Effects of visual-kinesthetic dissociation on anxiety in six phobic clients

Stephen Charles Bacon

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EFFECTS OF VISUAL-KINESTHETIC DISSOCIATION
ON ANXIETY IN SIX PHOBIC CLIENTS

By

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B.A., University of Colorado, Boulder, 1978

Presented in partial fulfillment of the requirements
for the degree of

Master of Arts

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ABSTRACT

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Effects of Visual-Kinesthetic Dissociation on Anxiety in Six Phobic Clients (95 pp.)

Co-directors: George Camp and John Watkins

This study evaluated the effects of Visual-Kinesthetic Dissociation (VKD), a Neurolinguistic Programming technique, on anxiety. Following a pilot study, six clinically-anxious phobic adults were recruited through advertising. Their levels of phobic-related anxiety were assessed via self-report, self-monitoring of behaviors in a natural environment, and a physiological measure (GSR). Following pretesting they received a brief VKD treatment. They were post tested immediately afterwards and at a ten day follow-up. Out of 20 different measures taken on the 6 subjects, 19 measures showed that VKD was effective in reducing measured anxiety. 5 subjects experienced substantial improvement and 1 subject experienced slight improvement. The theoretical foundations of VKD are explained and compared to hypnoanalytic theory and Marks' exposure principle. The limitations of this study are delineated and some implications of the success of VKD are discussed.
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INTRODUCTION

Many clients who desire therapeutic treatment have problems which consist of or which are complicated by anxiety reactions and phobic disorders. The prevalence of these disabilities in the general population has been summarized by Barrios (1979) in a review on coping skills training:

20% of school children (Eysenck & Rachman, 1965) and 25% of college students (Suinn, 1969) are test anxious. A significant portion of the adolescent and young adult population report intense heterosocial anxiety (Borkovec, Stone, O'Brien, & Kaloupek, 1974; Fishman & Nawas, 1973; Martinson & Zerface, 1970). Also anxiety related to public speaking (Paul, 1966), assertion (Gambrill & Richey, 1975), and mathematics (Richardson & Suinn, 1971) is pervasive among the nonclinical public. Agras, Sylvester, and Oliveau (1969) listed snakes, heights, storms, flying, dentists, injury, illness, death, enclosures, journeys alone, and being alone as common objects of fear. Macfarlane, Allen, and Honzik (1954) found that 90% of children between 2 and 14 years of age had at least one specific fear. Lapouse and Monk (1959) found that 43% of 6- to 12- year olds had at least 7 of 30 listed fears. Thus, it is apparent that a sizeable portion of the general population experience anxiety in a variety of situations. (p.493)
Given the widespread distribution of these symptoms, it is not surprising that there is an extensive body of literature on the development and evaluation of related treatment programs. Since the introduction of systematic desensitization in 1958, behavioral approaches have dominated the field and numerous reviews (e.g. Barrios, 1979; Marks, 1978) have testified to the efficacy of these techniques. While this is certainly encouraging, the extant procedures do have several drawbacks.

1) They are time intensive. Marks (1978), in a review of behavioral psychotherapy, states:

These results (reduction in phobic anxiety) can be obtained with real-life exposure after 1 to 30 sessions. The last hundred patients treated in the author's unit by nurse-therapists in 1974-76 required a mean of 11 treatment sessions. More complex problems with wider ramifications require longer treatments. (p.499)

Duration of treatment has obvious costs in time and money. In addition, Marks and also Ramsay (1975) note particular problems with clients who begin treatment but don't continue long enough to gain substantial benefits.

2) While the extensive research certainly indicates that behavioral approaches work to a degree, the extent of their efficacy is yet to be determined. Recent reviews of phobia treatment outcome studies have pinned pointed several critical weaknesses in design and measurement which raise disturbing questions. In particular the generalizability of analouge research is under attack. One frequently noted problem
concerns the difficulties of generalizing from minimally-anxious subjects to clinically-anxious clients (Marks, 1978; Barrios, 1979; Mathews, 1978). Other criticisms (Berstein & Paul, 1971) include failure to control for demand characteristics, use of inexperienced therapists, therapeutic techniques which differ markedly from clinical situations, and unblind raters (Barrios, 1978).

The most serious deficits however, are connected with ambiguities in measurement. There is little evidence to show that a reduction of anxiety on a lab measure (which is the usual basis for declaring a treatment effective) actually corresponds to a reduction of anxiety and behavioral change in the natural environment. Lick and Unger (1977) in a review of the problems connected with dependent measures, raise several points. A) improvements which are statistically significant are not always clinically significant. B) The measurement reactivity inevitable in the laboratory can cause seemingly positive behavior change which does not transfer to natural environments. C) Treatment can be so specific that it won't generalize. For example, a client might gain the ability to approach a familiar snake in a lab but be unable to tolerate a novel snake in natural settings. D) "Phobic stimuli elicit greater fear when they are uncaged or encountered in contexts associated with uncertainty" (Lick & Unger, 1977, p. 289) and in many outcome measures the stimuli have not been in these conditions. E) In complex anxiety producing situations it is difficult to identify all of the cues; therefore, in desensitizing specific cues, some stimuli may be overlooked. While the results still appear positive on a
laboratory test, the treatment fails to generalize.

Although these points cast doubt on the external validity of much of the analog research, there is as yet little empirical evidence on the matter. Lick does cite a number of studies which have shown failure to generalize and then goes on to conclude that they "suggest that it is easier to modify subjects' performance on laboratory tests than to affect change on measures designed to assess subjects' behavior outside the laboratory." (Lick & Unger, 1977) Marks (1978), commenting on the same topic, notes:

Such tests in an experimental situation are often but a poor guide to performance in the more natural situations which are the key focus of interest for clinicians. 'Even crippled patients not uncommonly succeed in touching the feared stimulus in an experimental test, even though afterwards they continue to avoid as much as usual in a natural situation. (p. 494)

In summary, while behavior therapy boasts a powerful set of tools for reducing phobic anxieties, these tools do have their limitations. If therefore, there was a treatment which was less time intensive and still effective, it would be a welcome addition to the therapeutic armamentarium.

In 1975 a new model of therapeutic techniques, Neurolinguistic Programming (NLP), was introduced to the scientific community by John Grinder and Richard Bandler. Their first book, The Structure of Magic, Vol. 1, concentrated on linguistic patterns and how they affect therapy. Since that time, Bandler and Grinder (and several other
... colleagues—notably Dilts, DeLozier, Gordon, and Cameron-Bandler) have proceeded to develop a number of other interventions which stem from this same linguistic-therapeutic model. Much of their work is derivative, taking its basic principles from Perls, Satir, and Milton Erickson, but Grinder and Bandler have repackaged the techniques so that the practices of these noted therapists are more easily taught and learned.

One of the NLP techniques which is particularly relevant to the treatment of phobias and anxiety reactions is a procedure called Visual-Kinesthetic Dissociation (VKD). It is a seven step process which allows a client to associate personal resources of competency and comfort to the same stimuli which originally evoked the phobic reactions. The seven steps, as outlined by Cameron-Bandler (1978) are:

1. Establish a powerful anchor for solid comfort. (more information on anchoring may be found in appendix I)

2. Holding the anchor, have the client visualize himself out in front in the very first scene of the traumatic incident (If the client doesn't know the origin of the phobia, a description of the regression technique used to locate it is given in appendix II), making it a "still-shot." So he is sitting there, next to you, seeing his younger self before him.

3. When he can see himself clearly, have him float out of his body so that he can see himself sitting there next to you watching his younger self. As such, there are now three of him. The visual perspective remains from the third place. Their actual body in the second and the younger self going through the trauma in the first place. When this three place disassociation is accomplished anchor it.

4. Now have the person run the experience through, making sure he remains kinesthetically disassociated from the traumatic incident by the use of anchors and by the use of
verbal patterns which separate out the three places—him, there, the younger you, that experience, what happened then, to separate the younger traumatized self from—you, here, today, watching yourself etc.

5. When the experience has been completely seen, have the third place float back into second place. (So the visual perspective is being integrated with the actual body position of the client)

6. Have the present-day person go to the younger one (the one who went through the traumatic experience) and reassure him that he is from the future, giving the younger self needed comfort and appreciation.

7. When the present-day person can see that the visualized younger self understands, have him integrate by bringing that younger part back inside his own body. (pp. 123-124)

It is clear from looking at the seven steps that VKD is not a radically new technique. Its basic premise—the reexperiencing of a traumatic event in a way that is free from pathology—is familiar to many therapeutic schools. Transactional analysis, for example, has developed a similar technique called "redecision" (Goulding & Goulding, 1976).

The centrality of formative events has, of course, always been a hallmark of the dynamic school. Probably the closest comparison to VKD within the dynamic area can be found in the hypnoanalytic literature. There are numerous case examples of a client hypnotically regressing to a traumatic experience and then reliving it in such a way that they become free from its negative effects. Schenck (1965) cites several cases of this nature, as does Watkins (1971) and Wolberg (1945).
Wolberg also mentions two phobic cases in which simple reexperiencing of the primal memories was insufficient to cause behavioral change. Eventually both of these cases overcame their phobias through extensive working through processes. Wolberg argues (1945):

During hypnoanalysis the individual may recover the memory of a forgotten traumatic happening and through this recall he may experience considerable abreaction. He may even liberate himself from certain associated symptoms. However, the essential difficulty will probably remain. The patient will still be insecure. (p. 242)

It is relevant to note that NLP also emphasizes the inadequacy of simple reexperience; in VKD reexperiencing is done in the context of the anchor of solid comfort, in a dissociated state, and with the mental set that new learnings are to take place.

Watkins' article on the affect bridge (1971, pg. 21) contains some striking parallels with VKD: "The 'affect bridge' is a technique whereby a patient is moved experientially from the present to a past incident over an affect common to the 2 events..." The regression technique used in VKD is precisely the same--the affect characteristic of the phobia is identified and used as a bridge to remember (regress) back to an earlier or primal time when that emotion was felt very strongly. (See appendix II for details.)

Insight into VKD's theoretical rationale may be achieved by comparing it with behavior therapy theories. On the face of it, such a comparison might be complex, as there are numerous theories, some of
which radically contradict each other. However, Marks (1978) argues that all of these theories can be subsumed under one umbrella: the exposure principle.

The principle of exposure involves relief from phobias and compulsions by the individual's continued contact with those situations that evoke discomfort (the evoking stimuli, ES) until it subsides.

Most behavioral approaches to the treatment of anxiety syndromes like phobic and obsessive-compulsive disorders employ the common principle of exposure to the ES. What at first sight seem to be widely different forms of fear reduction—for example, desensitization in fantasy, flooding 'in vivo', cognitive rehearsal, modeling, and operant condition—all appear to be ways of exposing the patient to the frightening situation until he or she gets used to it. This process could also be called adaptation, extinction, or habituation. (p. 498)

Marks believes that the exposure principle underlies such varied treatments as desensitization, flooding, operant shaping, modeling, cognitive rehearsal, self-regulation, paradoxical intention and aversion relief.

One of the most active dialogues in behavior therapy has been the debate between Wolpe's desensitization (1958) and Stampfl's implosion therapy (1967). Desensitization is based on the concept of pairing relaxation and the ES. It is assumed that the relaxed state will then "reciprocally inhibit" the anxiety reaction. Implosion therapy, on the other hand, argues that the client must be flooded with anxious emotions to the point where they become so exhausted that they can no longer generate anxiety. Desensitization therefore asserts that low arousal is necessary for success and flooding argues that high arousal is
necessary. The irony is that both techniques are effective!

Marks refutes both these claims by presenting numerous studies which show absolutely no difference in outcome whether the client is in a relaxed state, a neutral state or a highly aroused state. He concludes therefore, that we are left only with the fact of exposure.

Simply stated, the exposure principle is the concept that the necessary and sufficient criterion for reduction of anxiety is exposure to the anxiety provoking stimulus. Marks (1978) argues:

The exposure principle does not explain why improvement occurs under therapeutic conditions but indicates the strategy which the psychotherapist needs to follow. Clinicians need to search for the ES (evoking stimulus)—those cues that trigger phobias and rituals—and to persuade the patient to come into contact with these cues until he or she is comfortable in their presence. (p. 499)

Marks further states that the exposure principle assumes only that the phobic reaction has been acquired, not necessarily conditioned. He goes on to wonder why exposure to traumatic situations should sometimes cause phobias and yet still be the key to curing them, and concludes with a final question: why, in some cases (Marks reports this of 3% of his practice) do clients get sensitized when exposed to the phobic situations? The NLP model of phobia acquisition and treatment offers tentative answers to these questions.

Grinder and Bandler (1979) begin with the statement that at some point in a phobic person’s life they acquired a response to an ES.
They succeeded in doing something that humans often have a hard time doing. They succeeded in one-trial learning. Every time that set of stimuli comes up again later in their life, they make exactly the same response. It's a remarkable achievement. You change over the years, and despite external contextual changes, you are still able to maintain that stimulus-response arc. (p. 109)

A phobia can be pictured as a chain of experiences, consisting of similar yet somewhat differing stimuli which have precisely the same outcome—the phobic reaction. The experiences are all isomorphic in structure and identical in terms of the affective result. This is the chain that the affect bridge regression technique operates upon.

Grinder and Bandler are no more precise than Marks about the specific origin of the phobia. They do state (1979, p. 109): "A person who has a phobia made a decision, unconsciously, under stress, sometime earlier in their life in the face of overwhelming stimuli." However, the exact mechanism of acquisition is unexplained.

From Cameron-Bandler's description of VKD, it appears that the ability to reaccess the primal experience of the phobia is a necessary factor for treatment success. However, Grinder and Bandler are, in fact, unconcerned with locating an authentic, accurate original experience. Instead, they argue that any affectively powerful experience which is completely isomorphic with the phobic reaction will do. Just after working with a client on a phobia Grinder and Bandler (1979) stated:

I don't believe that (the client) actually had the experience that she watched herself go through. She may or may not have; I don't know. But it is irrelevant.... If the experience that (the client) generated has all the elements of whatever
the original experience or set of experiences was, it will serve as a metaphor which will be as effective as an actual, factual, historical representation. (p.120-121)

Wolberg (1945) notes that Freud also felt this way:

"(Freud reported) that many repressed traumatic experiences presented as factual by his patients were fantastic reconstructions that had no basis in reality. However, Freud insisted that such "cover memories" were no less important than memories of real events, since the patient responded to them as though they were true. (pp. 224-225)

The NLP explanation of the efficacy of VKD is quite similar to Marks' exposure principle. Once again the essential criterion is reexposure to the anxiety producing stimuli; however, in VKD there is a conscious effort to go beyond simple reexperiencing. Instead the client learns to make new associations to it—in this case, the anchor of solid comfort. This recalls Wolpe's notion of reciprocal inhibition (1958) where he attempted to associate relaxation with the ES. However, as mentioned above, Marks (1978) showed clearly that Wolpe's method of forming new associations was ineffective—exposure without relaxation was as effective as exposure with relaxation. It could be argued that this finding applies to the theory underlying VKD as well.

Bandler and Grinder (1979) respond to this by suggesting that the new association they are introducing is for comfort, confidence and competency—a far more powerful and appropriate association (i.e. would one want to be relaxed around a snake or more confident and competent?). Stevens, a NLP trainer, has argued (note 1) that a key to success in VKD is an adequately powerful anchor of comfort. If this anchor is too weak
(as NLP suggests Wolpe's relaxation was) the new association will fail and the VKD procedure must be repeated with a more powerful anchor.

NLP believes behavioral techniques are successful by accident—given enough exposure, a client is finally able to form new associations to the ES which replace the phobic reaction. This process is somewhat facilitated by the comforting presence of a therapist or the safety of a controlled laboratory. The 3% that Marks mentions who get sensitized are those who, for some reason, are unable to make any new associations; each exposure therefore serves to reinforce the phobia.

In addition to greater facility in forming new associations, NLP theorists suggest that they achieve more effective generalizability of treatment. They argue that by placing the intervention in a primal or pseudo-primal experience, it simultaneously undoes all of the subsequent anxiety generalizations. The implications for this in terms of complex anxiety reactions are obvious.

NLP claims that due to VKD's concentration on the precise factors which are necessary and sufficient for change, it is much more efficient than behavioral techniques. Specifically, anecdotal case studies report that almost all phobias are essentially cured in under an hour of treatment. (Grinder & Bandler, 1979) This study will attempt to evaluate these reports. The specific hypothesis to be tested is as follows: A brief application of VKD to clinically-anxious phobic clients will substantially reduce or eliminate phobic reactions as measured by self-report, self-monitoring in natural situations, and
physiological measures.
METHOD

Experimental Design

One appropriate method for evaluating the effectiveness of VKD is a multiple baseline with the treatment applied sequentially over six different subjects. Rationale for this choice is as follows:

1) Kazdin (1980) states:

The multiple-baseline design can be extended across individuals. Baseline data can be collected for a behavior across different individuals (e.g. ...patients on a ward), introducing the intervention at different points in time to each individual. ...a causal relation is assumed if behavior changes when and only when the intervention is introduced. (pp. 178-179)

2) A common difficulty in analogous studies of phobic treatment techniques is recruiting clinically- versus minimally-anxious subjects. Given the demographic limitations of Missoula it appeared unlikely that 30 clinically-anxious subjects (the minimal number necessary for an adequate between-group design) could be found. However intrasubject multiple baseline designs enabled us to overcome this obstacle by allowing the investigator to construct an adequate experimental design with a much smaller N.

An N of 3 is considered (Kazdin, 1980) the minimal number necessary for an adequate multiple baseline design. In this study we used an N of 6. The addition of three subjects made the design more powerful and convincing.
3) As this is the initial scientific study of VKD, it seems appropriate to first discover whether it has any results before comparing its efficacy with other methods. If this research suggests that it is a powerful technique, further studies of a comparative nature may be undertaken.

Subjects

As mentioned in the introduction, the most critical subject selection dimension is the ability to distinguish between minimally- and clinically-anxious phobic subjects. In order to maximize the probability that the experimental subjects would be clinically-anxious this study used the following criteria.

1) Subjects must be self- or other-referred to the study. No introductory psychology students were allowed. Most of the self-referrals came in response to a newspaper and flyer advertising campaign. The ads read, "ATTENTION PHOBICS. The University of Montana Clinical Psychology Center is in the process of developing a promising new treatment approach for phobias. If you would like free treatment, call 243-4523."
2) A clinical history revealing that the subject's phobia interfered significantly in their daily life.

3) Subjects were willing to place a $25 deposit for the duration of the treatment and research.

4) Subjects were willing to cooperate with self-monitoring research requirements which often required that they perform an inconvenient and sometimes uncomfortable task daily for three weeks. In addition, subjects were selected only if their phobic reactions were such that a change in the phobic anxiety level could be measured "in vivo" by self-monitoring techniques.

5) Subjects must achieve scores on the physiological and self-report measures indicative of high levels of anxiety.

19 potential subjects applied for the study and 6 were finally accepted. Of the twelve who were rejected, 4 were judged minimally-anxious either on the basis of their histories or their physiological and self-report measures, 1 was impossible to measure by self-monitoring techniques (she had a fear of flying), 1 required treatment immediately and it was deemed unethical to postpone it (she was an agoraphobic who was having difficulty attending her classes and was afraid that she would be dismissed from the university), and 6 withdrew when they learned of the financial and research requirements. Rejected applicants who indicated that they were willing to cooperate with the study were all offered treatment and all accepted it.
Detailed descriptions of the 6 experimental subjects are given below. (Several details have been altered to protect subjects from identification.)

Subject 1: Debbie. Debbie was a 23 year old, white female who was a graduate student in History at the University of Montana. She was single and worked as a TA for the History department. She had a phobia of spiders.

Debbie was unaware of the origin of her phobia, stating that she had had it as long as she remembered. Her symptoms during an attack included sweating, increased heart rate, nausea (on one occasion she vomited during a confrontation with a spider), and paralysis. She reported that she was unable to remain in the same room with a spider, that she refused to bring in wood for her wood burning stove, and that she had frozen in a class that she was teaching upon seeing a spider. In addition she routinely ran through a hall outside her apartment because she once saw a spider there and she refused to sit in any of the chairs on her porch because of spiders. She reported that her phobia regularly interfered with her normal life and caused her great discomfort and embarrassment.

Debbie was self-referred to the experiment after seeing a newspaper ad. She had high anxiety scores on both the self-report and the physiological measures.
Subject 2: Ed. Ed was a 23 year old, white male who was an undergraduate student in sociology at the University of Montana. He had worked for the two previous summers as a smoke jumper for the US forest service and was anticipating working for a third summer in the same position. Ed had a fear of heights.

Ed was unable to place the origin of his phobia stating that he had been aware of it in a mild form for as long as he could remember. His first clear memories of anxiety were a moderate discomfort when he used to ride the chair lift. He went on to get a pilot’s license, to parachute and finally to become a smoke jumper. Unfortunately during the last 12 months his phobia, which had formerly been mild and controllable, seemed to have increased to the point where Ed felt he would not be able to work as a smokejumper and might be unable to fly or parachute ever again. He had begun to notice that any exposure to heights, even behind a safe railing, was becoming progressively more disturbing. Ed reported that he had experienced heart palpitations and dizziness in the University library when he looked down a 5 story high stairwell and he was regularly avoiding any exposure to heights. Most importantly, Ed was experiencing increasingly severe anticipatory anxiety attacks (especially in connection with smoke jumping and flying). He would frequently spend the entire day preceding a jump or a flight worrying about what might happen—whether he would freeze up and whether he would be hurt.
Ed's symptoms included irregular breathing, sweating, uncontrollable urges to talk or whistle inanely, and a severely upset stomach. In addition he had been experiencing terrifying nightmares about falling and dying.

Ed was self-referred to the experiment after seeing a newspaper ad. He had high anxiety scores on the physiological and self-report measures.

Subject 3: Mary. Mary was a 41 year old, white female who was employed as a nurse at a blood bank. She had been married for 12 years and had no children. Mary suffered from agoraphobia.

Mary reported that her first agoraphobia attack occurred in 1975 while she was in church. She felt faint, dizzy, experienced visual distortions and had an overwhelming desire to leave. During the month preceding Mary's first attack, she had experienced three severe stressors. Her husband, who was in the army, had been transferred overseas for 15 months and she was not allowed to accompany him; she had discovered that she would not be able to have children; and their house had been severely damaged by a fire.

Following her initial attack in church, Mary experienced repeated attacks in a variety of locations and circumstances. She found travelling difficult and discovered that she was frequently nervous in public situations such as crowded stores, restaurants, supermarkets, etc. Attending church and waiting in lines were particularly difficult
Since 1975 she had experienced mild to moderate agoraphobic attacks almost daily. Severe attacks (which involved symptoms such as panic or paralysis) were rare, although several did occur. Her life had been limited in many ways. For example, she rarely went to church (although she was a devout catholic), always attempted to sit by the door at restaurants and was often forced to bolt her food when she felt attacks coming on, avoided shopping at busy times and avoided certain stores and environments (e.g., basketball games) entirely. When she went grocery shopping, she never got a full cart, but always limited herself to the number of items which could be checked through the express line.

Mary saw a psychologist soon after her initial attack who treated her once with progressive relaxation. Later she enrolled in Dr. Hardy's correspondence course for agoraphobia treatment and has been regularly practicing exposure therapy. She also joined a self-help group for agoraphobics at the YWCA. She was referred to the experiment by the leader of the self-help group.

Mary registered high on the self-report measure but had no reaction on the physiological measure. By the experimental criteria she should be rejected as a subject but she was so obviously clinically-anxious that it seemed appropriate to include her. In addition agoraphobia offers an ideal condition for self-monitoring, so it appeared that our primary dependent measure would be an adequate indication of her response to the treatment. Finally, agoraphobia is notoriously
difficult to treat (Marks, 1978) and the value of including such a clear case in the experiment seemed to more than make up for the lack of any physiological measure.

Subject 4: Leslie. Leslie was a 27 year old, white female employed as an RN at a local hospital. She was unmarried and reported that she suffered from a fear of heights.

She was unaware of the origin of her phobia stating that she has had it as long as she can remember. Most of her life it has been fairly mild but her fear seemed to be growing. She was bothered when driving over mountain passes, by being in tall buildings, when flying and whenever she was in any way exposed to significant heights. She reported that she was terrified when she visited the top of the Empire State Building. She hiked to the top of a fairly gentle hill above Missoula and became upset upon gazing down the gentle slopes to the town below. She was an avid hiker and was particularly disturbed with the way her phobia was limiting her hiking objectives. During an attack Leslies sweated, became dizzy, her heart rate increased and she sometimes trembled.

She was self-referred to the experiment after seeing a newspaper ad and had high scores on the physiological and self-report measures.

Subject 5: Jim. Jim was a 33 year old, white male who was self-employed as a carpenter. He had been married for 3 years, had experienced previous counseling for alcoholism and marital problems, and
had some college education. He suffered from a fear of heights.

Jim was unaware of the origin of his phobia although he dated his conscious awareness of it to 1969 when he began to work as a carpenter. During attacks his level of anxiety usually ranged from mild to moderate and he experienced such symptoms as heart rate increase, sweating, churning stomach, obsessive thoughts that he might fall and, in more severe attacks, temporary paralysis and crawling behavior. Once when he was at the brow of a hill watching hang gliders take off, he became so upset that he had to sit down.

As a carpenter he frequently works in exposed situations (e.g., roofs and walking wall plates) and finds his attacks both uncomfortable and dangerous. He also noted that he is an avid outdoorsman and his phobia has limited both his options and sometimes his safety in that environment.

Jim was self-referred to the experiment after reading a newspaper ad. He had high scores both on the self-report and physiological measures.

Subject 6: Mark. Mark was a 21 year old, white male who suffered from a fear of heights. He was an undergraduate student at the University of Montana, had been married for a year and a half (one child), and worked part time.
Mark's fear began approximately one year ago while he was doing some carpentry work on a building owned by his father. Previous to that time he had not been aware of any fear of heights and had done a great deal of carpentry and maintainence work. The onset of his phobia corresponded to a severely stressful period in Mark's life during which he was married, had a child and declared bankruptcy.

His phobic attacks were characterized by sweating, churning stomach, faint and dizzy feelings, increased heart rate, pains in the knee and arm (they had been injured in a fall earlier in his life) and obsessive visualizations of what he would look like immediately after a fall. He experienced these attacks even in relatively safe locations such as walking a wall plate 8 feet off the ground and standing on a ladder 10 feet off the ground. Subsequently he refused to go on a low angle roof that was only one story high and also refused to work on a wide scaffold which was approximately 8 feet off the ground.

Mark and his family had been very proud of his carpentry skills and he felt great disappointment about regularly refusing all jobs which took him more than a few feet off the ground. He was particularly disturbed because he wished to reroof both his father's and his grandmother's houses in the near future. In addition, one of his most important dreams was to build his own house, a dream that seemed badly blocked by his phobic reaction.
Mark was self-referred to the experiment after reading a newspaper ad. He had high anxiety scores on both the physiological and self-report measures.

**Therapist**

The investigator also served as the therapist. He was a second year graduate student in clinical psychology who had been trained in the VKD procedure by a NLP certified trainer at a weekend workshop. In addition to the formal training, he received further experience in VKD by practicing it during the pilot study.

**Pilot Study**

Before conducting the experiment a pilot study was performed. It consisted of the therapist seeing 17 phobics with varying phobias (including fear of snakes, spiders, flying, water, agoraphobia, and others) and varying anxiety levels. Some of the pilot subjects were introductory psychology students, some were recruited by advertising and some were self- or other-referred to the experiment. The pilot study
accomplished several goals.

1) It allowed the therapist to gain further experience in performing VKD.

2) It helped to refine the dependent measures by using them in an "in vivo" situation. Specifically, the physiological measure was altered by lengthening the baseline between the neutral stimulus and the anxiety evoking stimulus from one and a half to seven minutes. This allowed a more stable baseline to develop between measurements.

3) It facilitated the development of a clear and specific treatment manual. While the NLP literature generally describes the VKD procedure similarly, there are a few discrepancies between some writers. The therapeutic insight gained during the pilot study enabled the investigator to choose between certain options (e.g., anchoring the dissociated state or not) in standardizing the VKD procedure.

The specific changes may be observed by comparing the description of VKD in the introduction (which was the original treatment manual) to the actual treatment manual in Appendix VI. The most major changes consisted of the inclusion of feedback checks (e.g., the "change history" procedure) and a special emphasis on generalizability of the treatment (e.g., "future pacing"). In addition, in the interests of replicability, the manual was enriched and expanded wherever possible.
Procedure

The actual experiment began with the selection of experimental subjects. All applicants attended an individual screening interview with the investigator. There they were screened by the selection criteria (for details see "Subjects"). Those applicants who met the criteria were retained as experimental subjects; the others were offered the opportunity for treatment if they so desired.

The screening interview also doubled as the initial assessment interview. At that time a clinical history was taken and the self-report and physiological measures of anxiety were administered. In addition, they were instructed in self-monitoring procedures specifically designed to measure the level of anxiety of their particular phobia in a natural environment. The experimental subjects then returned home.

Approximately 10 days after the initial interview, the subjects presented themselves for treatment. Immediately prior to treatment, the physiological and self-report measures were readministered. In addition, they turned in their self-monitoring data. Then a brief treatment was given to each subject. Following treatment, subjects once again received the physiological and self-report measures. That concluded the treatment interview.
Approximately 10 days later the subjects returned for a follow-up interview. They began by turning in the self-monitoring data for the 10 day post-treatment period and then were readministered the self-report and physiological measures.

Treatment

Treatment was administered to each subject as outlined in the VKD treatment manual (see Appendix VI). The duration of each subject's treatment was as follows:

1) Debbie: 64 minutes

2) Ed: 27 minutes

3) Mary: 58 minutes

4) Leslie: 85 minutes (one session of 73 minutes and a second session of 12 minutes)

5) Jim: 37 minutes

6) Mark: 71 minutes (one session of 53 minutes and a second session of 18 minutes)
The average treatment duration was 57 minutes and the average number of sessions was 1.33.

**Dependent Measures**

In accordance with recent research requirements, multiple measures of the dependent variable were employed. They are listed below.

1) Self-monitoring: Lick and Unger (1977) argue that the most critical assessment deficit in the anxiety treatment outcome literature has been the lack of dependent measures which record behavioral changes in the natural environment. They suggest several procedures which remedy this deficit—specifically, overt and covert observation, use of informants and self-monitoring.

Given the nature of this study, self-monitoring seemed to be the most appropriate choice. It is efficient, easily learned, can generate multiple data points (a necessity for the multiple baseline design) and is relatively non-threatening.

Self-monitoring is especially appealing due to its 'in vivo' nature. It is superior to laboratory 'in vivo' procedures (e.g. BATs) in that it is in an uncontrolled setting, is relatively free from therapist demand characteristics, and directly addresses the problem of generalizability.
However, it does have several weakpoints. In line with Lick and Unger’s recommendations, monitorable behaviors must be limited to those that are highly discriminable and well-defined. In addition, they must be behaviors that will occur (or not occur) in sufficient frequency during the period of the research. Self-monitoring is also open to charges of unreliability due to subject laziness, sloppiness, or misunderstandings. These problems were minimized through adequate instructions and structured data recording sheets.

Each subject regularly monitored some target behavior or behaviors which were hypothetically related to their phobic anxiety. A change in the frequency or magnitude of the target behavior was assumed to reflect an alteration in the level of phobic anxiety. Self-monitoring was the primary dependent measure; the other measures were included for backup and cross-validation purposes.

Most subjects monitored one target behavior, but several were asked to monitor more than one. Following is a list of the subjects and the behaviors monitored by each.

1) Debbie: Debbie had two target behaviors to self-monitor. First she was asked to locate and to pick up one spider with her bare hands each day. She recorded her success or failure at this task. Second, she was asked to sit in a specific chair on her sun porch for 120 seconds/day. She had seen spiders on the porch and was most reluctant to consider sitting in this chair. She recorded this behavior in terms of the length of time she was able to sit in the chair with the possible
range extending from 0-120 seconds.

2) Ed had only one self-monitoring task. Each day he was to go to an exposed but safe place (e.g., a railed balcony) and stand at the edge and look down. Then he was to rate his level of anxiety by the fear thermometer. He varied the spots to control for desensitization effects.

3) Mary: Mary had two self-monitoring tasks. She carried a diary with her and whenever she had an agoraphobic attack she noted the date, place and severity (via the fear thermometer). This yielded two measures: number of attacks per day and severity of attacks.

4) Leslie: Leslie's task was the same as Ed's. She was to go to one exposed spot per day and rate her anxiety level via the fear thermometer.

5) Jim: Jim had the same task as Leslie and Ed.

6) Mark: Mark had the same task as Leslie and Ed.

All four acrophobics (people who fear heights) were given the additional assignment of actually staying in the heights-exposed spot for 3 minutes. They were all asked to record the number of seconds they were able to maintain their position.

However all 4 of them were able to stay in the exposed spots for 3 minutes almost every trial both before and after treatment. The measure was therefore discarded.
This was particularly unfortunate as this was the only behavioral measure available to the acrophobics. The measure they ended up using was more of a "in vivo" self-report measure.

The lack of success of the behavioral measure was certainly affected by the limitations on the possibilities of exposure available in Missoula. The acrophobics all found it impossible to find an accessible and safe spot which allowed them more than 4 stories of exposure. It is entirely possible that the results of the behavioral measure would have been much more useful if the subjects were able to expose themselves on the edge of a 50 story drop.

2) Self-report measure: Walk (1956) developed a simple, overt measure of anxiety called the Fear Thermometer (FT). Borkovec et al (1977) review its salient features:

By far the most frequent method of assessing momentary anxiety level in response to a feared stimulus is (the FT)... The FT is the quickest test to administer and is applicable to any fear situation. Immediate test-retest correlations (rs = .94 to .98, Borkovec & Craighead, 1971) and reliability over several weeks (r = .75, Lang & Lazovik, 1963; r = .94, Trexler & Karst, 1972) have been generally quite high in studies of both snake phobia and speech anxiety. As mentioned earlier, phobic patient ratings of fear level have generally correlated highly with therapist and medical assessor ratings (e.g., .75 to .87, Watson & Marks, 1971). (p. 387)

This study will use a derivative of the FT designed to assess phobic anxiety levels. A copy of the FT is included in Appendix III.
Each subject was asked to rate the anxiety level they imagined they would experience if they were in a certain situation. For example, Debbie responded to "How scared would you be if you looked down and saw a small, brown, nonpoisonous spider on your hand?" Ed responded to, "If you were on top of a 4 story building and leaned against a safe railing and looked over the edge for 1 minute, how scared would you be?" The other 4 subjects had comparable imaginary situations. Each time the self-report measure was administered the subject responded to the same imaginary situation.

3) Physiological measure: The final dependent measure was a physiological measure of anxiety—specifically Skin Conductance Level (SCL) which is a form of galvanic skin resistance. In an extensive article on assessment of anxiety, Borkovec, Weerts and Bernstein (1977 ) note:

(of all the bodily systems available for measurement, the skin's electrical properties have most often been elected as a convenient measure of the physiology of the anxiety state. There are a number of properties that argue for its election. First, the skin receives only sympathetic and not parasympathetic innervation in contrast to most other dually innervated autonomic organs, and thus the sympathetic action cannot be inhibited by an opposing neural influence. Second, electrode application procedures are relatively straightforward and painless, and the electrical circuitry required is not particularly complicated or expensive. In short, the skin appears ideal for immediate assessment of sympathetic arousal. (p. 411)

SCL levels were monitored as subjects listened to a tape recording. The tape consisted of instructions, a neutral stimulus, and a fear evoking stimulus. Each tape was individually designed by the
investigator to tap a subject's specific phobic reaction. The tapes were divided into several sections:

a) Instructions: The tapes began with: "During the next 20 minutes we will be monitoring your physiological reactions to two guided fantasies. First there will be approximately 7 minutes of silence while the recording instrument warms up. Then there will be a short guided fantasy. As much as possible try to follow the instructions on the tape. They will ask you to imagine yourself having various experiences. Try to let go and allow the images to occur as if they were real. It is particularly important to 'step into' them—to feel as if you are actually there—and not simply to watch it as if it were a motion picture. Are there any questions about this?" (At this point the recorder is turned off if there are any questions.)

"After the first guided fantasy, there will be a brief period of silence, and then there will be another short fantasy. At the conclusion of the second guided experience, just sit quietly for a few moments and then the tape will end.

"It is very important for you to try and sit through the entire tape. However, if it becomes uncomfortable for you, you can request that it be turned off. Are there any further questions?" (The recorder is switched off if there are any questions.)
The investigator was in the room as the subject heard these instructions. His presence was necessary both to answer any questions and also to record the SCL levels. He was seated out of the subject's view and data recording was quiet and unobtrusive.

b) Habituation and baseline: This lasted for seven minutes (minutes 0-7) and was necessary to allow the novelty effect of being hooked up to the machinery to wear off and to get a clear initial baseline measure.

c) Neutral stimulus: The neutral stimulus consisted of a 3 minute guided fantasy (minutes 7-10) as similar as possible to the anxiety evoking stimulus, but without the anxiety-generating material.

d) Second baseline: The second baseline was another 7 minute period of silence (minutes 10-17).

e) Anxiety-evoking stimulus: This consisted of another 3 minute (minutes 17-20) guided fantasy which was divided into two sections. The first 1 1/2 minutes was a hierarchical approach to the feared situation and the last 1 1/2 minutes was a full exposure to the phobic stimulus.

The SCL measure was the average level of skin conductance over a certain period of time as measured in micromhos. Subjects were attached to a SCL recorder (an Autogen 300 feedback dermograph) via finger electrodes. The signals from the SCL recorder were fed into a wave integrator (an Autogen 5100 digital integrator/wave form analyzer). The integrator gave a digital readout of the average SCL level (in
micromhos) obtained over the previous 15 second period. This number was recorded by the investigator. This yielded 80 data point per administration of the physiological measure (4 recordings per minute over a 20 minute period.)

The test was given four times: once at the initial interview, once before treatment, once immediately after treatment, and at the 10 day follow-up. The ability to compare these four different levels of arousal was the actual dependent measure; hence, some way of summarizing the 80 SCL data points into a single number was necessary. A simple way to do this (patterned after McGlynn & Barrios, 1978) is to subtract the average SCL levels attained during the last minute of the neutral stimulus from the average SCL level attained during the last minute of the anxiety-evoking stimulus. In order to control for differential baseline levels, McGlynn & Barrios (1978) suggest that these average scores be converted to logs. The remainder after subtracting the log of the neutral stimulus from the log of the anxiety stimulus was called the SCL arousal score.

Since we only generated 4 SCL arousal scores it was clear that there were not enough data points for a multiple baseline design. However, it should be recalled the the main methodological burden was to be shouldered by the self-monitoring measure; SCL levels were a backup dependent measure which were included to generate some data from a different assessment channel.
Physiological assessment is a complex and involved process with many potential problems. Following are three particular relevant issues—order bias, habituation, and desensitization—with discussion on how they affect assessment.

a) Order bias: Skin conductance is extremely responsive to novel and interesting stimuli (Borkovec et al, 1977), hence it can be predicted that the response to the neutral stimuli will be higher than the anxiety-evoking stimuli simply because it is always presented first. This is somewhat balanced by a finding by McGlynn and Barrios (1978) that subjects consistently score higher (more aroused) if the anxiety stimulus is presented second instead of first.

b) Habituation: If the identical tapes were presented 4 times, there would be some lowering of arousal simply due to habituation. To control for this there were 4 different tapes, one for each test. In order to control for the possibility that the tapes were differentially anxiety producing, all the tapes were made ahead of time and their order of administration was randomized.

c) Desensitization: The tapes themselves probably had some treatment effect—they are actually a form of exposure therapy. However it may be argued that this impact was minimal. Over the period of 3 weeks, subjects were given 12 minutes of imaginal exposure (imaginal exposure is less potent than 'in vivo' exposure, Marks, 1978) and we may recall that Marks (1978) estimated a mean of 11 hours for significant treatment effects. It is also worthwhile to compare this test with the
traditional Behavior Avoidance Test. That test also has a treatment effect (which is probably stronger than these tapes), yet it is regularly employed in the literature.
The results of the experiment are displayed in Figures 1, 2, and 3 and in Table 1. Figure 1 records the self-monitoring measure(s), Figure 2 records the self-report measure, Figure 3 records the physiological measure, and Table 1 presents the pre- and post-treatment averages of the data across all measures. Each graph has a solid line and a dotted line. The solid line connects the actual data points, the dotted line is a summary score and represents the pre- and post-treatment averages.

The figures are not designed according to the traditional multiple baseline format. The multiple baseline design requires that treatment be applied to the various subjects sequentially over time. Although this procedure was followed in the experiment it is not represented visually on the figures. In the interests of saving space, each graph within a figure is portrayed as if it stood by itself. In actuality they are all related and the requirement of introducing treatment at different times for different subjects was closely followed. Each graph begins with a "day 1." The "day 1" for each subject corresponds to the following dates: 1) Debbie- 4/2/81, 2) Ed- 4/9/81, 3) Mary- 4/22/81, 4) Leslie- 4/24/81, 5) Jim- 4/27/81, 6) Mark- 4/28/81. The different starting dates ensured that treatment was introduced on different dates thereby controlling for any extraneous environmental effects. In addition the pretreatment baseline lengths were varied (from 7-14 days)
FIGURE 1: SELF-MONITORING MEASURE

"In vivo" self-monitoring of target behaviors on each day of the experiment

DEBBIE (A): length of time in seconds sitting in porch chair.

DEBBIE (B): able to pick up spider barehandedly.

MARY (A): severity of phobic attack as measured by the Fear Thermometer.

MARY (B): number of phobic attacks per day.
FIGURE 1: SELF-MONITORING MEASURE (CONT.)

The acrophobics: level of anxiety measured by Fear Thermometer (scale = 0 to 12) during "in vivo" exposure to heights. Target behavior was recorded once each day.

ED:

LESLIE:

MARK:

JIM:
FIGURE 2: SELF-REPORT MEASURE

Self-report measures of anxiety recorded at four different points: initial assessment (I), pre-treatment (P), post-treatment (T) and at a 10 day follow-up (F). Anxiety was measured by the Fear Thermometer (scale = 0 to 12) and consisted of each subject envisioning the amount of nervousness they would experience in a certain phobic situation.
Figure 3: Physiological Measure

SCL arousal scores measured at four different points: initial assessment (I), pre-treatment (P), post-treatment (T), and at a 10 day follow-up (F). The SCL arousal score is the log of the SCL measurement taken during the anxiety-evoking stimulus minus the log of the SCL measurement taken during the neutral stimulus.
### TABLE 1: AVERAGE PRE- AND POST-TREATMENT ANXIETY SCORES

Summary of the Self-monitoring (SM), Self-report (SR), and Physiological (P) measures averaged across treatment.

<table>
<thead>
<tr>
<th>Name</th>
<th>Measure</th>
<th>pre-treat. average</th>
<th>post-treat average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Debbie</td>
<td>SM (spiders)</td>
<td>1.00</td>
<td>.20</td>
</tr>
<tr>
<td></td>
<td>SM (porch chair)</td>
<td>41</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>12</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.085</td>
<td>-.05</td>
</tr>
<tr>
<td>2. Ed</td>
<td>SM</td>
<td>6.8</td>
<td>2.75</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.135</td>
<td>.085</td>
</tr>
<tr>
<td>3. Mary</td>
<td>SM (severity)</td>
<td>3.05</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>SM (frequency)</td>
<td>3</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.065</td>
<td>-.05</td>
</tr>
<tr>
<td>4. Leslie</td>
<td>SM</td>
<td>5.78</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>10</td>
<td>.1</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.125</td>
<td>.465</td>
</tr>
<tr>
<td>5. Jim</td>
<td>SM</td>
<td>2.5</td>
<td>.43</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.12</td>
<td>.055</td>
</tr>
<tr>
<td>6. Mark</td>
<td>SM</td>
<td>9</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>SR</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>.215</td>
<td>.175</td>
</tr>
</tbody>
</table>
which controlled for a "length of pretreatment assessment" effect.

In Figure 1 the self-monitoring measure shows clear reductions in anxiety following treatment for each subject except Mary. Mary shows a small reduction in anxiety, but that drop is so slight that it is only apparent upon comparing the dotted average lines. The variance of the data appears to be normally distributed with the possible exception of Debbie who, in graph A, appears to have become progressively better at staying in her porch chair even without treatment. When asked about this variance she replied that she had "really wanted to try to stay in the chair" and had worked at making increasingly strenuous use of will power to do so.

In Figure 2 the self-report measure shows clear reductions in anxiety for each subject with the exception of Mary. She showed a large reduction on the post-treatment measure but her anxiety level was almost back to the pre-treatment mean by follow-up. Jim, Leslie and Mark all showed a certain variance on the two pre-treatment measures. When asked about this they replied that the "in vivo" exposure had demonstrated to them that their phobia was less severe (or in Leslie's case, more severe) than they had originally believed.

In Figure 3 the physiological measure shows slight levels of anxiety reduction for almost every subject when the SCL arousal scores are averaged pre- and post-treatment. The exception to this is Leslie who shows a large gain in arousal following treatment. The variability of scores is much more pronounced on the physiological measure as
compared to the previous two measures.

Table 1 allows all of the measures to be summarized in a single glance. Of the 20 measures taken on the 6 subjects, 19 of them showed post-treatment anxiety reduction and 1 showed post-treatment anxiety gain. Perhaps half of the 19 measures seem to show clear reductions in anxiety and the other half reflected moderate and slight reductions.

**DISCUSSION**

Before attempting to examine the level of support generated for the experimental hypothesis, it would be useful to analyze several of the design features which particularly reflect on the interpretation of the data.

**Follow-up:** A major flaw in the experimental design is the extremely short follow-up period. It is quite possible, for example, that the subjects might appear to respond to treatment when measured at a 10 day follow-up, but that they would lose all of those gains in six months. Because of this it is recommended that none of these results be disseminated until there has been a 3 month follow-up. A 6 month follow-up would be even more useful.
Subject variables: Although the subjects who were used in the experiment met the formal criteria for clinically-anxious it is clear from reading their histories and from examining their scores on the self-monitoring measures that several of them might not actually be clinically-anxious. In particular Jim's low scores on self-monitoring argue that his phobia was hardly debilitating and the fact that all of the acrophobics could remain in a height-exposed situation for 3 minutes suggests that level of anxiety may have been low.

The critical point in differentiating clinically- from minimally-anxious subjects is whether in reality the subjects would present themselves in a clinic and request treatment. It is entirely possible, for example, that there are hundreds of people who have acrophobia to the degree that Ed and Jim have it, and yet most of those people would never think of treating it; it simply doesn't interfere with their lives. However, if one is a carpenter or a smoke jumper even a relatively mild case could cause one to seek treatment. It is possible that that is precisely what has occurred here. Given these points one could even argue that both Jim and Ed were clinically-anxious while only suffering from relatively mild cases of acrophobia.

Of course the clinically-anxious criteria are intended to select clients with relatively severe phobic anxieties. But even if the criteria were somewhat weak and some of the experimental subjects had only mild to moderate levels of anxiety, the experimental N of 6 is probably large enough to control for that problem. It should be
recalled that Kazdin argues that an N of three is adequate for a multiple baseline design. However, regardless of whether the N is large enough or not, it is undeniable that the inclusion of subjects who were only mildly or moderately anxious weakens the experiment's external validity.

**Therapist variables:** As noted in the Introduction, a number of phobia treatment outcome studies have been criticized for using inexperienced therapists. This study also suffers from that flaw. A second year graduate student whose entire training in a technique occurred at a weekend workshop can hardly be called experienced. It is not inappropriate to argue therefore that the results achieved in this experiment are a lower boundary estimate of the potential effects of the VKD procedure. It is conceivable that in the hands of a "master" therapist VKD might demonstrate much more powerful effects.

Of course the lack of therapist experience is also useful. If, in the final analysis, the results seem to support the hypothesis that VKD is an effective treatment for phobias, then one could argue that the VKD procedure is not that difficult to learn.

**Dependent measures:** One of the most severe flaws of the experiment was the inability of the self-monitoring measure to achieve its full behavioral potential in connection with the acrophobics. Their failure to locate an adequately frightening heights exposure situation caused each of them to be deprived of the behavioral component of evaluation. The substituted measure—a kind of "in vivo" self-report—while still
useful, is without the power of the original behavioral self-monitoring task.

In addition every subject except Mary was asked to perform a target behavior which was different from their normal routine. The contrived nature of these exposure situations certainly will result in some limitation of generalizability. For example, a subject might report that he was OK in one of the contrived situations yet still experience anxiety in the completely unstructured context of everyday life. Of course the "in vivo" nature of all of the target behaviors counteracts this partially, but the external validity of the experiment is somewhat reduced.

The self-report measure was clearly affected by the subject's "in vivo" experiences. As mentioned in the results section, Leslie, Jim, and Ed all had clear pre-treatment shifts after real life exposure. The most remarkable post-treatment shift was the case of Mary who apparently imagined she was over her phobic anxieties entirely until she rediscovered them in the natural environment. Debbie showed the same pattern albeit to a much smaller extent. This suggest that the reliability of self-report measures of anxiety will be enhanced when administering them after relevant "in vivo" experiences. The simple direction of "imagine you are there" and then guessing one's level of anxiety is probably not that trustworthy. Therefore it is appropriate to discount the substantial improvements shown by Mary on her post-treatment measure and rely more heavily on her follow-up measure.
The physiological measure clearly yielded the most ambiguous results of the three dependent measures. In a number of cases, the data points themselves did not form clear patterns; it was only after inspecting the dotted average lines that any sort of conclusions could be drawn. And even though those conclusions were essentially in the same direction as the other measures, they were usually weaker.

It is possible that one of the reasons for the increased variation in the physiological measure is that it requires subjects to cooperate in a special way. It is necessary that they make a strong effort to pay attention to the tape recorded guided imagery. If they ignore it, the SCL score will simply reflect the levels of arousal associated with random daydreaming. For example, Jim had two scores of 0 on his pre- and post-treatment physiological measures. It is certainly possible that those rather surprising results might simply be due to him not listening to the guided fantasy that day.

Leslie's physiological reaction was even more ambiguous. Why should her post-treatment scores soar far above her pre-treatment scores, especially as she showed clear lessening of anxiety on the self-monitoring and self-report measures? Perhaps she was daydreaming, perhaps the therapeutic focus on her phobia made her more conscious of it, or perhaps something else occurred. It is impossible to tell why her scores increased and therefore impossible to meaningfully interpret them.
The physiological measure is clearly an important channel in that it taps noncognitive processes and measures them directly. However, the amount of variability and measurement error innate in the process suggest that it might perform more efficiently as an outcome measure if there were more data points. In the context of increased data, artifacts and outliers might be more easily understood.

**Experimental design limitations:** In addition to the limitations on external validity already discussed, the study has some particular limitations due to its experimental design. While there may be some support for the idea that VKD may be effective, the N is simply too small to assume that it will work equally well on all phobic subjects. This study was actually designed to test only one specific question: is VKD effective with 6 phobic subjects; questions such as why is it effective, how does its efficacy compare with other treatments, what percentage of phobic cases will respond well to VKD, are there certain types of phobias which resist VKD, etc., all remain for further studies.

**Hypothesis testing:** Most of the discussion section up to this point has been concerned with noting the limitations of this study. In spite of the seriousness of some of the objections, the results of the data are sufficiently consistent that it still appears appropriate to conclude that in general, the experimental hypothesis is supported. The fact that 19 out of 20 dependent measures were inclined in the same direction is fairly strong evidence that there is an actual treatment effect. However, this conclusion must be modified.
VKD did not prove equally effective across all subjects. While most of the other subjects appeared to make clear gains, Mary showed only slight improvement across all three dependent measures. This difference could have been due to a number of factors such as the severity of her agoraphobic condition, incompetent therapeutic performance, uncontrolled personality variables, etc. Given the experimental design it is impossible to know why VKD was successful for the other 5 and less successful for Mary. However the lack of success demonstrates clearly the VKD is certainly not infallible and that there will be subjects who do not respond to it. Indeed, none of the subjects experienced complete remission of symptoms. In summary, given the small N of the study and the normal "halo effect" experienced by every new treatment method it would be wise to regard the apparent success of VKD with caution and to interpret these results conservatively.

Of course the statement that the hypothesis appears to be supported refers only to the internal validity of the experiment; conclusions regarding the external validity remain to be drawn. It goes without saying that almost nothing can be concluded about external validity until the 3-6 month follow-up results are available. However, even if those results show that the treatment gains are intact, there are still serious weaknesses in the external validity of the experiment. The anxiety level of the subjects and the modification of the self-monitoring measure for the acrophobics are particularly problematic.
These issues or others like them would be raised for any experiment but they are especially relevant here because of the brevity of the treatment. It is probably safe to say that most clinical psychologists would tend to be highly sceptical about the existence of a treatment method for phobias which demonstrates strong effects after only one or two sessions. And experience has certainly demonstrated that there are many treatment approaches that looked impressive initially but lost their power after the novelty wore off.

The simplest way to interpret this experiment, the way that leaves intact all preexistent assumptions about therapy, is to suggest that these results were simply a chance occurrence; that the particular combination of place, subjects, therapist and approach allowed them to happen. This would be an appropriate response except that the experimental hypothesis specifically predicted that they would occur. NLP practitioners have been claiming these results for several years. Their claims and the support offered by this experiment, even with its flaws, places us in a position where, as scientists, we cannot afford to ignore the possibilities raised by VKD.

Of course there is one obvious next step: replication. One or more replications of the VKD study are the simplest way to answer the questions raised above. Only when these replications have been accomplished can we allow ourselves to seriously examine the possible implications of the brevity of the VKD treatment.
These implications are fairly straightforward. If, after replication, the VKD procedure maintains its brevity and its power then it is possible that VKD embodies a whole new level of therapeutic efficiency—a level substantially higher than the present one. Therapeutic efficiency implies an enriched understanding of basic therapeutic principles. And it is certainly possible that these new principles might be applicable to other mental illnesses beyond phobias.

But of course this is simply speculation. We must await the results of the replication. But perhaps while we are waiting it would be appropriate to review two statements by Grinder and Bandler (1980). The first concerns the limitations of NLP.

.. if what we've demonstrated is something that you'd like to be able to do, you might as well spend your time learning it. There are lots and lots of things that we cannot do. If you can program yourself to look for things that will be useful for you and learn those, instead of trying to find out where what we are presenting to you falls apart, you'll find out where it falls apart, I guarantee you. If you use it congruently you will find lots of places that it won't work. And when it doesn't work, I suggest you do something else. (p. ii)

And the second quote concerns their sense of NLP's potential.

We haven't even begun to figure out what the possibilities are of how to use this material. And we are very, very serious about that. What we are doing now is nothing more than the investigation of how to use this information. We have been unable to exhaust the variety of ways to put this stuff together and put it to use, and we don't know of any limitations on the ways that you can use this information. During this seminar we have mentioned and demonstrated several dozen ways that it can be used. It's the structure of experience. Period. When used systematically, it constitutes
a full strategy for getting any behavioral gain. (p. ii)

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APPENDIX I: ANCHORING

from Cameron-Bandler (1978, pp. 102-105)
Anchoring

A basic premise of my work is that people have all the resources they need to make the changes they want and need to make. My job is to assist them in accessing and organizing their resources to make those desired changes an accomplished fact. Regardless of whether or not this basic premise is true in actuality, certainly when I structure my behavior as if it is true the results provide ample testimony to its validity.

The resources I am speaking of here lie in each of our personal histories. Each and every experience we have ever had can serve as an asset. Most everyone has had an experience of being confident or daring or assertive or relaxed, at some time. Each of those experiences is a possible resource. The therapist's task is to make those resources available in the contexts in which they are needed. Bandler, Grinder, Delozier and I have developed a method called "anchoring" which does just that.

In the same way that certain external stimuli are associated with past experiences and can recall them, so can we deliberately associate a stimulus to a specific experience. Once this association has taken place, we can then trigger the experience at will. It works in the same way that language does.

If I ask you to remember a time when you felt very confident, a time when you felt truly satisfied with yourself, my words send you on a search through your past experiences. As you access various memories congruent with being confident and satisfied with yourself, various aspects of those experiences come into the present experience. Similarly, you know how you can become angry again by remembering a past argument or frightened again by remembering a terrifying movie or incident. Thus by bringing up a memory (an internally generated experience) we reexperience many of the same feelings which occurred when that memory was formed.

Anchoring utilizes this natural process by making a deliberate association between a stimulus and a specific experience. Examples of this that we are already familiar with are our responses to hearing the national anthem or seeing our flag, or perhaps our response to being given the "finger". The Russians may have understood this principle when after the revolution they kept all the melodies of their national songs and merely changed the lyrics. That is, the melodies were already associated to patriotic re-
responses so merely changing the lyrics made the new associations nearly automatic. As an adult, have you visited a grammar school and been flooded with memories and feelings that were a part of your childhood? Can you remember the first time you were passionately kissed, really recalling the fullness of that experience and all the feelings associated with that kiss?

These are all examples of some aspect of your present experience recalling or triggering you to a past experience, such that your feelings become congruent with that previous experience. We have learned that by deliberately inserting some discreet stimulus such as a sound, a touch, a specific visual input or even a smell or a taste while a person is fully in touch with an experience, the stimulus then becomes associated with the recalled experience. So much so, if the timing is good, that reinroducing the same exact stimulus brings back the feelings of the recalled experience. This procedure is called “anchoring”. The specific inserted stimulus is referred to as the “anchor”. The anchor then can be used to trigger the associated experience again and again. For instance if you and a partner were feeling especially romantic while a particular piece of music was playing, when next you heard that same music you would again be flooded with those romantic thoughts and feelings. “Your song would be playing.” The concept of anchoring is that you could deliberately anchor such feelings in any chosen way and have them available whenever they were wanted or needed.

Vital to being able to insert a specific stimulus at the appropriate time (anchoring) is being able to identify when a person has accessed an important experience. In a previous section, the detection of external stimuli with relevant experiences was discussed. That discussion accentuated the importance of recognizing specific “expressions”. Since you cannot know exactly what internal state a person is experiencing by their expression, you must depend upon your eyes and ears to detect the external expressions of an internal experience and be able to tell one from another. With anchoring, the specific areas that are useful to focus upon—because they change radically enough to be easily detectable—are voice tone, skin color, lip size, facial muscle tone, breathing rate and breathing from upper or lower chest. There are other changes as well, like skin temperature, but noticing these will be sufficient. By eliciting various intense responses that correspond to different
internal states, you can recognize and differentiate a person's various expressions.

You can elicit various intense responses simply by asking them to access a series of various past emotions such as when they were last angry or frightened or passionate and then watch and listen for changes in the above areas and you will be able to detect the important differences. A person's lips may become thinner, facial color paler, breathing more shallow, when remembering a frightening experience, whereas lips typically are fuller, color flushed and breathing deeper with a softening of facial muscle tone when accessing passionate memory feelings. Your eyes and ears will become increasingly accustomed to detecting such minimal distinctions the more you do this. Should you detect no changes or very little change in your subject's responses check two things. One: is your own voice tone, facial expression, words, congruent with the response you are asking for? The more expressive you are the more expressiveness you are apt to elicit and your own behaviors need to be congruent with the response you are asking for. If you are asking for a passionate memory ask for it with an appropriate voice tone and facial expression. Perhaps a throatier, lower, sultry voice with a wink. Your success with anchoring is very dependent upon your own flexibility of behavior in that you will often be using your own expressiveness to elicit desired responses.

The second thing to check is whether your subject is remembering the asked for past experiences by being in the picture or by seeing themselves in the picture. Remember that seeing yourself in the picture is a constructed image and so can often be detected by noticing your subject's accessing cues. If you are not sure even by their accessing cues whether they are seeing themselves in the picture or not then ask them directly. This is crucial because if they are seeing themselves in the picture they will not be re-experiencing the past feelings. They will instead be experiencing feelings about the past experience. To exemplify, I would like you to picture yourself on a rollercoaster and see yourself in the first seat going up that first big hill so you are watching yourself on the rollercoaster. Then enter your own body in the picture so you can feel yourself sitting in that seat looking up, feeling the rollercoaster pulling you higher and higher, to the peak of that big hill. Just to the top, where you can see all the way down and feel your stomach rise as your body drops, listening to your own scream as you race
towards the bottom. Obviously there is a big difference between the two images. The difference is crucial. If your subject is watching himself in that past experience you will not be anchoring the powerful feelings which would be occurring if your subject was inside his picture. If you discover that indeed your subject is watching himself merely ask him to step inside the picture and feel what he felt then, hearing the sounds which occurred then and seeing just what he saw in that past experience.

Once able to detect various expressions, you can anchor them. That is, while observing a full expression (an external representation of an internal experience) that having access to would be useful for therapeutic purposes, you can supply a stimulus to which the expression becomes associated. (This might be a touch on the back of the hand or a snap of the fingers.) With proper timing, firing off that stimulus will bring back the same expression, which means it brings back the associated internal state as well.

Many therapists already utilize this process by using a special voice tone and tempo when doing guided fantasy or hypnosis. This voice tone becomes an anchor for the altered states that are experienced when it is used. In Gestalt chair work, too, each of the two chairs becomes an anchor for a different emotional state and a client changes radically as he moves from one chair to the other.

In order to anchor a response successfully you should follow the following rules. (1) Have your subject access the desired experience or induce it as powerfully and fully as possible. (2) Insert your stimulus at the moment of fullest expression or most intense response. Timing is crucial! (3) Be sure your stimulus can be recapitulated exactly. Repeating the stimulus will only bring back the internal state fully if it is repeated exactly. Although I may describe anchoring as touching a client’s knee or shoulder or the back of a hand, I want you to know that in actuality it is a far more specific touch. I repeat those touches exactly, even as to pressure. You can and should test these rules in your own experience both to verify them and to discover what if any leeway exists.

Using anchoring as described here gives the therapist access to a client’s various experiential states. A common complaint concerning working with mentally disturbed people is that they change who, what, and how they are with great rapidity. As soon as a therapist is headed in a useful direction with such a client, his experience is that the client goes somewhere else. Anchoring can
APPENDIX II: REGRESSION

from Grinder & Bandler (1979, pp. 112-117)
Tammy: No, I don't.

OK, that's typical. It's typical that the person only knows that in certain kinds of situations they have a very powerful kinesthetic response—in fact in your case I would describe it as an overwhelming response. That response is so overwhelming that in the past when you have been in these situations you literally exercise no choice. You have found it to restrict your behavior in the past, right?

Tammy: Oh, yes—in my dream world, too.

Most phobic people do not know what their original trauma was, and, indeed, it is not even necessary to know that. I'm going to do it as if it were necessary, but it's just part of the mythology.

Tammy has succeeded for years in making the same response over and over again. She has demonstrated adequately that she knows how to do that. A phobia can be thought of as nothing more than a one-trial learning that was never updated. And it worked, by the way. I will often turn right to the person and say this: I want to reassure the part of you that has been making you phobic all these years that I respect what it has done, and I regard that as a valid response. You're here. You survived. If there hadn't been a part to make that effective response to keep you out of certain situations, you might not be here. My desire is not to take away the choice of being phobic but to update it so that you can also make other responses which are more congruent with your full resources as a fully grown woman. We're going to use that same capacity to do one-trial learning to help you learn to do something else.

In a moment I'm going to ask you to do some time-traveling. As you go back I want you to increase pressure here on my hand at any point that you need to be reminded of your competence as a fully grown, mature woman. This is your connection with the present time and all the powerful adult resources that you have as a fully grown person. Do you know what the feelings of the phobia are?

Tammy: Umhm. (He touches her arm.)

That's all you need to do to anchor the phobic response. Or you can ask a different question: What is the last time that you had an intense response like that?

Tammy: Umhm. (He touches her arm again.)

I got the same response that she gave a moment ago when I said "Do you know what the feelings of the phobia are?"—the same facial expression, the same breathing. That's now anchored on her arm. This anchor constitutes a stabilizing factor to help us go back and sort
through her personal experience to find the original experience. It's not necessary to do it this way; this is one way to do phobias.

Your holding hands with me constitutes your connection to all the strength and resources you have as an adult woman. There were experiences in your past, namely those connected with this phobia, which we're going to go back and relive, but in a way that involves no discomfort at all, a way that involves total comfort. And I call to your mind the notion of dissociation that we talked about yesterday. We told you during the exercise you did yesterday afternoon to be sure you step inside the picture so that you recover the full kinesthetics. The opposite holds true here. For years Tammy has been exposed to certain kinds of real life situations and responded with a lot of emotion, a lot of kinesthetic feelings over and over again. To have her go back and relive that experience again and have those feelings again will simply reinforce it. That's ridiculous. And most people's unconscious minds say "Bullshit! We aren't going back there; that hurts!" and they are called "resistant clients," right? Respect that resistance as a statement that says "Look, make some new arrangements so we don't have to go through the pain again."

The specific arrangements might go like this: I'd like you to close your eyes, Tammy. You can vary the pressure in your hand any time you need more strength. You can draw it directly from here, and that's also a way for me to know where you are. In a moment I'm going to reach over and touch you here on your arm. That's going to help you remember a little bit of the feelings of pinking. I don't want you to go through the feelings again. I want you to take these feelings—only as much of them as you need—and drift back until there comes before your eyes a scene in which you see yourself over there at a younger age in a situation which has some connection with how you first learned to respond that way.

At some point while you see those images which are connected intimately with these feelings of pinking, I'm going to say "What do you see now?" I would like you to stabilize the image at that point. Likely it will be an image of yourself at a younger age, dressed in some particular way, in some colors, in some context. I don't know what any of that will be and at the moment you don't either, because you don't know where this came from. As soon as I ask you to stop the image, I want you to form a snapshot and just hold it stable. I don't want you to run any movies yet, because we need to make one more arrangement to make you even more comfortable before you run the movie.
Remember that you can modulate how much of these feelings (he touches the phobia anchor on her arm.) you are going to use to drift back until you see a clear focused visual image connected with these feelings, that represents where this original learning took place. That’s right, you draw on all the strength you need here, as you drift back through time, even further, take your time . . . even more. There’s no rush. Be perfectly comfortable. Now look at that image. And simply nod your head when you clearly see an image of yourself at a younger age.

Tammy: I see myself at a younger age but I’m not in any situation. I’m just—

That’s fine. Can you see what color shoes you are wearing?

Tammy: Black.

OK. Now I want you slowly to look at the surface that’s right under the shoes. From there let your eyes slowly notice what is around you as you stand there in those little black shoes. Remembering to breathe, remembering to use these feelings of strength and competence. You’ve demonstrated adequately that you know about those old feelings. Now I want you to demonstrate that you can have these feelings of strength as you watch that image. Remembering to breathe; oxygen is essential for this whole process. That’s right. When you have the still image, just nod . . .

OK. Now, I would like you to hold that image constant, just a snapshot. Relax your right hand—not your left. Your left can be as tight as you need it to be in order to get access to these feelings of strength that you need. And you are breathing nicely now. Continue your breathing.

Now, I would like you slowly to float up and out of your body so that you can actually see yourself sitting here holding hands with me, ridiculous as that may sound. Take all the time you need. And when you have succeeded in floating out of your body so that you can see yourself from above or the side or the front or the back, just nod that you have succeeded. Excellent.

Now, staying in that third position, I want you to look past yourself sitting here holding my hand and feeling the feelings of strength and adult resourcefulness. This time, with feelings of strength and comfort, I want you to watch and listen carefully to everything that happened to young Tammy way back there, so that you can make new understandings and learnings about what occurred, and therefore have new choices. You are to do this, watching from the third position,
having the feelings of resourcefulness and strength connected with my hand here. Knowing that you did live through that and you won't have to again, let that younger part of you feel the old feelings over there as she goes through that old experience for the last time. When you've seen and heard it all, adequate for your making new understandings, simply nod your head and stay there. You can begin the movie now....

(She nods.)

All right, now very, very slowly I want you to float down from the third position and step back in and reunite with your body, sitting here with feelings of resourcefulness and strength....

And now I want you to do something very powerful and important for yourself. Younger Tammy did something very powerful for you; she went through those feelings again for you, and she let you watch and listen with comfort and strength to stimuli which in the past have triggered overwhelming responses. This time you were able to see and hear those without pinking. I want you to walk over to young Tammy in your mind's eye. I want you to reach out and use all of the adult female resources you have, to comfort her and reassure her that she will never have to go through that again. Thank her for living through the old feelings for the last time for you. Explain to her that you can guarantee that she lived through it because you are from her future.

And when you see on her face and in her posture and in her breathing that she is reassured that you will be there to take care of her from now on, I want you to really reach out, take her by the shoulders and pull her close and actually feel her enter your body. Pull her inside. She is a part of you, and she's a very energetic part. That energy is freed now from that phobic response. I would like your unconscious mind to select some particular pleasurable activity that some of that energy can now be used for, for yourself here in the present and in the future. Because energy is energy and you deserve it. Just sit there and enjoy those feelings. Let them spread through your whole body. Take your time. You've got plenty going on inside. I'm going to talk to the group.

Do you understand the anchors? First, she holds hands with me. This is a “bail-out” anchor, a resource anchor that will always get her out of trouble and says “Here, you're grounded right here.” It's also a really exquisite biofeedback mechanism. By temperature and pressure and moisture changes in her hand, I get an incredible amount of information about her complex internal experience. An anchor here on her arm stabilizes the phobic feelings to use as a lead to go back and
find some visual experience that will serve as a metaphor for her entire set of experiences called "the phobic response."

Once she sees herself at an earlier age over there, using the feelings to lead her back to something she had never known about consciously before, then I dissociate her a second step—I ask her to float up out of her body. You could see the changes in posture and color and breathing and so forth which indicated which position she was operating from.

Once the two-step dissociation has been established, I have her watch and listen with comfort to the old experience. She saw and heard things today which have never been available to her before.

Tammy: That's true.

She was so overwhelmed in the past by the kinesthetic phobic response that she couldn't see and hear what was going on. Consciousness is limited. As she watches and listens to herself at a younger age, the competent feelings of comfort and resourcefulness are being associated with the auditory and visual stimuli from the past.

And when she's gone through the whole thing, then we reintegrate. Every model of therapy, every psychotherapy, is built on dissociation and sorting to help people reorganize. Whether you call it "parent-child-adult," "topdog-underdog," using chairs or words doesn't matter as long as you label and sort a person's behavior, dissociating parts of them, one from the other. You have the responsibility as a professional communicator to put your clients back together before the session is over. One easy way to make sure the dissociations that you create are re-integrated before the end of the session is to simply reverse the process by which you create the dissociation.

In this particular case, the dissociation is (1) see yourself over there at a younger age, (2) float up and out of your body. For the integration, (1) float back down and rejoin yourself here—and you could see the tremendous change in her that indicated that she had succeeded in doing that, (2) then walk over in your mind’s eye, reach out, comfort and reassure the younger Tammy, thank her for going through this so that you could learn, pull her into you, re-integrate her and feel the feelings of energy.

What we're doing here is structured regression. Primal Therapy claims to get complete regression back to infancy. If that were true, then Primal Therapy would achieve change only insofar as it doesn't work! If Primal Therapy really got complete regression, it would be doing exactly what Tammy has been doing with the phobic response.
up until today. Complete regression simply means that you relive the experience in all systems. If you do that, you reinforce it.

A partial, structured, regression of the type Tammy and I were working with here allows you the freedom to go back and connect new kinds of resources with the auditory and visual stimuli which in the past have elicited old, uncomfortable, kinesthetic responses. It's impossible for her to go through this experience and still maintain that old response because she's done one-trial learning again. Now she doesn't have to be phobic. I haven't taken that choice away. There may be some context in which being phobic in response to something may be useful. I'm not playing God. I presuppose that people make the best choice in context. My job is to make sure that resources which have been dissociated from a certain context become available in that context. I leave it to the unique human being, with all the various needs they have that I don't even know anything about, to make an adequate selection somewhere along the continuum between resourcefulness and terror. And she will. Those resources have been dissociated in the past, but they are now integrated and they are now both responses to the same stimuli.

Right. Is there any particular assumption you'd like to challenge?

Man: Um, all of them.

Good. Pick one.

Man: That she feels any different now than she did before.

OK. Let me give you a way of testing. (He turns to Tammy.) Let me ask you a question. (He touches the phobia anchor. She turns to him and smiles: "Umhm?") That's fine; you answered it. Does that make sense to you, sir? Do you remember that the last time I touched her there she had a phobic response? I had anchored the phobic reaction there, and then I demonstrated that I had control of her phobia. When I reached over and touched her arm she became phobic. Now I reach over and touch her and what does she do? She looks at me as if to say "What do you want?" That is a far more elegant demonstration than any verbal feedback I could get. I'm not saying don't use verbal conscious feedback, but understand that when you ask for that, you are tapping into the least informative part of the person: their conscious mind.

Let me give you another way of testing. Tammy, I'd like you to try something for me. This is just a scientific experiment. Are there any
APPENDIX III: FEAR THERMOMETER
FEAR THERMOMETER

ABSOLUTELY TERRIFIED

BADLY UPSET, VERY UNCOMFORTABLE

NERVOUS AND UNCOMFORTABLE

A SMALL AMOUNT OF UNEASINESS.

CALM, COMPLETELY UNTROUBLED
APPENDIX IV: INFORMED CONSENT
Human Subjects Form

1. This research is an evaluation of the effects of a new phobic treatment technique, Visual Kinesthetic Dissociation (VXD) on adult phobic subjects. It is a therapeutic procedure which consists of: 1) the subject begins by accessing a state of confidence and comfort; 2) they regress back to the initial phobic experience; 3) they then watch it from a dissociated state; 4) finally they are reintegrated and now have a nonanxious way of responding to the phobic stimulus. The treatment is not cathartic in that the subject is not asked to reexperience the feelings; in fact, the emphasis is on observing the negative experience in such a way that the painful emotions will not occur. Evaluation of the effects of the treatment will be through pre/post treatment tests of anxiety. They will consist of physiological, self-monitoring and self-report measures of the anxiety produced by the phobic stimulus.

2. The benefit to the subjects is that the treatment will probably result in the substantive reduction or elimination of phobic anxieties. The benefit to scientific knowledge is that this research will provide the first quantitative study of the effects of VXD—a treatment which is anecdotally reputed to be both faster and more effective than other treatments presently available.
3. There will be 4 experimental subjects. They will have a one hour screening session where they will take the pre tests, a one hour or less treatment session, a 30-minute follow-up one week later and a 30 minute follow-up in 3 months. They will also be asked to self-monitor phobic related behaviors over 3-one week periods.

Subjects will be required to place a deposit of $25 upon being admitted to the program which will be refunded after the 3 month follow-up. The deposit insures two responses. First, it will tend to eliminate subjects who are not genuinely disturbed by their phobic condition and second, it will increase the likelihood of participation in follow-up.

In addition to the experimental subjects, there will be 15-25 pilot study subjects. Some of these will receive only the treatment, some the pre tests and treatment, and some the pre tests, post tests and treatment. Pilot study subjects will not be asked for a deposit.

4. Subjects will be recruited by advertising which would offer interested phobic subjects free treatment. In addition, referrals of phobic subjects from mental health clinics and doctors around Missoula will be solicited. Requirements for subjects are as follows: 1) over 18; 2) clinically-anxious phobics (level of anxiety will be shown by the screening tests); 3) the phobic diagnosis should not be complicated by many extraneous diagnoses (e.g. subjects from psychologically or socially vulnerable populations are not desirable).
5. Risks and discomforts experienced by the subjects should be minimal. It must be reemphasized that this is not a cathartic procedure and that its effectiveness is predicated on the ability of the subjects to go through the treatment experience calmly and with comfort. It is likely that subjects will experience some degree of anxiety during the pre-tests; however, this discomfort should be relatively mild. Subjects will repeatedly be assured that they can withdraw from any anxiety-causing situation at any time.

6. Anxiety will be minimized during treatment by establishing a strong mood of comfort and competence in the subjects and then having them watch their original phobic experience in a dissociated state. Anxiety will be minimized during testing by allowing the subject complete control of any approach behavior related to the phobic stimulus.

7. Subject's confidentiality will be protected by storing all material with specific names in locked file drawers in the Clinical Psychology Center.

8. Copy of the informed consent form is appended.

9. No waiver of written informed consent is required.
Informed Consent Form

Visual Kinesthetic Dissociation (VKD) is a new therapeutic technique aimed at treating problems related to anxiety reactions and phobic disorders. It has four basic stages: 1) accessing a state of competence and comfort; 2) regression to the primal phobic experience; 3) watching it comfortably in a dissociated state and 4) reintegration. The treatment normally takes less than one hour.

I understand that I am a participant in a scientific research project designed to assess the effects of VKD. Therefore, in order to measure the treatment effects, a certain amount of time for testing will be necessary. In addition to the one hour of treatment, I agree to spend approximately three hours in testing procedures which will occur at three different appointments during the next 3 1/2 months.

Neither the treatment nor the testing should cause more than slight anxiety. However, if I do experience discomfort, I have the right at any time to require the experimenter to proceed more slowly or to withdraw from the experiment entirely.

It has been explained to me that the treatment is free if I complete it fully, including participating in all the evaluation procedures through the follow-up 3 1/2 months from now. I have made a $25 deposit which will be returned to me after successfully completing follow-up. I understand that if I am unable to complete the program for whatever reason, my $25 will not be returned.

I realize that this treatment may benefit me directly by removing or substantially reducing my phobic anxiety, but I also know the procedure may be ineffective. The data accumulated from myself and others may aid scientists in their efforts to understand how to treat phobias more effectively. I realize that I may ask questions at any time during or after treatment and that I have the opportunity to have the results of the research communicated to me.

In the event that physical or psychological injury results from this research, I should individually seek appropriate medical treatment and shall be entitled to reimbursement or compensation consistent with the self-insurance program for Comprehensive Liability established by the Department of Administration under authority of Title 82, Chapter 43, RCM 1947 or by satisfaction of the claim or judgement by the means provided by RCM 1947 Section 82-4325. In the event of a claim for such injuries, further information may be obtained from University Legal Counsel.
APPENDIX V: A TREATMENT MANUAL FOR VISUAL KINESTHETIC DISSOCIATION
The following treatment manual is an amalgamation of three different NLP descriptions of VKD: Stevens (Note 1), Grinder & Bandler (1979), and Cameron-Bandler (1978). While it normally takes between 20 and 60 minutes to complete the treatment, in difficult cases treatment may lengthen to two or even three one-hour sessions. This study applied VKD according to the steps listed below.

1) Establish a powerful anchor for solid comfort, competence and confidence. In order to make the anchor very strong, stacking of anchors may be employed. Anchor, as used in this study, is defined as the association of a physical touch to a certain psychological state in such a way that the readministration of that touch will reevocate the state. Stacking means to associate several states (usually similar ones) to the same anchor.

A concrete example of anchoring will help clarify the concept. To anchor competency ask the subject to recall a time when he felt particularly competent. When he remembers such a time, help him recall it vividly by suggesting that he add various sensory channels (e.g., "now add the sounds that were present then, now add whatever odors you might have been smelling."). In addition emphasize that he is to remember it subjectively—as if he were reexperiencing it in the present—and not objectively, as if he were watching a movie of someone else going through certain experiences.
As the subject begins this recall carefully note his nonverbal cues (e.g., breathing, facial expressions, muscles tone, etc.). When those cues alter from their normal condition to a new alignment, assume that the change is signaling involvement in the memory. Apply the anchor at that moment. When that same touch is reapplied later, the subject will reexperience the same feelings of competence.

2) Test the anchor.

3) If the primal experience at the root of the phobia is consciously remembered, go to step 13; otherwise begin the regression sequence (steps 4 through 12).

4) Anchor the feelings associated with the phobic experience.

5) Test the phobic anchor.

6) Explain to the subjects that you will soon ask them to remember a scene which is associated with the primal phobic incident. Emphasize that they are to visualize only the very first scene of their experience—a still shot of their younger self.

7) Activate the positive anchor and continue to hold it for the entire VKD procedure.

8) Ask the subjects to close their eyes.
9) Activate the phobic anchor and ask the subjects to drift into their past until they can see an image of themselves at a younger age. When they see such an image they are to nod their heads.

10) Ask if they can see what color clothes their younger self is wearing. Release the phobic anchor.

11) If they have trouble finding an image, ask them to remember the last time they had the phobic feeling and then the time just earlier than that and so on, until they arrive at an early and powerful experience.

12) If they can't see the color of clothes clearly, ask them to continue to look at the image until it comes into clearer focus.

13) Have the subjects run the experience through, making sure they remain kinesthetically disassociated from the traumatic incident by the use of anchors and by the use of verbal patterns which separate out the three places—him, there, the younger you, that experience, what happened then, to separate the younger traumatized self from—you, here, today, watching yourself, etc.

14) If the subjects begin to directly experience the phobic feelings as they watch the incident, discontinue the visualization immediately. Verbally reemphasize the feelings associated with the anchor of comfort. If they do not immediately relax, it is necessary to build a stronger positive anchor (by stacking more positive experiences). When they are calm and composed, return to the phobic
visualization. This time ask them only to watch a small segment of it, a segment they are sure they can handle. After they have witnessed one segment several times and feel completely at ease with it, ask them to add another tiny segment. Continue in this manner until they can witness the entire experience with ease and comfort. Direct them to watch it in great detail and to run the entire experience several times.

15) When the experience has been completely seen, have the third place float back into second place. (So the visual perspective is being integrated with the actual body position of the client)

16) Have the present-day person go to the younger one (the one who went through the traumatic experience) and reassure him that he is from the future, giving the younger self needed comfort and appreciation.

17) When the present-day person can see that the visualized younger self understands, have them integrate by bringing that younger part back inside.

18) Test the results of VKD by performing a "change history" procedure as described in the following steps.

19) Ask the subjects to remember 2 or 3 recent phobic experiences and anchor each one.

20) Fire the positive anchor and ask the subjects to take those resources back to one of the phobic experiences (now fire the anchor for one of the recent phobic experiences). Ask the subjects to "rerun" the
movie of the phobic experience and watch it carefully noting how the experience changes now that their resources are available.

21) If VKD has been effective the subjects will be able to effortlessly watch the phobic reaction change into a normalized one. If this occurs perform "change history" with the other recent phobic experiences. (More information on "change history" may be found in Appendix VI.)

22) If there is some hesitation or uneasiness in the subjects or if the phobic experience does not change by itself, either VKD was done incorrectly and must be repeated or it was done on the wrong primal experience. Carefully question the subjects on their VKD experience watching for any sign that they collapsed into the phobic reaction. If it is certain that VKD went well then try the regression sequence once again, locate another primal scene, and repeat VKD.

23) Now future pace by eliciting the feelings that signal the onset of the phobic reaction. Anchor them. Then fire the onset anchor and while the subject is experiencing those sensations, fire the resource anchor. This anchors the resources to the onset of the symptoms. (More information on future pacing may be found in Appendix VII.)

24) For a final backup, show the subjects how to gain access to their resources by touching the resource anchor. Tell them that they can use it if necessary in the phobic situation.
APPENDIX VI: "CHANGE HISTORY"

from Cameron-Bandler (1978, pp. 109-117)
der, triggering the response she wished to have with her husband. Her breathing became deeper, skin tone flushed and lips swelled as they had done before. I repeated this process twice more while we were together. When her husband came to pick her up at the day's end, I utilized his presence by instructing him privately in just how to touch her on the shoulder when he wished her to know that he desired her. As he touched her, I watched closely to make sure the anchor had transferred to include his touching her as well as her internal image of him naked. Soon the touch on the shoulder would not be needed because the experience of being aroused by the visual experience of her husband would have generalized. In the meantime, his special touches would continue to be meaningful. In this way, I utilized the process of anchoring to locate the desired experience (one of being aroused) and then associated it with the context in which this woman wished to experience it.

Changing History With Anchoring

Another client, Chuck, believed he was a complete failure with women, especially in the sexual context. Judging by his behavior, it was not difficult to concur in his belief. He had been in therapy for two years and had been referred to me by his male therapist, a psychologist who thought I would be especially effective in helping Chuck with this problem area.

Chuck was completely certain about his likelihood of failure with women in almost any situation, but he was acutely so concerning sexual encounters. He stated that his certainty was based on past experience and that he could not imagine things ever being different or better in the future. As we talked, I learned that Chuck’s behavior was generally predicated upon past events. He used eidetic (that is, past) images to guide his present behavior. What he did well in life, he did very well—over and over again. He used these eidetic images as a lead system and then represented them kinesthetically as feelings about what he was going to do. So, whenever he came into contact with a woman he accessed visual images from past unsuccessful experiences with women and felt sure he was going to “blow it again.” And, of course, he did. Thus, in order to quickly change his ongoing behavior with respect to women, I needed to alter these past eidetic images. To do this, I
employed a method which utilizes anchoring that we refer to as “change history.” The partial transcript which follows illustrates the use of this very important technique:

Therapist: Chuck, can you tell me again how you feel when you approach a woman?
Chuck: (As he answered, I watched closely to see if the same expression reoccurred that he had before when talking of women. Part of this expression was an up and left accessing cue.) Well, sure. If anything I'd like to forget it. But I just feel really shitty, you know.
Th: (When the expression was fully there, I touched him on the right knee, saying . . .) Good, it's important that you remember that feeling just now.
C: Oh, yeah. Why?
Th: You'll understand very soon. Now, take that feeling (I touched him again on the right knee and held it there watching the expression come back) that “really shitty” feeling, and tell me what scene from your past comes to mind.
C: Well, it's a time from a couple of years ago when I was out with this woman. I, uh, made a pass at her. Wow! It was a real disaster!
Th: I believe you. Now, what I want you to do is take that same feeling and go back in time. Back through your past and find other scenes in which you had this feeling.
C: (Closes eyes) Okay.
Th: That's right. And just go on back and I'll stop you sometimes.

As Chuck searches through his past on the pathway provided by this particular feeling, he remembers other experiences of which this feeling was a constituent. So while other portions of the experience change—like who was there, how old he was, what was said by whom, etc.—the feeling portion of the experience remains constant. While he was doing this, I watched for subtle exaggerations of the expression; greater intensity of skin color or deepening of lines in the forehead and around the mouth, tightening of the lips and changes in breathing. These exaggerations indicated that he was remembering especially intense experiences when this unpleasant feeling occurred.

Holding the anchor constant keeps the feeling constant and
insures that the search through time is done on the pathway of a specific feeling. When I saw an exaggeration, I said to Chuck:

Th: There! Stop there. Take a really good look at that scene. Does it make sense to you in relationship to your feelings? (With my other hand, I mark out this specific experience with a touch on his other knee so I'll be able to come back to it later.)

C: Yes, yes it does.

Th: And how old are you there?

C: Oh, I was sixteen then.

Th: Good, good. Now, continue back just as you were.

Ch: Okay.

Again, I wait for the exaggerations. The moments slip by until there is a very gross exaggeration of his expression:

Th: Stop there. Take a really close look at that scene. Tell me, how old are you?

C: I'm about six (voice quality is higher, more childlike than before).

Th: And what's happening to you there, Chuck?

C: I'm in parochial school. God, I hated school and I'm in trouble with the nuns. I don't know what for, but I really remember that somehow this was the first time I ever realized that nuns were women. I don't know what I thought they were before, but this is the first time I knew they were women.

Th: (Again, I marked this with a different touch on the knee, making it possible to facilitate his going back to this experience; then I take my hands from his knees.) Now, Chuck, I want you to come back here. Open your eyes and see me. Hi. That was quite a trip you took. Are you all the way back here now? Can you feel the back of the chair?

C: Yeah, sure, I'm here.

Th: Good. What I'd like you to do now is to think about what resource you would have needed in those experiences so that they would have been good ones, so that they would have been experiences that you felt really satisfied about.

C: What do you mean by resources?

Th: Like being confident or assertive or relaxed. If you had just been able to be assertive, say, then you would have acted differ-
ently and those experiences would have happened in a way that satisfied you instead of giving you that shitty feeling.

C: Well, what I needed was for the women in those experiences to like me.

Th: I agree; but, what could you have done to get them to like you?

C: I don't know.

Th: Do you get along well with men?

C: Yeah, pretty good.

Th: What resource do you have in dealing with men that makes it so different?

C: I don't know. I guess I'm just relaxed. Yeah, just real relaxed. I don't worry about what's going to happen. I just feel like it doesn't really matter.

Th: Good, good. That's what I'm after. Chuck, go ahead now and remember a time when you were really relaxed in the way you just described, a time when maybe somebody else would have been nervous, but you were really calm and relaxed (as I said this, I calmly leaned forward so I could reach his arm to anchor this experience).

C: Sure, I got one.

Th: Good (touching on forearm). Tell me about it.

C: I asked my boss for a raise and I was just as calm as could be. It didn't really matter what he said; I had nothing to lose so I felt really relaxed.

Th: Great (taking hand from arm). A lot of people couldn't have done that. You know those feelings of being really relaxed (touch arm again and I can see the "relaxed expression" come back).

C: Yeah?

Th: Well, what I want you to do is to take THESE feelings of relaxation back to those other experiences. So, starting with the most recent one that you took a close look at, I want you to take THESE feelings with you and notice how different everything is. (These feelings are kept present by keeping my hand on his forearm, thus using the anchor to fire off relaxed feelings) Notice how you behave with THESE FEELINGS and how differently those women respond.

C: Okay.

Th: Good. When you've gone through that first experience and
are completely satisfied with it, and only when you are completely satisfied with it, I want you to nod your head. Now, go ahead.

C: (Time passes, and Chuck nods.)

Th: Excellent, and now I want you to go back to that time when you were sixteen (I trigger the anchor on the knee, with my other hand, which marks out that experience), and do it over again as you did with the last experience. And, again, when you've gone through it completely and are completely satisfied with it, just nod.

C: (Again, time passes and Chuck nods.)

Th: Excellent. Now, I want you to do the same thing with the last experience (I trigger appropriate anchor), the one where you were six and were dealing with the nuns. Just do the same thing that you did before.

C: (Time passes, and Chuck begins to frown slightly.)

Th: Oh, oh. What's happening?

C: I'm not sure, but I just can't quite make this one okay. It's better than it was, but I still feel a little shitty.

Th: That's okay. It just means you need some other resource. (I release the anchors by removing my hands) "After all, sometimes a six-year-old boy needs all the help he can get when it comes to getting into trouble with the nuns. Come back and let's figure out what else you need to take back there with you."

(Chuck opens his eyes and returns to the here and now.) "Now, what do you think the six-year-old you needed?"

C: "Well, they made me feel like I was really bad, really bad and dirty."

Th: "But you know better than that now, don't you?"

C: "After two years of therapy, I should hope so."

Th: "Good. Now, tell me about a time when you did something, maybe something nice for someone else that made you feel like a really good person."

C: "Hmmm, let's see" (goes up and left). "Well, I, uh, helped my next door neighbor fix his car. I don't even know him, but he was having lots of trouble and I could see him out the window, and I just went out and gave him a hand. It took the whole afternoon, but I feel like that was a real nice thing to do." (As he describes this incident, I again anchor him on the forearm with my other hand.)
Th: "Makes me wish you were my neighbor. Now, you know those feelings of feeling really good about yourself, really knowing you're a good human being (trigger anchor)?"
C: "Yeah."
Th: "And those feelings of being very relaxed? (I trigger the "relaxation" anchor so I now have both hands on his forearm, simultaneously firing off both resource anchors.)"
C: Yeah.
Th: Well, take ALL THESE feelings back and revisit the nuns and just nod when that experience has happened in a way that really satisfies you.
C: (Chuck closes his eyes. A few moments pass, and he grins broadly and nods his head.)
Th: (I let go of his arm) Great. Really makes a difference when you can take your resources where you need them, doesn't it?
C: It sure does. Those experiences just seem kind of funny to me now.
Th: Do they? Good. Then go back and remember them again and find out for sure.
C: Okay (closes eyes, sits quietly for a few moments; then smiles). Yeah, they weren't any big deal.
Th: Excellent. Now, when is the next time you're going to make contact with a woman, other than me, of course?
C: (Laughs) Oh, you don't count. You're a therapist.
Th: Thanks a lot, but when will you make contact with a woman that will be somehow meaningful?
C: Well, I won't unless I make one happen.
Th: When is your first opportunity to do just that?
C: Well, I could approach Sally. She's a girl at work that's single and attractive.
Th: Great. What I want you to do is to imagine how you'll approach her, but to be sure to take that sense of relaxation and those good feelings about yourself along, okay? (I am now using no anchors in order to learn if the changes that have occurred concerning past perceptions will generalize into future imaginations.)
C: Okay (closes eyes, sits quietly, gives a half-smile and chuckles).
Th: How'd you do with Sally?
C: Well, pretty good. I didn't make like Paul Newman or anything, but I didn't feel scared about talking to her.
Th: Fantastic. That deserves a handshake. So, you really felt okay about talking to her. That's just great. (We ritualistically shake hands. Thus shaking hands can also be an anchor for this successful internally-generated experience and may be triggered in the future by a handshake.)

From this point, it was easy to assist Chuck with future projections and role playing; to be relaxed and comfortable about relating to women. By taking resources and incorporating them into a context where needed, it is possible to change a person's history. In a sense, Chuck's history had stopped him from expressing new behaviors. Until his history was subjectively changed, he could only continue to live out a predetermined present and future with regard to women. Our personal histories are sets of perceptions about past experiences and, as such, can be altered. Chuck used his memories of the past to anticipate and even program himself for the future. To a large degree this is true for all of us. With Chuck, changing the past with respect to women in a way that resulted in good feelings and a sense of satisfaction also allowed him to change his present and future behavior. Just as only one trauma easily generalizes to many associated contexts, I have found that only a few important experiences need be changed for generalizations to occur for other associated past experiences as well. Changing history produced an alternate set of eidetic images for Chuck to recall when he thinks about relating to women. Usually only one added resource is needed to effectively change history, but in Chuck's case the nuns were so powerful a memory that a second resource was needed.

The tremendous effectiveness of changing history was discovered by paying attention to how people can distort their internally generated experience and then act on the distortion, forgetting that they created it in the first place. For instance, jealousy is an experience almost always generated as the result of a person making constructed images of a loved one with someone else and then feeling bad in response to the picture they have themselves created. This picture and feeling are then acted upon just as though they had been experienced externally. In fact, it is sometimes impossible to convince the jealous person that his or her imaginings did not actually take place. Once a constructed image is made, it can be stored and recalled as an eidetic image. Because
of this, a person must remember in some system other than visual that he or she created it.

Changing history is a utilization of this same process. The fuller and richer in detail the internally-generated history change is, the greater the possibility of it being given equal validity with the "real" history. Because of our ability to store experiences and draw upon them as resources, the changed history becomes an accomplished experience and thus can serve as a foundation for the future. The steps for this process are:

1. Anchor the unwanted or unpleasant feeling.
2. Use this anchor to assist the client in going back through time finding other times when he or she felt "this" way.
3. When exaggerations of the expression are noticed, stop the client and have them see the full experience, noting their age when the experience took place. With each exaggerated experience, establish an anchor so you can get back to the specific experience if needed (these anchors can be auditory or kinesthetic).
4. Once the client has identified three or four such experiences, release that anchor and bring them back to the present.
5. Ask the client what resource he needed to have in those past situations for them to have been satisfying experiences. Be sure the resource is one which influences the client's behavior and subjective experience. Many people, like Chuck, think everything would be fine if only the other people were somehow different. The point, however, is for the client to have been different and thus to make new learnings by eliciting different responses from the other people involved in that past experience. Once the needed resource is identified, assist him in accessing an experience where he genuinely exhibited that resource fully. Anchor it.
6. Using the resource anchor, have him go to each of the already identified past experiences and change history using the added resource. You can use the anchors which designate each of the three or four experiences to assist them in going directly to them. When he is satisfied with the changed experience, have him nod and then proceed to the next one. (If your client is not satisfied with the new outcome produced in the old experience move back to step 5. Get another resource or a different re-
source more appropriate to the specific past experience then proceed on to step 6 again.

7. Have him remember the past experiences with no anchors to discover if indeed those memories have subjectively changed.

8. When past experiences have been changed, have him future-pace. That is, to imagine the next time a situation similar to the past ones is likely to occur, suggesting he take the needed resource along. Use no anchors. This is a way of testing whether the changes have generalized.

This process gives the therapist a way of knowing what result he is going for, a way of getting that result and a way of testing the attainment of that result. For this technique, kinesthetic anchors are best because they can be held constant whereas auditory anchors are difficult to sustain and visual anchors are ineffectual if the client's eyes are closed. Should you be working with a client who cannot "see" his pictures, then use the process of overlap to bring visualizations into consciousness before proceeding with the change-history technique.

**Visual-Kinesthetic Disassociation**

There are some cases in which the aforementioned anchoring techniques are not sufficient. Specifically, sometimes clients who seek therapy are suffering from the results of a severely traumatic experience in the past. So much so that when anything associated with the trauma occurs in their ongoing experience they become overwhelmed by feelings that are pertinent to the prior episode. In short, they have a phobic response.

This was the case, for instance, with the woman mentioned earlier who had a phobic response to the sight of an erect penis. The case histories presented by Masters and Johnson cite a gentleman who walked in on his wife completing intercourse with her lover and was thereafter impotent with her. Each time he began to make love to her he would visually flash back to that unfortunate incident and again feel as he did then.

All phobic responses have this same form: an external stimulus serves to trigger feelings associated with a past or sometimes a future projected traumatic experience. This is not only the case with phobic sexual dysfunction, but is also true for phobias con-
APPENDIX VII: FUTURE PACING

from Cameron-Bandler (1978, pp. 159-160)
Although futurepacing is an integral aspect of all the aforementioned techniques, it merits special emphasis because of its practical as well as theoretical importance. Essentially, futurepacing refers to the process of ensuring that the changes accomplished during therapy become generalized and available in the appropriate outside contexts. Too often, changes that occur in therapy remain anchored to the therapist's office or even to the therapist himself rather than being available to the client in the specific situations that most need the new behaviors and responses.

The primary method of futurepacing new behaviors is by anchoring the new behavior or response to a sensory stimulus that naturally occurs in the applicable context. Step five of "reframing" futurepaces new behaviors by asking a part to take responsibility for generating those new behaviors in the appropriate context. As in the "reframing" example with Tom I asked him how he would know when he needed the new choices. For him the signal was feeling "pushed" so I anchored the new behavioral choices to that feeling. In "changing history" futurepacing is accomplished by asking the client in what future circumstance will they again need that resource which you have worked with them to access and to alter their subjective experience of their past. When the future circumstance is identified the client is then to generate an internal projection of that circumstance in which that needed resource is available and expressed. In this way the resource becomes attached to the context in which it is needed (futurepacing). The therapeutic metaphor futurepaces by including leading or future behaviors as a part of its construct. The futurepacing of those changes accomplished with visual-kinesthetic-disassociation is best done by presenting the client with the actual stimulus which previously triggered the phobic response. So if it was of heights to take
them to a high place and learn if the desired change has been accomplished.

Futurepacing can be done very directly. One way is to ask the client, "What is the very first thing you will see, hear or feel externally that will indicate you need this resource?" When the specific experience is identified have the client generate it internally and then anchor it to the appropriate resource. Then when the stimulus occurs in external experience it can naturally or unconsciously trigger the appropriate feelings/behavior. For instance, anchoring feelings of passion (the resource) to the feeling of smooth cool sheets or the sound of his name softly whispered or the sight of a yellow rose is futurepacing the resource of passionate feelings to specific externally occurring experiences. This process can be done with couples by anchoring the new, more useful behaviors/responses to phenomena that already naturally occur; For example, how he scratches his head, the sight of their front door, the sound of the television being turned off. Any of these can serve as triggers for initiating some newly acquired behavioral choice on the part of clients. Role playing can often serve to futurepace changes also. But most preferable of all is to present the client with the actual situation in which new behaviors/choices need to be expressed. While usually impossible when dealing with sexual dysfunction this is still the best way of testing your work and insuring the full integration of new behaviors.

What is most important about futurepacing is to do it, and not just leave it to the client's conscious mind to take the accomplishments of a session into their ongoing lives. Although the conscious mind may try very hard, it usually recalls the new behavior only after it has already failed by exhibiting the former behavior. Unconscious processes however, work automatically. So, it is the therapist's task to implant the new choices at the unconscious level, making sure that the triggers for these new more useful behavioral choices will work and that they are certain of occurring at the appropriate time.

Futurepacing is not frosting on the therapy cake. Without adequate futurepacing the accomplishments of a session are often lost. It is the final step in any effective therapeutic intervention.