... it's straight down ... there's almost no room for your footing. It's not a safe thing to do....I remember standing up. That was the biggest challenge because once you're on top ... to stand up ... you think it would be easy, but there's nothing to hold on to... standing up in mid air... it's... you're standing up there and there's nothing in front of you and to the side. You're out in air. You're standing up against the sky.

The payoff seemed worth the anxiety.

I conquered my fear. That was really something. I conquered my fear. ... There's an overwhelming sense of power, but of caution, too, because I could fall off.

Here the observer-self seems absent, and the creator-self has gained prominence by letting go of fear and standing up against the sky. In metaphor, this willingness of F to begin to undertake the imagery training was a feat of daring, a response of the creator-self to explore the unknown. In the presence of the trainer, this creator-self was supported, but when F worked by herself, the interaction with trainer was replaced by an interaction with the observer-self. The anxiety the observer-self provoked was too overwhelming. She returned to safe territory.

As Kelly wrote:

Men may change things by changing themselves first, and they accomplish their objectives, if at all, only by paying the price of altering themselves - as some have found to their sorrow and others to their salvation. (1955, p. 966)

4. What is the participant's final evaluation of how the training sessions were on her imaging ability and how might that correlate with her construction of self?

Since F dropped out of the training without completing the full series of sessions, she was not asked the effect of the training on her imaging ability. She was willing to retake the Betts QMI, however, and her improvement according to that test was dramatic, 52 points. After completing the test, she laughed and commented on how easy it was for her to visualize now that she realized that she didn't have to struggle to dissect intellectually whether this aspect of the image was more vivid than that or whether the vision was an experienced remembrance or an actual visual reconstruction, etc. She just "let go" and up popped an image! Her creator-self, when supported, encountered no difficulties.

What allowed her to "let go" at that point was not explained by F, but the researcher proposes an explanation by Kelly, who theorized that therapists who were most successful in helping clients move beyond constricting constructs first joined the client in an empathetic understanding and acceptance of his/her constructs. That acceptance supported the client's tentative (and frightening) movement into more permeable constructs. The transcript of the last interview between F and the trainer, made minutes before the second Betts test, reveals a kind of acceptance by the trainer that might have been the beginning support for F to "let go." After an extended explanation and apology, F said

F: That's when it suddenly dawned on me that rather than blaming myself, that I should take a look and say maybe it's because the images are coming from the outside in and I'm being told to imagine images from the inside out.

Trainer: What you decided to do was respect yourself.

F: Right. That's exactly right.

Trainer: And that your mind had its own pattern and process, and you don't have to change it.

And if something is making you uncomfortable, you know enough to say, "Leave it alone."

F: Yeah, and that was a big step for me actually, being able to say that. "Hey, wait a minute. What are you doing?" It was a much healthier

response than trying to figure it out.

and.

The powerful and fascinating quality of human beings, Kelly said, was that they were constantly construing and reconstruing their world in order to gain more predictive accuracy. Fear inhibited reconstruction and produced impermeable types of constructs, but feeling accepted bolstered one's daring to seek alternatives.

Man is a form of perpetual motion with the direction of the motion controlled by ways in which events are anticipated. (Kelly, 1955, p.48)

The process involves a change in the manner in which, and to the extent to which the individual is able and willing to communicate himself in a receptive climate. ... The process involves a loosening of the cognitive maps of experience. From construing experience in rigid ways which are perceived as external facts, the client moves toward developing changing, loosely held construings of meaning in experience, constructions which are modifiable by each new experience. (Rogers, p.157)

The Case of G

1. How did each participant phrase his/her goals for the training?

Greplied: Mine relate to spirituality. In meditation. I'd like to be able to focus on an image and to use that as a pathway to God. And I just draw a blank. The only thing I can do is to recall Bible verses. I've done a lot of Bible work, and I can come up with them. If I keep my eyes open, I can see the cross. Beyond that, virtually nothing happens. And that's the purpose of it. You see, L. has described a lot of imagery work that she's done and is able to do herself. I go into a meditation class with her, and imagery is just a good thing for me. I cannot do this, except once or twice. So that was my goal. I really want to be able to do it.

2. What does such a goal suggest about the construct of the self?

More than any other participant in this study, G
expresses a yearning to possess a mental quality that
she says is now absent in spite of several years of
effort and classes. Importantly, she endows this
missing quality with immense power - a pathway to God.
While some other participants were curious whether or
not imagery worked or whether or not they could develop
their latent abilities to image, G evaluates herself as
essentially devoid of the ability. Nevertheless she
seems to have decided that imagery is a good thing for
her, based, in part at least, from a friend's evaluation

of how valuable imagery is in the friend's search for God.

Secondly, this researcher infers that imagery has assumed such high value because of a dimunition of the power of a former pathway to God - the study and recitation of Bible verses.

Thus G is at a critical point in how she construes herself, a point which Kelly might describe as the anxiety-filled phase of finding old, familiar patterns of meaning (constructs) inadequate to accurately control and predict the future, but replacement constructs are nebulous and inchoate. (Kelly, 1963, p. 58) G seems beyond the no-return point of wondering "whether to preserve the integrity of the system and replace one of its faulty parts," (Kelly, 1963, p. 89)

The construct system of such a client is characteristically impermeable; he needs a separate pigeonhole for each new experience and he calculates his anticipation of events with minute pseudomathematical schemes. ... He starts making new ones. While he has very little successful experience with concept formation at the permeable level, these are the kinds of concepts he tries to develop. ... They may have to do with reevaluations of life and death. (Kelly, 1963, p. 89)

The stage which G's statements reflect she is in is stage three, a stage hallmarked by the perceived inadequacy of current constructs but with the

movement to the next stage stymied by a paralysis of self-questioning.

Personal constructs are rigid, but may be recognized as constructs, not external facts. ... he sees (these ideas) as the way he has construed experience rather than as settled fact. (Rogers, p. 136)

G's statement that "imagery is just a good thing for me" appears to be a sort of pre-emptive construct that is as constrictive as her former constructs. In contrast, a permeable or propostional construct of self would experiment with imagery and try it out, like a scientist, to ascertain whether, indeed, imagery might be a pathway to God; only after much testing, would the propostional construct of self declare it to be a good thing.

However, G's construct of self seems to be at a stage that is seeking for personal meaning in better role performance. During the training, her search for spirituality was spoken of in terms of her former profession of religious missionary; she left her fundamentalist church in order to find another way to God. Thus this researcher surmises that G is not construing herself from the higher stages from which the self senses itself as a process - the very datum of

change. Her goal is not phrased in terms of personal change, but in a quest to better fulfill a role she has defined for herself: a spiritual quester.

In conclusion, G appears to be at a crisis point in remodeling her construct system, and is attempting to use imagery rather rigidly to reconstruct more open constructs.

3. What other internal evidence from the participant's training and feedback is there to support the researcher's understanding of the construct of self?

Many of the feedback statements from G's at-home training sessions attest to the anxiety and pain associated with disowning the old constructs, but finding the supposedly-growthful constructs distant and unattainable.

It (the imagery training session on tape) was all from a perspective of "outside out there." It's as if I'm keeping myself quite distant from the imagery. Why? How to change?

and, from a later feedback:

No images at all - just a monolog and I was following it in my head until I jerked away when you said to look at myself in a pond, and I wouldn't do it. Nor could I dive into the water with "your powerful and creative self." No such thing. "Your powerful and creative self." No such thing. Maybe I shouldn't be doing this. I don't like my negative reactions, my insistence on a safe disnegative reactions, that I don't trust you. It's just

the way I listen without cooperating. I do the same thing with TV and records and radio. I listen, but I don't process anything in such a way as to make meaning.

Initially, G finds that no mental picutres appear even though she "followed it in her head." Then she discloses that she wouldn't, not couldn't, look at herself, for unexplained reasons. She expresses herself as an agent capable of determining action, even questioning herself as to whether she should be undertaking this course of action in training. But she seems more capable of determining what she should not do or how she should restrain herself than of determining positive movement. She withholds cooperation and thereby bypasses having meaning made for her.

Kelly explained this stalemate brought about by anxiety:

When a person must move, he is confronted by a series of dichotomous choices. Each choice is channelized by a construct. As he reconstrues himself, he may either rattle around in his old slots or he may construct new pathways across areas which were not previously accessible. When he is under pressure, he is not likely to develop new channels; instead, he will tend to reverse himself along the dimensional lines which have already been established. ... If the emergency is great and the pressure intense, the movement is likely to be abortive. (Kelly, 1963, pp. 128-29)

The abortion in G's imagery seems to take at least three forms: (i) falling asleep ("I think I fell asleep and went through more than one session." "All I do is fall asleep if I shut my eyes. Relaxation feels so dangerous. I tune out all together." and "Relaxation again complete; I woke up after it was all over.")

(2) distancing herself (It's as though I'm standing apart, watching, insulated from doing the real work.") and (3) non-cooperation ("Couldn't follow the sun; wouldn't with Santa Claus." "I remember involuntarily recoiling when you began making changes in color and markings." and "I wrestle with a sense of constraint at first, but somewhere along the way, I just ignore what was being said, and let go of having to do what was told me.")

This researcher evaluated G as centering uncomfortably at stage three, which Rogers describes as having

very little acceptance of feelings. For the most part, feelings are revealed as something shameful, bad, or abnormal, or unacceptable. (p. 136)

Through the momentous struggle between wanting to change and wanting to remain the same runs self-negation.

("Why isn't this working? I don't like my negative reactions." "Stupid way to respond!" "Sorry. Maybe I shouldn't have volunteered after all.")

4. What is the participant's final evaluation of how the training sessions were on her imaging ability and how might that correlate with her construction of self?

I'm not an imager, I guess. I'm not going to make it. I don't know. It's hard to say. I did learn that, with that (the training tapes) going on, I can relax fine. Sounds are there, but pictures are never there. I should be open to inner voices, but I'm not. I could focus on the specific things you were saying, and I was aware that I was thinking of these things, and I was drawing on my memory of what they were supposed to look like and creating not an image but an idea, because there's nothing visual that I can see inside. It's just a nondescript idea without any symbol. It may be what you wanted. I don't know. ... It (the training program) didn't bring me any closer to what I wanted to do, but maybe what I wanted to do is just not possible for me.

If G's construct of self were responding to itself as the datum of the training experience, the researcher would have expected a more negative evaluation of the training program, such as, "It wasn't effective," with a more positive evaluation of self, such as, "I do things another way." Instead, G's construct of self negatively evaluates the self as inadequate to the defined task, and she concludes, "I'm not an imager, I guess. I'm not going to make it." The failure of the training program to accomplish her goals is attributed to inadequacies within herself.

Kelly proposed that movement from one stage to another was accompanied by a growing awareness of the self as it interacts with the environment and others. This awareness was made manifest by a clearer understanding of the procedures and processes with which a person constructed his universe, but in G's situation, such a heightened sense of her unique processes is missing. Instead, there is regret that she cannot master the task she wishes to accomplish.

The screen with different colors I could "think" but it wasn't images. Just thought. I know what
they would look like. The number bit, though, I
totally blocked doing that. I guiltily realized
I was doing absolutely nothing, so I quickly
thought of a 6 at the end of 524. ... The sounds now,
that's different. Of course, I know bells and their
tunes, too, even without places. I can't visualize;
I can only auditorialize! ... Odd though, I'm a
visual learner - can't learn anything by ear alone
and tried to devise a way to cheat and peek. So why
can I hear and not see? And if I can hear, why don't
I ever hear inner voices? Something's awry.

Learning a new task, according to Kelly, involved an active reaching out to make sense of the universe by rebuilding constructs by a process of trying out alternative interpretations of events. For G, however, a passive acceptance of failure has replaced the active involvement with her development of new knowledge.

G's construct of self, in the crisis of transformation at stage three, could not incorporate the information and could not reject the training. Her persistence in completing the training which frustrated her may be considered as a person's

way of looking for additional elements which, if added to the profusion of elements before him may somehow provide a key to the situation and enable him to regain structure. ... from the client's point of view, it is actually a frantic search for structure by finding new elements, that is by dilation. (Kelly, 1955, p. 899)

That dilation before the potential shift to another level of construct is agony. As G commented in her last feedback:

Left - without the safe shelter of a cocoon anymore. I need that shelter still. I'm not ready to fly on my own. I doubt I ever will be. I can hardly wait to come back to Amherst where my safe shelters are.

Within a few sentences, however, she tells of her dissatisfaction of staying safe, and asks for the researcher's understanding.

So please don't judge and condemn because it (her attempts at imagery) is undescribable and inappropriate. I'm feeling very vulnerable and wonder - what next? exposed? rejected? so what?

Her concluding sentence of the final feedback returns to the painful, yet seemingly inevitable dilation phase again.

On the other hand, I'm grateful to have had the chance to try out this path, even if it didn't take me where I wanted to go.

_C_H_A_P_T_E_R_V

RESULTS, SIGNIFICANCE, AND IMPLICATIONS

Summary of the Study

This exploratory study was designed to evaluate the degree to which the imaging ability of people could be enhanced through a training program that provided approximately four and a half hours of interactive and individual sessions which introduced and provided practice in a wide variety of imagery-stimulating scenarios. Part of the study involved designing the training programs, another part implementing the training, and the final portion evaluating the effectiveness of the training design by analyzing the changes which occurred on the Betts/Sheehan Questionnaire on Mental Imagery and the subjective changes reported by the participants during the training.

This chapter presents a description of the results of this study. In addition, the significance of this research will be assessed, and implications for future study will be suggested. Topics covered in this chapter include an

analysis of the participants' imaging ability after training, and based on that information, an assessment of the design of the program and an evaluation of the procedures used in carrying out the training.

Changes in Participants' Imaging Ability as Indicated

by the Betts/Sheehan Questionnaire on Mental Imagery

Changes in participants' imaging ability after they participated in a short-term training program were assessed quantitatively by means of a pre- and post-administration of the Betts <u>Questionnaire on Mental</u>

<u>Imagery</u>.

Results from those tests indicated that five of the seven participants' posttest scores were lower than their pretest scores, suggesting enhancement of their imagery. The median point improvement of these five was 36 points. Two of the seven's posttest scores indicated a deterioration in their imaging ability after training. Their scores showed three and seven point losses.

These findings appear to indicate that the type of imagery training design presented in this study is not successful with all individuals, and, indeed for some

people, this type of training seems to accentuate negative self-perceptions of imaging ability. However, for those whose scores did show improvement, the training design seems to be quite successful in terms of the sizable point improvement. In summary, the training program can be evaluated as effective for certain types of individuals only.

However, this conclusion drawn from the Betts QMI needs to be compared with the subjective reports from feedback and interactive training of the participants, for there are three instances of discrepancies. For example, one participant whose scores showed a deterioration reported she had "definitely improved" in her imaging ability. For another participant, the training felt as though it had not produced any discernible improvement even though there was a positive indication on the posttest QMI. Yet another participant's 52 point improvement in the posttest contrasted with her report that the training felt deleterious to her psychological and artistic growth. One possible explanation for the discrepancies is the QMI itself, and this problem will be discussed in the subsection, Implications for Further Research.

The differences in the seven imagery modalities from the pre and posttest scores on the QMI were extremely interesting in that no single modality predominated in improvement among the seven participants, but rather each person produced a unique pattern of enhancement or deterioration in modality scores. This finding suggests that mental imagery is a very complex, highly individualized process which requires more research before generalizations, such as those sometimes made by psychologists and educators, can be made with assurance.

Changes in Participants' Imaging Ability as Indicated by Case Studies

Of the seven people who volunteered to participate in the study, five completed all parts of the training.

One completed both interactive training sessions but only three of the ten at-home tapes, and the second undertook one interactive session and three at-home tapes. Of the five who completed the training, four reported a successful outcome. Of the remaining three, one did not

know how successful the training had been for her, another felt herself as much a non-imager after the training as before, and the third rejected the training as contrary to her way of creating and unhelpful to her emotional equilibrium.

After all the training was completed and the transcripts from the trainings and participants' feedbacks were reviewed, the researcher selected two theoretical psychological models as a framework from which to view the proceedings and results of the training. George Kelly's personal construct theory and Carl Rogers' stages in the process of becoming a person provided a structure of meaning that elucidated some of the factors which may have facilitated or blocked the enhancement of imaging ability.

In summary, these factors had to do with the way a person construed his/her self and the degree to which the self was regarded as independent from societal roles and expectations. This researcher found striking correspondances between Rogers' descriptions of the characteristics of the self during the seven stages of development and the psychological processes reported by the participants during their training. These correspondances led to the speculation that certain

factors within the construct of the self contributed to the success or failure of the training. Some of the factors which seemed to permit development of more vivid and fluent imagery were the participant's

- -free expression of feelings in the present
- -ownership of self feelings and desire to be those
- -critical examination and questioning of constructs
- -sense of being a process, not a fixed object
- -openness to inner exploration and communication.

Some of the factors which inhibited the enhancement of imaging through this type of training were

- -lack of spontaneous expression of present feelings
- -feelings are handled as remote, unowned objects
- -constructs are thought of as facts
- -sense of self as definable, limited entity
- -lack of easy inner exploration and communication.

Signficance of Results

The Training Design

The range of responses to the imagery training design of this research leads to the conclusion that this design is very successful with certain kinds of people, and inappropriate with others. It may be further concluded that additional research with alternative training designs needs to be undertaken before any definitive answer can be given to the question, "Can a person enhance his/her imaging ability?" for it is possible that other approaches may yield successful outcomes for those who did not find this training program helpful.

Training Procedures

The structure of the training program followed a standardized format which presented few difficulties for either the trainer or the participants, and therefore was deemed adequately planned. Several appointments had to be rescheduled, but that did not present undue difficulties.

Because two of the participants did not complete the at-home training, there is some question about the appropriateness of imagery training without trainer support for some people. This training was structured to provide both interactive and individual opportunities to practice imagery in order to evaluate any differences between the two, and in retrospect it seemed as though two participants were unable or unwilling to engage in imagery practice unsupported by the trainer. Both participated fully in the first interactive training session, and one had a particularly fluent and enjoyable second interactive training even though she stopped working by herself at home after just three sessions of the first at-home tape. Future training designs might consider the efficacy of asking those in the lower stages to work independently; they may have more success interacting with the trainer or in a group setting with a partner.

Implications of the Study

The scripts of this training were excerpts from imagery sessions led by psychotherapists and group leaders working within the last fifteen years, and the use of imagery was sometimes heralded as a tool that has "the most profound consequences upon the conscious repatterning of both our physical and mental lives" (Houston, 1982, p. xx) or as a technique "to create what you truly want love, fulfillment, enjoyment, satisfying relationships, health, beauty, prosperity, inner peace ... " (Gawain, 1978, p. 14) These imagery-scenario designers often worked quickly and directly on the participant's construct of self ("Imagine yourself as a rosebush.."), and for those in stages five, six, or seven of personal development, insights seemed to abound, as attested to by the continuing popularity of these imagery workshops and classes.

However, as this study has suggested, people at other stages in the process of development do not have a superordinate construct of self permeable enough to admit such information, and understandably cannot find meaning

in many of these imagery scenarios. Kelly wrote that this inability to adapt new information was characterized as "resistance" by frustrated therapists, but that more reasonably

the client who exasperates the therapist by his failure to deal with what the therapist wants him to, or by his refusal to see things the way the therapist so clearly sees them, is... demonstrating the fact that his construct system does not subsume what the therapist thinks it should. (Kelly, 1955, p. 1101) Kelly's clear-eyed insight into the cause of

unsuccessful learnings, such as those presented in three of this study's cases, suggests that the level at which the imagery exercises in this training were aimed, that is at alternative information about the construct of self, were unsuitable for nearly half the population of the study.

Instead of direct assaults on loosening the overly tight construct of self, Kelly and Rogers offer techniques that more patiently and more obliquely give clients opportunities to tentatively explore new information.

Most essentially, the client requires acceptance and support at his/her present level of constructs. In terms of imagery training, then, the exercises need to be grounded first in whatever the client is experiencing, and

appreciation of those images the client can spontaneously produce, even if they be merely shades of gray fuzz. The trainer's task would be to support the investigation of differentiations, incongruent "flashes," and expressions of accompanying emotions.

Secondly, since threats to one's identity close down rather than expand, self constructs, Kelly used story-telling as a way of tentatively trying out how alternative concepts

could be of help to a fictional character in trouble. Gradually the client became acquainted with expanded ways of viewing situations, and having experimented with possible consequences of new constructs in a character's life, he/she began to experiment in his/her own life. The process of developing and extending a story could be a way of enhancing imaging vividness and control as well as a way of loosening the constructs that prevent inner communication. Thus the training design might work with telling the details of a fictional person who was happy at work, for example, allowing the trainee to practice imagery and emotional extension simultaneously.

Thirdly, Kelly found that changes were most likely to occur when the client was experimenting with very low

of little consequence to self-constructs. New information then could be viewed from the security of a position that was not required to change - unless the client saw that its positive effects might make the trouble of change worth it. From this perspective, an imagery training program might be more successful with people in the lower stages of personal development if it were introduced as one of many possibly interesting ways that some people, but not all people, use their minds. Emphasis should be made that some highly creative, productive people find imagery of little use or pleasure, but if people wanted to try out this method to see if it were useful or pleasurable for them, then they might want to try it out for a while.

This attitude is quite different from the one underlying the present training program, which starts out with an introduction by a Gestalt psychologist:

These exercises are designed to help you become deeply aware of yourself as you are now. ... Here you can practice letting go and flowing with your experience, instead of frustrating yourself with demands to be different. ... (these exercises) may provide you with tools that you can use to may provide you with tools that you can use to explore your life in a highly personal, unique, explore your life in a highly personal, unique, natural way: using your imagination. (Stevens, 1971, p. 3)

These expectations could well intimidate many.

In addition to these alternative training strategies, it would be useful for educators or psychotherapists working with self-identified poor imagers to primarily attend to the client's need for consistency in selfimage. A client wishing to enhance a skill such as imagery is placing her/his very identity as a non-imager on the line and may find losing her/his sense of self worse than failure to master a skill. Therefore, the imagery trainer might find it helpful to introduce any training with suggestions that the client can and may remain a non-imager, but that he or she may experiment with compensating techniques that will accomplish some of the same benefits that good imagers enjoy. This approach encourages an expansion of one's repetoire rather than a change in self-identity and might foster the acquistion of more vivid images without attendant anxiety.

Delimitations of Study

This study is limited in that it dealt with a small number of participants, and the findings from this sample may not be generalizable to the population as a whole.

In addition, the population was drawn from a very specialized group of educated, motivated people, and the results of the study could be significantly different with different populations.

Exploratory in nature, this study is intended to raise further questions about the trainability of mental imagery rather than to definitively end the discussion. The hypotheses offered about the relationship between the construct of self and the success of training are not offered as conclusions, but in order to stimulate more theoretical investigations of the relationship between mental imagery and personality.

Also, the principle investigator was the only one to conduct the training sessions, which may have lead to a possible bias in the study. It is hoped that other types of training programs carried out by a variety of trainers will add to an understanding of imagery.

Suggestions for Further Research

The results of this study can contribute to the developing scientific literature on imagery, but they are,

by the nature of the research design, suggestive of further areas of research needed on the individual differences in human imaging and on the significance of imagery in the process of change in human development.

Refinement of the measurement of imagery seems to be required before more definitive conclusions about trainability can be drawn. The Betts/Sheehan QMI raised objections from a few participants even as they took the test because they found it impossible to accurately and consistently distinguish between the numbers on the rating scale as they went through the thirty-five items. Others became exasperated on the retest because they couldn't remember the first scores they had given themselves and thus felt that the posttest set of scores did not truly reflect their relative position after training.

Another participant questioned how accurately the differences in the pre and posttest QMIs reflected her growth for she remarked that the process of taking the pretest sensitized her to her own imaging and caused her to think about the seven point scale and how she experienced the differences. This increased sensitivity possibly caused the posttest scores to be more stringently monitored as her initial judgments became more refined

and precisely defined. For example, during the training she became very aware that improvements in her olfactory imaging lagged behind improvements in all other modalities. Therefore when she took the posttest, she evaluated her olfactory images as much lower in contrast to the others. Thus it appeared that her olfactory images deteriorated three points, when, in fact, she felt it had distinctly improved, but just not as much as the others.

In conclusion, this researcher suggests that further development of imagery measurement questionnaires would greatly aid the investigation of individual differences in imaging and of the possibility of ways to enhance imaging skills.

Further investigation is required to answer the question of the relationship between imagery and the developmental stages of self. It is not yet clear if the inability to image vividly predisposes people to maintain rigid constructs or whether the maintenance of rigid constructs precludes experimenting with imagery. Are there people at stages six and seven of Rogers' model who cannot image? Are there vivid imagers at stages one and two? A more thorough examination of a broader

population is required.

This research suggests the need for more study on imagery's applicability in curriculum design and classroom management. The conclusions of this research indicate that imagery ability can be enhanced to some degree in some people, and that exposure and practice contribute to this enhancement for this group. Given the positive assessment by the successful participants in this study of emotional, physical, and intellectual gains they experienced through this imagery training, there seem to be many benefits that could be gained by some from more extensive use of imagery exercises throughout all levels of educational institutions. However, more research needs to be carried out to identify target populations and appropriateness of imagery to educational goals.

Given, too, the broader understanding of why certain kinds of imagery exercises are unable to be incorporated into the constructs of many people, further research into alternative ways to approach imagery would be extremely helpful.

This research seems to be part of an emerging science of a relatively uncharted cognitive and emotional phenomena that may help us better understand how people experience life.

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Appendix A

Participants Agreement Form

Date:

be used as a subject in the training program to enhance my imaging ability. I understand that there is no physical risk involved and that my rights and welfare will be protected by the trainer. I will receive typed transcripts of the training sessions and my responses to them, and will be given an opportunity to discuss the training and my results with the trainer. All material from the research will be confidential except to the dissertation committee. My name will not appear on any of the material shown to the committee or published in the dissertation.

(One copy to be retained by the trainer and one by the subject.)

Trainer: Paula Nowick

42 Shoreline Drive

Ware, Massachusetts 01042

Appendix B

THE BETTS QMI VIVIDNESS OF IMAGERY SCALE

Instructions for doing the test

The aim of this test is to determine the vividness of your imagery. The items of the test will bring certain images to your mind. You are to rate the vividness of each image by reference to the accompanying rating scale, which is shown at the bottom of the page. For example, if your image is 'vague and dim' you give it a rating of 5. Record your answer in the brackets provided after each item. Just write the appropriate number after each item. Before you turn to the items on the next page, familiarize yourself with the different categories on the rating scale. Throughout the test, refer to the rating scale when judging the vividness of each image. A copy of the rating scale will be printed on each page.

An example of an item on the test would be one which asked you to consider an image which comes to your mind's eye of a red apple. If your visual image was moderately clear and vivid you would check the rating scale and mark '3' in the parentheses as follows:

Item
5. A red apple
Rating
(3)

Now turn to the next page when you have understood these instructions and begin the test

The image aroused by an item of this test may be:

Perfectly clear and as vivid as the actual experience	Rating	1
Very clear and comparable in vividness to the actual	Rating	2
experience	, and the second	
Moderately clear and vivid	Rating	3
Not clear or vivid, but recognizable	Rating	4
Vague and dim	Rating	5
So vague and dim as to be hardly discernible	Rating	6
No image present at all, you only 'knowing' that you	Rating	7
are thinking of the object		

Think of some relative or friend whom you frequently see, considering carefully the picture that rises before your mind's eye. Classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

Item	Rating
 The exact contour of face, head, shoulders and body Characteristic poses of head, attitudes of body, etc. The precise charriage, length of step, etc. in walking The different colors worn in some familiar costume 	()
Think of seeing the following, considering carefully the which comes before your mind's eye; and classify the image so by the following question as indicated by the degree of clean and vividness specified in the Rating Scale.	suggested
5. The sun as it is sinking below the horizon	()
Think of each of the following sounds, considering carefu image which comes to your mind's ear, and classify the imag suggested by each of the following questions as indicated be degrees of clearness and vividness specified on the rating	es y the
6. The whistle of a locomotive	()
7. The honk of an automobile 8. The newing of a cat	()
9. The sound of escaping steam 10. The clapping of hands in applause	()
Think of feeling or touch each of the following, consider carefully the image which comes to your mind's touch, and the images suggested by each of the following questions as by the degrees of clearness and vividness specified on the Scale.	indicated
11. Sand	(
12. Linen	(
13. Fur 14. The prick of a pin	(
15. The warmth of a tepid bath	

Think of performing each of the following acts, considering carefully the image which comes to your mind's arms, legs, lips, etc., and classify the images suggested as indicated by the degree of clearness and vividness specified on the Rating Scale.

16.	Running upstairs		
17.	Springing across a gutter	()
18.	Drawing a circle on a paper	()
19.	Reaching up to a high shelf	()
20.	Kicking something out of your way)
	The state of the s		

Think of tasting each of the following, considering carefully the image which comes to your mind's mouth, and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

21.	Salt	(,
22.	Granulated (white) sugar	,	,
	Oranges		3
24.	Jelly	(,
25.	Your favorite soup	(

Think of smelling each of the following, considering carefully the image which comes to your mind's nose, and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

26.	An ill-ventilated room	()
27.	Cooking cabbage	()
28.	Roast beef	()
29.	Fresh paint	()
30.	New leather	(

Think of each of the following sensations, considering carefully the image which comes before your mind, and classify the images suggested as indicated by the degrees of clearness and vividness specified on the Rating Scale.

31.	Fatigue	(1
32.	Hunger	(Ì
33.	A sore throat	(ĺ
34.	Drowsiness	(l
35.	Repletion as from a very full meal		ĺ

Appendix C

Training Exercises to Enhance Imaging Ability

Trainer's introduction: These exercises are designed to help you to become deeply aware of yourself as you are now. You don't have to change or worry about improving yourself. Just let happen whatever wants to happen, with confidence that it will work out well. Here you can practice letting go and flowing with your experience, instead of frustrating yourself with demands to be different. These exercises will not provide you with answers to the problems of your life, but may provide you with tools that you can use to explore your life in a highly personal, unique, natural way, using your imagination. These exercises will increase your awareness of an on-going, but easily overriden aspect of your existence: your inner world of private images and fantasies. One way to start is to...

Take some time to pay attention to your own awareness now. Just be an observer of your awareness, and notice where it goes. Say to yourself, "Now I'm aware of-" and finish this sentence with what you are aware of at the moment, and then notice whether this is something OUTSIDE, something INSIDE, or a FANTASY... Where does your awareness go? Are you mostly aware of things outside your body.. or sensations inside your skin? ... Now direct your attention to whichever area you are least aware of, inside or outside, and become more aware of this. ... To what extent are you occupied with fantasies, thoughts, and images? Notice that while you are occupied with a thought or an image, your awareness of inside and outside reality decreases or disappears.

Continue experimenting with your awareness, and realize that your awareness is like a searchlight. Whatever you focus your attention on is pretty clear, but other things and events tend to fade out of awareness. If I ask you to become aware of what you hear, you can probably hear quite a few different sounds and noises. ... And while you are

doing this, you are mostly unaware of the sensations in your hands. ... As I mention your hands, your attention probably moves there, and you become aware of the sensations in your hands. ... As your attention moves there, your awareness of sounds fades away. Your awareness can shift from one thing to another quite rapidly, but you can only be fully aware of whatever is in the focus of your awareness at the moment.

Now try shuttling back and forth between awareness of something outside and something inside for a few moments. First become aware of something in your surroundings, and then become aware of some physical feeling inside your Take some time now to focus your awareness on your body and your physical sensations. Wherever you notice some movement, tension, or discomfort, exaggerate this activity slightly, and become even more aware of it. you are tensing your shoulder, tense it more, and become aware of which muscles you use and how you feel as you do ... Become aware of how one of those tight muscles reacts when you direct a relaxing message to it by imaging it first as a tight hard knot in a rope which then begins to slowly, slowly loosen and soften and go limp until the knot dissolving into a soft mass of foam rubber. ... you wish, you may take some moments to scan your entire body and stop whereever you sense tension ... and change that tightness into looseness by imagining a knot dissolving and melting into a soft mass ... imagining your whole body as loose and as comfortable as an old rag Now focus your attention on your breathing ... become aware of all the details of your breathing... Feel the air move in through your nose or mouth... Feel it move down your throat... and feel your chest and belly move as your breathe... Now imagine that your breathing is like gentle waves on the shore, and that each wave slowly washes some tension out of your body... and releases you even more.

Now become aware of any thoughts or images that come into your mind... Just notice them... What are they about, and what are they like? If you wish, you could name or describe whatever pictures appear in your mind. ... (Exploration and encouragement of spontaneous images continue in trainer/subject dialogue)

Now I'd like you to imagine that you are a rosebush. Become a rosebush, and discover what it is like to be this rosebush. Just let your fantasy develop on its own and see what you can discover about being a rosebush...What kind of rosebush are you? ... What kind of ground are you rooted in?... See if you can feel your roots going down into the ground... What are your stems and branches like? ... Do you have any flowers? ... How do you feel as this rosebush? What are your surroundings like?... What is your life like as this rosebush?... What do you experience and what happens to you are the seasons change?... continue to discover even more details about your existence as this rosebush...

If you wish, we can change the scenery and time of the next imagery exercise ... and move to an adventure exploring a cave and some memories of your childhood. are sitting on a riverbank now. Feel the stillness of the hot summer afternoon as you sit there. It is so quiet so still that everything in you is hushed in response. Close your eyes to savor this peace, this silence. It is quite hot, but you know that there is also shade and coolness here, the coolness of a nearby cave. As you think about the cave, it seems to come toward you, behind your closed lids; and the closer it comes, the more inviting it is ... Now it stops in front of you, inviting you to enter.... How cool it is inside. A narrow path leads into the depth of the mountain. It meanders downhill, very gently, very gradually becoming a little steeper as you become accustomed to the dim light, to the coolness, the peacefulness. Now the path is becoming smoother and smoother, and walking requires less and less effort. And you know that soon, very soon now, it will cease being a path altogether; you will not have to walk at all any more, but will be able to float down comfortably, enjoyably, effortlessly, down to the depths of the cave waiting to receive you. Are you floating now? How does that feel? Are you feeling secure, cradled and protected?

Watch the scenery go by as you float deeper and deeper. What can you see? And now that the burden of walking has been lifted from you, you have time to see the walls of

the cave. As you look around this tunnel through which you are floating, the walls are lined with pictures. The scenes are very familiar, and gradually you realize that they depict scenes from your childhood, recalling your happiest memories. And as you continue to float down, the pictures of your happy memories accompany you down the corridor of time, back through the years of your childhood, year by year. Whenever you wish, you may slow down to examine a picture at leisure, and continue to float when you are ready. When you have found a picture at which you want to stop, let me know.... So you've stopped now... and are examining the picture? ... Seeing it in all its vividness and color, all its detail...What are you seeing? ...

And as you absorb these images, you also absorb the feeling of happiness you experienced when you first encountered that scene as a child. The happiness penetrates you, until it encompasses and fills your whole And you know that this feeling of happiness, of well-being will remain with you, even as you float back up, slowly, effortlessly, past the earlier pictures, all the way back up to the path. Now you retrace that path, leading smoothly upward, outward, toward the sunlight which you begin to see in the distance. Now the light comes closer, grows brighter, and you begin to feel the warmth and the stillness of the summer day again. You come closer and closer to the mouth of the cave, and now you are outside once again, out in the daylight again, but with the happiness of your past memories alive within you. Without losing any of the happiness, any of the memories, begin to separate yourself mentally from the image of yourself on the riverbank. Tell yourself that you will now count from one to three, and then quietly open you eyes in the present again.

Appendix D

First Week's At-Home Training

Day one:

Hello. This imagery training exercise will take about fifteen minutes, so please find yourself a very comfortable spot where you can relax without being disturbed for a while. You will hear soft music in the background which may help you relax even more quickly.

Close your eyes, and let your eyelids grow heavy easily, very naturally, growing heavier and heavier as they have before. Feel your whole body beginning to grow very relaxed now, just growing deeper, and deeper, and deeper relaxed... deeper... and deeper... and deeper. Your eyelids heavier and heavier... and heavier. The entire body relaxing now, mentally and physically, from the top of the head, all the way down to the very tips of the toes. Just growing deeper, and deeper, relaxed, and

more relaxed.. deeper and deeper.

And if you wish, you may imagine yourself standing on the grassy, green bank of a beautiful shallow stream. Sense the warmth of the sun on your arms and feel the slight breeze as it brushes by your face and hair ... and you feel so relaxed, so peaceful. And, as you look up the bubbling, clear stream, you see a lovely, painted rowboat glide up to your feet and stop. Inside the bottom of the boat are large, downy pillows... and you step inside the boat and lie down on those incredibly soft downy pillows. You feel so relaxed, so calm. And soon the boat gently begins to glide down, down the little river. You can hear the lap of the water as it ripples against the sides of the boat... and the chirping of birds in the shady trees along the shore. Above in the blue, blue sky are puffy white clouds, and some hawks lazily circling across the wide sky. You feel utterly content, and deeply quiet inside... and ready for some interesting mind-play.

On the left side of your brain, imagine a festive

outdoor scene with a big picnic and fireworks.

On the right, image a couple getting married.

Let that image go, and on the left, imagine a procession of nuns walking two by two through a lovely medieval cloister.

On the right there is a hurricane sweeping through a coastal town.

On the left is an atom.

On the right is a galaxy.

On the left are fruit trees bearing new blossoms.

On the right are trees weighted down with frost and snow.

On the left is a sunrise.

On the right is a sunset.

On the left is a green jungle forest.

On the right is a snow-covered mountain in the Alps.

On the left is a three-ring circus.

On the right is a thick fog.

On the left is the sensation of climbing rocks. Try to capture the feeling and sensation of the rocks and breathe easily as you experience it.

On the right imagine how your hand feels caressing a baby's skin.

Now take a few moments to become aware of how wonderful it feels to take the time to release tensions, to be more sensitive to the inner world of mental images, and to letting yourself be more open to the potentialities and possiblities in you. When you are ready, take a full, deep cleansing breath, open your eyes, and return to the present feeling full of joy and energy.

Would you please take a few minutes and tell me about your experiences and feelings during this training session?

Day two:

Hello again. Are you seated or lying down in a very comfortable spot, ready to spend a few minutes relaxing and imaging? Take a moment now and move around slightly to find the very most comfortable position for your legs, your back, your neck, your arms, your hands, your head. Become aware of your breathing now and find the very most comfortable rhythm possible. Some people find that it is very relaxing to allow your inhalations to be as long as your exhalations... so that your breaths feel very even... smooth... without any strain. Keeping your breathing even and smooth, imagine yourself walking slowly down a hillside, into the midst of a shimmering rainbow. Now you are in the center of the red band of light... breathe in

the sparkling bits of red light and as you breathe out, let the red light spread through your whole body. And now you move into the brilliant orange light and it surrounds all of you. Breathe in the energizing orange light and as you exhale, feel it flow through your whole body. In a few steps you are in beautiful yellow light... imagine breathing in the healing yellow-gold light, and allowing it to circulate throughout your body as you breathe out. Then you can walk into the gorgeous green rays and breathe in the strengthening shimmers of green and sense its vigor as it flows all around. Next are the loveliest shades of blue light and you may inhale the vibrant blue energy, and exhale, feeling it sparkle up and down your body. Lastly you step into a band of violet light and sense how majestic you feel in its presence. Breathe in this incredible violet energy and watch it swirl through your entire being.

Strengthened and relaxed now, you may wish to exercise your mental powers, remembering how wonderful it is to become more fluid and more expressive in our thinking. Can you imagine plunging your hands into warm soppy mud?

Making snowballs with your bare hands?

Smelling freshly brewed coffee?

Smelling gasoline?

Imagine the taste of a crisp, juicy apple?

And the taste of hot buttered toat?

Now on the left side of your brain, experience as fully as you can the following scene.. you are riding a horse through the snow and sleet carrying three little kittens under your coat and you are sucking on a peppermint.

On the right side of the brain you are standing under a waterfall, singing "You Are My Sunshine" and watching a

nearby volcano erupt.

two?

Do you feel ready to return to your everyday world now ready to face the things you have to do and deal with today and tomorrow... feeling so good to be calm like this... making this time for yourself to relax and enjoy your life and make things work out for yourself. Breathing deeply now, counting to three... one, two, three.. opening your eyes, feeling fully awake.

Could you please take a few minutes and tell my some of your experiences and feelings after this session on day Hello. Today, you may find it even easier than before to relax more deeply than you have ever relaxed before. To begin, you could take a very deep breath, and blow it out as slowly as you can. As you breathe out, let yourself go limp and loose. Relax completely now... as you rest there

feeling yourself breathing in and out.

You may feel as if you are sucking healing, cleansing, soothing and refreshing air in through your mouth and nose, down your windpipe into your lungs... soothing and relaxing them... and you may feel yourself sucking this healing, cleansing breath of life in through your lungs into your bloodstream... turning your blood bright red with life and health... feeling this purifying fresh air flowing into every cell and organ and nerve and muscle of your body... soothing and relaxing every part of your body from your head to your toes... so good... it feels so good just to relax and let go and feel yourself becoming more and more peaceful, calm, loose and limp and relaxed...so good...

As you breathe out, with every new breath you breathe out you can feel yourself blowing out of your body and mind all tightness, all tension, all ill health and discomfort... breathing yourself calm and clear and fully relaxed... blowing every last bit of tightness and tension and strain and stress and nervousness and anxiety out of your body and your mind... more and more with every breath you breathe out... more and more calm and clear and pure and empty

Now you are ready to explore and deepen your skills of imaging. As you move deeper and deeper, letting yourself be carried very deeply into the realm of intuitions, images, and imagination, come to a deserted beach and walk along in the sand at the water's edge. What time of day is it? What is the sky like? Is there any wind? What do you feel on your body? Look closely at the water around your feet...

Kneel down in the sand and begin to trace your name in the sand.. and watch the waves wash it away. Trace your name again... and watch as the water rushes over your letters and blurs their lines. And still on that lovely beach, you begin to wander slowly along the jagged shoreline, listening to the sound of the waves washing

against the sand, smelling the salty sea air, hearing the cry of a gull, aware of a growing sense of serenity and peace, a knowledge that all is one and you are one with all that is.

Now you come to rest beside a beautiful tidal pool. Here the water is very shallow and still. You watch the coral and lovely sea anemones. As you lean closer to the pool you see reflected there an image of yourself, a self that has many dimensions, a self that can be loving and kind, hateful and cruel, caring and indifferent, angry and peaceful, joyous and sad, weak and strong. Here in this space out of time you see yourself reflected and that reflection mirrors all that is you.

Looking closer still you begin to focus on your limitations, your weaknesses. You see those attitudes and behaviors you would like to change. You see where your energy is blocked, and places where you are hurt and scared, lonely, and sad. You notice and accept all this, secure in the knowledge that you are a strong person.

Now reach your hands into the water and begin splashing harder and harder. As you splash the images

are dissolving, disappearing.

Now the water is still once again, crystal clear and very still. Once again you lean over the pool and see your reflection and mirrored there are all of your strengths. See the places where your energy flows clearly and uninterruptedly. See your skills and sensitivities, your joys and successes. See those attitudes and behaviors that are rewarding and bring you peace and contentment. See the ways in which you wish to be and you are, simply by your intentions.

Now to your surprise the pool has grown larger and deeper, so deep that you are able to dive right in, and that is what you do. Dive into the pool and merge with your powerful self, knowing that this is your power, the power to create, the power to imagine. Now merged with your powerful self, rise up out of the water, out of the trance and return awake and refreshed to your waking reality. Open your eyes, stretch, feeling fully refreshed

and renewed.

Would you please take a few minutes and share with me what happened to you on this journey into your imagination?

Hello. Let's begin. Please make your body comfortable, so you can really relax. As you begin now to relax, you can feel yourself feeling more and more comfortable... letting go... more and more calm and receptive now... taking even, deep breaths now, remembering how pleasant it feels to let go of tension and allow it to slip away, glide right out of your body with each breath out. And you might begin to notice that something very wonderful, very interesting and desirable is occurring somewhere in your body and mind now, or perhaps it is about to happen in another moment or two as you feel yourself entering into a realm of complete peace and security.

Further and further into the calmness and peace and relaxation now... let yourself feel like a catepillar floating in a womb cocoon of deep relaxation and perfect peace... feel the joy and the freedom and the power growing within you.... ready to burst through... you can feel yourself moving into the future now... letting go of the past and moving into the future you are now creating for yourself by your positive, constructive, spontaneous thoughts and images.. feeling yourself on the verge of breaking through now... into new power and joy and freedom... leaving behind all your no-longer-needed catepillar tastes and needs and habits and appetitites and limitations and frautrations... it's safe to let go and feel yhourself now about to awaken as a beautiful, strong, graceful, slender, joyous butterfly soaring powerfully, lightly, up, up, up toward the sunlight of your dreams and goals and hopes and desires... feel yourself anticipating your new freedom... feel the new power surging through your veins... the first hints of your new certainty and joy in living... but for now, why don't you just let yourself be like a caterpillar floating in a womb cocoon of perfect relaxation, perfect peace and stillness... absolute safety and freedom.

In the middle of your forehead, imagine a huge

Then erase the sunflower. sunflower.

Now in the middle of your forehead, imagine a small Then imagine the sun just inside the top of your sun. Try to roll it down the inside of your skull to the inside of the bake of your head, so that if your eyes could turn completely around in your head, they would be looking at it.

Now raise the sun along the back of your head to the top and then down to the forehead. Now raise it along the inside of the head from the forehead back to the top and then to the back of the head, and then to the top of the head and back to the forehead. The sun should be making vertical semicircles on the inside of your skull.

Now let that sun move out in front of you and see it setting over the sea. From somewhere in the direction of the sunset comes a sailboat. From what direction is the sailboat coming. from the left, right, or center?

Let that image fade away and imagine an elephant walking. Try to become more and more aware of him as he walks. He stops and eats something, pushing his long trunk into his mouth, then he walks some more, then he sees you and breaks into a run. He slows down and then he stops and eats some more.

Let the elephant go, and imagine seeing Santa Claus in a sleigh pulled by reindeer. Overse the sleigh and watch it accelerate, then slow down and stop, then start up again, going faster and faster as it circles around and

down a spiral track that is inside your head.

Starting from your chin, the sleigh spirals up and around and around to the top of your head. Then it circles down and round and around to your chin. Circling now up and around and around and around to the top of your head. Let it stop there poised on the edge of the front of the top of your head.

Now yawn and let Santa and his sleigh and reindeer drive down over your nose and into your mouth, swallow the

sleigh, and forget all about it.

Appendix E

Training procedure for enhancing imaging ability
Second Session

As you become completely relaxed, you could imagine becoming totally limp and loose in your body and hear

yourself saying 'zero' to yourself.

You can imagine thinking and feeling and picturing zero now, over and over in your mind ... one zero makes you feel calm and clear and relaxed ... balanced perfectly ... but as you keep on thinking and imagining zero, you become more and more relaxed as you think and picture zero... saying zero for a few minutes relaxes you completely ... saying and picturing zeros ... little zeros ... and big zeros ... fat zeros and skinny zeros ... short funny zeros and tall happy zeros ... zeros every color of the rainbow ... the sound of zero... the feeling of zero ... slipping out through the hole in the zero and leaving reality behind for a while ... feeling more and more zero ... like a place holder ... neither here nor there ... neither positive nor negative ... peaceful ... perfect calmness with you around it ... as clear and still as a diamond ... zero ... a wonderful feeling of peace and freedom and warmth and safety ... zero ... a tiny, tiny zero gradually growing bigger and bigger ... and another tiny zero gradually growing bigger and bigger ... and that big zero starting to shrink slowling back into a tiny, tiny zero .. and the first big zero coming into view now and starting to shrink smaller and smaller ... and see if you can imagine a line of zeros going across your field of vision ... with the center of the line of zeros starting to move upward, pulling the other zeros up along with it ... and now the center starts to slide down and all the other zeros slide down, too... again the center of the zeros starts to slide up and pulls the other zeros up too ... and then the center comes back down again, and so do all the other zeros ... relaxing like this lets you feel good and enjoy your leisure time ... you find yourself more and more enjoying doing all sorts of things with zeros ... whatever you'd like to do ... trying new things, new activities ... just being the sort of person you have always wanted to be ... zero ... being and feeling and acting naturally ... imagining yourself being, feeling, and acting free ... free of anything or

everything that could hold you back ... free of frustrations and problems and blockages ...

Let's see what sort of visualization comes into your mind this time ... just let yourself do whatever comes into your mind now when you think of being free, of making your life work out right ... (30 second pause) ... now you can let this imaginary reality collapse and shrink into a tiny dot of light and vanish somewhere deep into your mind, where it can work itself into your deepest thinking

and feeling ...

Begin to visualize a very beautiful, very happy, very relaxing scene, one in which you can remember yourself feeling a wonderful, relaxing exhilaration. You may not see anything, but experience what it would feel like to be at this imaginary place. Sense it as fully as you can. What sort of place it is? (Related questions may be asked in order to sharpen the details of the imaged scene: e.g. What kinds of trees are there? Can you see the sky or do the leaves cover up the sky? Can you hear any sounds? etc.) Look around and fully sense this place.... and see if you can find a favorite spot... a place where you can sit down for a few moments to sense fully the peaceful beauty all around you... Go over to the spot and sit down ... where are you sitting now? What is in front of you.. Relax and enjoy it. at your sides?

In this beautiful spot in your mind's eye you can more fully sense the interconnections of everything around you... and within you... as you rest and relax, you can sense the incredible regenerative forces at work... restoring... nourishing... energizing... healing... that you've found your favorite place, it's time to locate Put a welcoming smile on your face... and your adviser. slowly look around... Somewhere, nearby, some living creature is waiting for you... smiling and waiting for you to establish eye contact.... This creature may immediately approach you or it may wait a few moments to be sure that you mean it no harm... Have you found a creature yet? yes, skip following script and continue at next paragraph) Be sure to look up in the trees...or behind Look to your left... and your right...) the bushes.

Introduce yourself... tell your adviser your name, and that you mean no harm, for you've come with only the friendliest intentions. What is your advisor doing? (If friendliest intentions assure that sometimes advisers become behavior is unusual, assure that

quite excited and act strangely, but as they get used to people, they calm down.) Find out your advisor's name. The first name that comes to mind... right now. If you wish, you might offer (him or her) some food... and ask your adviser if (he or she) is willing to come over and talk with you for a few moments. (If advisor hesitates or stays at a distance, assure that in any friendship, it takes time for feelings of mutual trust and respect to develop, but that you sincerely want your adviser's help.)

Although your adviser knows everything about you ... since your adviser is a reflection of your inner life - tell you adviser that you won't push for any simple answers to important questions that you mauy be dealing with... rather, you'd like to establish a continuing dialogue... so that anytime you need help with a problem, your advisor can tell you things of great importance... things that you may already know, but you may have underestimated their significance...

If there's a problem that's been bothering you for a while, ask your adviser if (he or she) is willing to give you some help with it? (If yes, go on to next paragraph.) If no, ask your adviser if there is something you have to do first before (he or she) is willing to answer you. If the adviser doesn't answer at all, suggest that the adviser's response is the first answer that pops into your mind ... pose your questions as you exhale and the first response that comes into your mind as you inhale is your adviser's reply.. an inspiration.

Ask your questions now. What did your adviser rely? (Dialogue flows from the nature of the response, with the trainer acting, when needed, in the role of a sort of non-directive counselor, reflecting, clarifying, etc.) The length of this dialogue will vary, but generally ends when the client has been provided with one or two unexpected insights or solutions.

If there is something that you'd like your adviser to be thinking about between now and the next time you meet, tell this to your adviser now... If there is anything your adviser would like you to think about between now and the next time you meet, find out what that is now...

See if your adviser will allow you to touch or pet (him or her)... Take a moment to enjoy stroking (him or her)... While making this contact, find out if there's anything else that your adviser would like to tell you... Is there anything you'd like to tell the adviser?

In a moment, you will take a deep, cleansing breath to return from this meeting, but before you do, tell yourself that each time you make contact with your adviser, the communication will flow more and more smoothly... more and more easily... more and more comfortably... Thank your adviser for helping you... and say goodbye.

Tell yourself that when this experience is over, you will feel not only relaxed, rested, and comfortable, but also energized with such a powerful sense of well-being that you will be able to respond easily to any demands that may arise... To end this exercise, take a deep, cleansing breath... exhale... breathe in deeply through your nose... blow out through your mouth. Open your eyes.

At this point, the trainer spends five to ten minutes processing with the client how the imaging session went. what was clear... unexpected... satisfying... etc. Interview the subject about the following information:

Meeting your inner adviser

- Where was your favorite place?
- Describe what your favorite place looked like.
- During what season of the year did you visit it?
- What time of day was it?
- What sounds could you hear?
- What other experiences related to your favorite place did you enjoy?
- Describe your adviser's physical experience.
- What was your adviser's name?
- Did your adviser tell you something that you already
- know is important in your life?
- Did your adviser tell you something that you hadn't
- known or thought about before?
- Other notes of interest:

Appendix F

Second Week's At-Home Training

Day One

Hello again. This series of taped imagery exercises is the second part of independent training procedures for enhancing your imaging abilities. I hope you will find most of them to be enjoyable and worthwhile.

Begin to relax by getting comfortable where you are... let yourself breathe easily and comfortably... take a couple of full, deep breaths and let the out breath be a real "letting go" kind of breath... just begin to let go of any unnecessary tension or discomfort... as you relax allow you eyes to close and begin to focus inside as I ask you to imagine a variety of things, allow yourself to observe what happens for you... remember, there is no right or wrong way to imagine these things... just notice what it's like for you... that's your only responsibility now... noticing what it's like...

And if you wish, you can imagine a triangle in your mind's eye ... any type of triangle will do. you may imagine that you see it on a screen, like a movie or TV screen or may may imagine it in your mind ... just notice which is easier for you ... notice what kind of triangle it is ... or is there more than one? ... is it a steady, vivid image, or does it come and go or change as you watch it? ... remember, it doesn't really matter what kind it is, or how you imagine it, as long as you stay relaxed and aware and observe what's happening inside ... can you make the image more vivid? ... imagine you have controls, like on a TV set, and you can dial the image in so it's more vivid ... or take a couple of deep breaths, and relax more deeply and let the image become clearer ... which works better?

Now let the image go ... and let a square form in your mind's eye or on your mental screen ... any kind of square is fine ... just notice what it's like as you continue to observe it ... now let the image fade and imagine a circle... notice how big or how small it is, how round ... let the circle be yellow .. a bright yellow circle.. does it help if you imagine the sun, or a lemon?

let the yellow fade and turn the circle red ... notice if it helps to imagine an apple, or something red that's familiar to you ... now let that go, and imagine that the circle is filled with blue ... like the sky, or the ocean ... let the circle become three dimensional and form a sphere and let the sphere begin to rotate slowly ... see it rotating and let it become a globe, spinning in space, as if you were looking at the Earth from outer space...

Now come back to earth ... imagine you are in the country, and it's wintertime you are walking through the freshly fallen snow and can hear and feel it crunch beneath your feet ... the air is cold and crisp and you can see your breath as you exhale ... in the distance a church bell is pealing .. and somewhere a radio is playing "Jingle Bells" ... hear the song "Jingle Bells" ...

Now let that image fade and imagine instead you are on a beautiful tropical beach in mid-July ... the sky is blue and the sun is bright and warm on your skin ... the sand is warm beneath you ... the ocean is vast and the waves roll to the shore one after the other in a timeless, tireless rhythm ... you can hear the sound of the waves break ... advancing and retreating on the sand ... imagine that you walk down to the water, the sand is hot beneath your feet and you walk a little more quickly to get to the water line where the water has washed and cooled the sand ... as you walk a little ways into the water, the cool swirling water washes around your ankles, and as the water retreats, the sand beneath your feel is drawn out with it ... the movement of the sand and the water feels good beneath your feet...

Now let that go .. and recall some time when you felt very much at peace with yourself ... a time when you felt very peaceful, centered, and calm ... imagine it as if it is happening now ... notice who you are with .. what you are doing ... what your posture is like ... and your face ... how is your voice ... especially notice the feelings of peacefulness and centeredness in you ... where do you feel these things? ... let them be there...and let them grow in you ... let the feelings expand and amplify in

you, filling your whole body with feelings of peacefulness and calm ... let it overflow your body and fill the space around you ... so that all of you is bathed in this peace.

Now slowly let yourself begin to become aware of the room and sounds around you... let yourself come back awake and alert, bringing any feelings of peacefulness you have experienced back with you... remember what was of interest or importance to you in this experience and please take a few minutes to tape record your reactions to this experience. Please stop this tape now.

Day two:

Hello. I am hoping you are in a quiet spot now, with some amount of time just reserved for yourself ... a few minutes out of a busy day to center on your wishes and talents. Today, the exercises may help you strengthen the length of time you can hold an image in your mind's eye. Please be a relaxed as can be, watching what happens for you during this session... there is no best way of visualizing... there is simply your way. Sit in a comfortable chair, arms and legs uncrossed. Take three or four deep breaths. Exhale slowly and relax yourself.

Close your eyes. Picture a home movie screen in your mind or imagine a white sheet of paper on the wall. Change the color of the screen in your mind to red. Hold it in your mind for five seconds.

Change the color of your screen to blue. Hold it for five seconds.

Change the color of your screen to yellow. Hold it for five seconds.

Change the color of your screen to black. Then change it back to white.

Now picture a red square in the center of your white scren for five seconds.

Change the color of your square to yellow.

Change the color of your square to blue.

Change the color of your square to black.

Bring your white screen back.

Now picture a red circle in the center of your white screen for five seconds.

Let's change the scene ... imagine being in a classroom with a blackboard, gray or dull black. Then imagine tht in the middle of the blackboard appears a figure: let us say the number 5, as if written with white chalk, fairly large and well defined. Then keep it vividly before your inner eye, so to speak: that is, keep the image of the five vivid and steady in the field of your conscious attention. Then on the right of the 5, visualize the figure 2.

So now you have two figures, a 5 and a 3, making 52. Dwell for a while on the visualization of this number, then after a little while, imagine the appearance of a 4

at the right side of the two.

Now you have three figures, written in white chalk, 5, 2, and 4, making the number 524. Dwell for a minute on this number.

Continue adding other numbers on the right of these three until you are unable to hold together the visualization of the number resulting from those figures.

Fine... using your creative imagination now, observe what happens to you when you are asked to imagine certain sounds... such as the ringing of church bells... Do you hear any sounds at all... one bell?.. a series of bells... are they playing a melody or not... are you also seeing the bells or not... if you are seeing the bells as you hear their pealing, can you blank out the picture and still hear the sounds... or if there was no picture for you when you listen for the sounds, can you now make a picture with the bells chiming? Notice which is easier for you.

During the next exercise, please imagine the sound with or without the picture of the scene, whichever seems most natural for you. Imagine the sound of waves crashing against rocks... the sounds as the waves first crash, the next few seconds' sounds, and then the sound of the water withdrawing from the rocks. Now, as an experiment, try to imagine the same sequence of sounds of water crashing imagine the same sequence of sounds of water crashing against rocks, only this time, see what happens when you eliminate the visual element, if that's how it was for you eliminate the visual element if you did not

have it at first. Once again, the sound of waves crashing against rocks...

Allow yourself to sense the rhythm of pushing hard and then letting go and draining out... the exuberance ... the relaxation... the power... the total resting. When you are ready, you may return to full consciousness of the room, drifting back to complete awareness, but filled with energy and deep contentment ... Please turn off this tape, and put in the blank tape to record your impressions and experiences of this training session.

Day Three:

Hello once again. I hope you are pleased to begin the eighth independent training session. Finding yourself a very comfortable spot, either sitting or lying down, you can start the deep relaxation process as you usually do... by paying attention to how you breathe yourself... how the air feels as it enters your nose and moves down into your lungs... how the warmer air leaves your body... paying attention to whether your breath in is longer than your breath out... or whether the rhythm is pretty even... noticing what is your way. Suppose you use your imagination now. In your mind's eye, imagine that you are standing in front of an escalator such as are in some stores. See the steps moving down in front of you and see the railings. You're all alone. It's your private escalator. I'll count backward from ten to zero, and as I start to count, imagine that you are stepping on the escalator and then stand with your hand on the railing as the steps move down carrying you with them deeper and deeper. With each count you'll go deeper and deeper. When I reach zero, imagine you've reached the bottom and step off the escalator. Ten you step on. Nine... eight... seven... six... five... four....three... two... You may wish to take a moment to enjoy the one...zero. deep pleasure in relaxing your mind and your body...

The following imagery tasks will be presented as a "yes" or "no" question... whether the answer is "yes" or "no" is entirely unimportant... all that is important is that you try to do what the question ask... you will see

as we go along ...

Can you visualize the space between your ears? Can you picture the spot at which your head touches the chair, bed, or floor? Does one hand feel warmer than the other? Can you imagine something, an object) that is far off in the distance? Now, can you picture a very beautiful flower in front of you? Its colors, textures, fragrance. Have you ever noticed how close your breath comes to the back of your eyeballs when you breathe in through your nose? Can you picture yourself floating on a cloud? Does one leg feel heavier than the other? Can you imagine being stuck in molasses? Can you imagine yourself floating in a pool of warm water with your eyes closed? Can you make your body feel like a rag doll? Can you make your body very heavy, so heavy you couldn't possibly move it around?

And now that heaviness will begin to leave you, slowly at first, and then more quickly, as your body is becoming lighter and lighter, until your normal weight has been reached, and then continuing to become even lighter, lighter, feeling as light as a feather...and you may feel yourself to be rising just a little... and then settling gently back down once again... slowly, pleasurably now, discovering that your normal weight is returning, and it is very pleasant is returning... you are aware of your own flesh and the fullness of your body once again.

In just a little while now, you may find yourself walking down a street paved with stones, and soon you will come to a very pleasant-looking small cafe, and you can go inside...and there is a table set especially for you.. you sit down... and watch the plate at it begins to be filled with your favorite foods...you may take a bite of something... notice how it tastes, its temperature, its texture... swallow it slowly... and then sample another bite of something different... and observe any differences you may notice from the first bite... taste, temperature, texture...and as you swallow that you look up and notice some musicians on a stage... and then they play a song you have never heard before... and you take great pleasure in listening to this new music.

You may, if you wish, imagine images flowing to you as notes of music... as many kinds of images flow to you, they may become clearer and more vivid. At this

creatively receptive level of mind, let the images flow, watching them appear and disappear, combine, coalesce, merge and separate... let the images play before your inner senses...as you continue to see the images, allow your receptive state of mind to open the doors of your psyche. Let the images have access to all the perceptions of your mind and body, of mankind, and of the universe....

In a few moments, you will return to complete awareness... and will remember clearly the images you have visualized. Allow your mind to choose the images you will remember the most clearly. To return to your ordinary level of consciousness, count from 1 to 3, and gently move some part of your body. Allow yourself to return slowly and open your eyes when you feel ready to do so. You will feel rested, full of energy, and ready to do whatever work is necessary to put your creative ideas into form.

Please turn off the tape recorder now and put in the blank tape. Could you tell me what you experienced and remember from this session?

Day 4

I am happy to be with you once again as you use your developing imagery powers to relax to healing and creative levels. Try to get comfortable now.. close your eyes and begin to relax as you have before. Allow yourself to breathe very deeply now and send your breath into your toes and feet. And let your breath like a healing massage break up any strain or tension and as you exhale let the tension drain away. Breathe deeply now and send your breath into your ankles and let your breath like a healing massage break up any strain or tension there and as you exhale let the tension drain away. Breathe deeply now and send your breath into your knees and let it break up any strain or tension there and as you exhale, let the Breathe into your thighs; and your tension drain away. breath is a healing massage breaking up any strain or tension, and as you exhale the tension is draining away. Breathe into your genitals now; the deep relaxing energy is flowing into your genitals and any tension is draining away. Breathe into your abdomen now; all your internal organs are soothed and relaxed and any strain or tension is draining away. Let your breath flow into your chest;

let it sooth you and as you exhale any tension is draining away. Breathe into your back now; your breath like a healing massage is breaking up any strain or tension and as you exhale the tension is draining away. The deep relaxing energy is flowing through your back, into each vertebra as each vertebra assumes its proper alignment. And the healing breath is flowing into all your muscles and tendons and you are relaxed. Breath into your shoulders and neck; your breath like a healing massage is breaking up any strain or tension and as you exhale the tension is draining away. And the deep relaxing energy is flowing into your arms; your upper arms, your elbows, your forearms, your wrists, your hands, your fingers are fully relaxed. And let that relaxing energy wash up over your throat and your lips, your jaw, your cheeks are fully relaxed. As you breathe into your face, the muscles around your eyes, your forehead, your scalp are relaxed ... completely relaxed.

Your body is strong.. so strong it can take care of itself. Your mind is strong.. so strong it keeps your body well. Good energy is all around you. Every time you breathe in you breathe in good energy and it moves all through your body and keeps your body well.

And now picture a big blue star over your head. A big blue star is over your head. Suyddenly it bursts into thousands of tiny blue stars. A shower of stars pouring down on you. It is raining little blue sparkling staars. These tiny little stars are healing energy. When you take a deep breath, you bring the stars into your body. When you breathe out, all the little stars move through your body. All the tiny blue stars are moving through your body. You feel all warm and tingly as the stars move through your body. The blue stars are moving all through your body just like your blood does. They are moving into your toes and feet. They are moving up through your legs The blue starts are filling your stomach and and hips. your chest. You feel all warm and tingling as the tiny blue lights move along your back, your shoulders, your And now the tiny blue lights are moving into your The tiny blue lights will move all through your body all day and night and make your strong and well.

Even as you heal, can you imagine flying on the back of a beautiful bird and landing on the top of a mountain?

What can you see? smell? feel under your feet? hear? Find a winged horse... climb on its back and ride across a desert until you come to a cool oasis. What can you see? smell? feel with your hands? hear? taste? Find a silverblue stream of water.. ride in a crescent boat through a long, winding tunnel and come to rest in a quiet grotto. What can you see? taste? smell? hear? Get out of the boat and climb a long, winding path until you reach a cabin on the top of a hill. Push open the cabin door. What can you see? hear? smell? touch?

In a moment you will return to complete awareness of the room, feeling refreshed and mentally vibrant. Take some time now to move your feet around, and rub your hands together. Now gently move your hands to your face and lightly massage your face. Open your eyes and see anew the room. Please turn off the tape recorder and put in the blank tape to tell me how this imagery exercise was for you today.

Day Five.

Hello. This is the last in the series of imagery training exercises. But your imagination will go on and on, becoming a greater source of pleasure and creativity to you the more you use it. The best is yet to come...

Allow yourself to begin to relax completely again. let all tension drain out of your body and mind. breathe deeply and slowly... relax more and more.

Visualize a light within your heart - glowing radiant and warm. Feel its spreading and growing - shining out from you farther and farther until you are like a golden sun, radiating loving energy on everything and everyone around you.

Say to yourself silently and with conviction; Divine light and love and flowing through me and radiating from me to everything around me.

I am filled with divine light and creative energy. The light within me is creating miracles in my life here and now.

I have all the love I need within my own heart.

I am a lovable and loving person.

I am whole within myself.

I am ready now to accept all the joy and prosperity life has to offer me.

I now take responsibility for creating the world as a happy, abundant place for everyone. I am lovable and beautiful. I am kind and loving, and I have a great deal to share with others. I am talented, intelligent, and creative. I am growing more and more attractive everyday. I have a lot to offer and everyone recognizes it. I love the world and the world loves me. The more I receive the more I have to give. I love and accept myself completely as I am. I don't have to try to plase anyone else. I like myself and that's what counts. I am highly pleasing to myself in the presence of other people. I express myself freely, fully, and easily. I am a powerful, loving, and creative being.

Day Five

Hello. And once again, close your eyes if you wish and allow yourself to let go and relax, but this time, you may feel yourself not getting the least sleepy or drowsy because this time you are taking the other direction: you are becoming more and more awake... more and more comfortable and peaceful and wider and wider awake with every breath you breath in... more and more conscious... calm... empty and still with every breath you breathe out for the rest of this session... more and more fully conscious... as if you're waking up out of a lifelong trance into your full, conscious potential... you might be able to feel yourself waking up inside now, more and more... breaking out of your shell and spreading your wings... your glorious, gorgeous butterfly wings of imagination... feeling the power awakening in you... feeling yourself becoming more and more fully conscious... new mental powers and freedom and energy... new freedom and aliveness... feeling more and more alive and awake with every breath I breathe in now... I can begin to sense something wonderful starting to happen deep inside me... feeling a wonderful magical energy welling ujp deep inside me... spreading out now throughout my body and mind...

wonderful, glowing, radiant life energy... filling my heart with light... more and more... I can let myself almost feel this inner light... this power... this aliveness... as I feel myself unfolding like a flower unfolds its petals to blossom.... I can feel myself unfolding inside....opening up to my own light... my own power... feeling it glowing like a warm, wonderful sun in my heart... filling my body and mind up with its radiance... so good... so alive... feeling the brilliance of my innerlight spreading throughout my body and mind now ... filling my skin with joy and light ... I can feel this light soothing and healing and calming and awakening everything it touches... transforming me into brilliant light... pure consciousness... more and more I can feel myself like a star of glowing, dancing, joyous light... pure consciousness shining through every pore... spreading far beyhond my skin now... filling the room with light and safety and life and joy ...

And I feel as if I'm floating high above my body... glancing down, I see it relaxing down there... healing itself... enjhoying itself as I float higher and higher as if in a wonderful dream of power and joy... looking down, I see my body relaxing ... what a miracle it is ... all those billions of little cells working together as one... giving me life in this world... I see my body with new respect now... I wonder at my body... such a miracle of life... starting right now, I can feel a new respect, a new accceptance and comradeship with my body... and I look outward... my consciousness fills this room... and beyhond... I feeel conscious of the entire earth... all life as one... life striving toward the infinite... a dance of life filling time and space.... I can feel the earth spinning round and round as it dances in its own orbit around the life-giving-sun... and the sun, it is also dancing.. slow and stately... and all the stars are dancing together... the universe is a dance of light and energy and something more... and I set myself free for a while (pause)

And now I let myself slowly return back to my body and myself... bringwith me a new joy and aliveness... a wonderful new freedom and power into my everyday life... soon I will be ready to open my eyes and experience new

calmness, confidence, and power... a sense of wonder and zest for living... more and more naturallly living up toward my fullest potentials... allowing myself to perform my very best in all situations, under any and all circumstances... using my imagery techniques so long as I need to use them and whenever I nned them I use them and they work for me because I can allow myself to do my very best in everything... thinking back now to how I felt when I first began working with imagery, I realize how much progress I have already made in my life (pause) but this was just the beginning... I am just now starting to come into my full potential as a successful, fully alive, fully awake, fully able human being.

When I open my eyes, I will feel something... I do not yet know what it will be... but when I open my eyes, I will certainly feel it... and it will tell me that I am well on my way now... it will show me how good it can be to be really alive... here you go. You take a deep breath, open your eyes, feeling how great I can feel when I allow myself to feel my deepest best.. back to normal awareness now, feeling wide awake, comfortable,

refreshed...

My warmest thanks to you for sharing your time and experiences with me... it has been wonderful for me to get to know a little bit about you ... how we all enrich one another... thank you again. Would you please turn off this tape now and insert the blank tell to tell me some of your thoughts and experiences now that you have finished this last session?

