Looking for Emotional Themes

by Using

Ambiguous Photographic Images

A Research Project

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Abstract

This study looked for emotional themes expressed while viewing ambiguous photographic images. The 10 subjects were employed adults in the San Francisco Bay area. Four ambiguous photographic images created by Dr. Joel Walker were shown to each subject. For each image, subjects were asked three questions: "What do you see?"; "What does this image evoke in you?"; and "How would you title this image?". Subjects were then asked to select a single word from a list naming emotions. Subjects did express emotional themes in response to question 2, and agreement of emotions chosen from the list was greater across image than across subject. There were, however, individual differences as well as gender differences. The full range of possible emotions was not expressed. Additional cards/images need to be developed and a larger number of subjects interviewed in future studies.

INTRODUCTION

A General Description of the Area of Concern

"We see things not as they are, but as *we* are." (Weiser, 1990, p. 83 [source unknown]).

The topic researched was the use of ambiguous photographic images to evoke emotional themes. Weiser (1988) states that phototherapy is a process. It is less threatening than the traditional verbal approaches to psychotherapy. Phototherapy is a way to find out what unconscious values are at work as a person makes decisions (Weiser, 1988). Walker (1983) uses photographs as a catalyst to look for unconscious emotional themes.

> Photographs can serve as a means, a process, 'a way in,' that is less
> threatening in that dealing with photos is a not unfamiliar experience.
> Photos in and of themselves really have no meaning -- in our perceptions,
> we actively participate in the meaning created. . . . Thinking,
> remembering, and feeling occur in symbolized (and predominantly visual)
> meanings that exist before any words that are used to denote them.
> (Weiser, 1988, pp. 254-255)

People are rarely aware of how much they are revealing about themselves when they discuss photos (Weiser, 1988). Weiser (1985) notes that phototherapy is not a separate form of therapy but a method that can be integrated into any therapeutic approach:

> It is an open-ended collection of methods that allows therapists and clients
> access to previously blocked areas of feelings, thoughts, attitudes,
> memories, expectations, etc., that had otherwise been unavailable through

ordinary verbal means of counseling. (p. 12)

Krauss (1981) defines phototherapy as "the systematic use of photographic materials in the helping relationship to effect client change in the areas of thinking and/or feelings and/or behaving" (p. 58).

Problem to Be Studied

The specific problem studied was that of using ambiguous photographic images to look for an overall emotional theme in people's responses. The population studied was working adults without psychiatric disorders who live in the San Francisco, California, Bay Area. The researcher gathered information regarding whether each individual expressed one consistent emotional theme after viewing Dr. Joel Walker's four visuals, or whether each visual elicited a separate and different emotional response.

If a subject expressed a consistent theme throughout the viewing of all four visuals, further studies might indicate whether this theme indicates the subject's core issue or blocked areas of feelings, thoughts, and memories (Walker, 1980). Uncovering unconscious core issues in a short period of time could allow therapists and clients to experience short term therapy more efficiently and effectively, which is important in this age of managed care.

Purpose of the Research Project

The purpose of the research project was to look for emotional themes in research subjects' responses to a series of ambiguous photographic images. The subjects were not aware that the researcher was looking for an emotional theme. The researcher asked for the first written response to an ambiguous photographic image. The technique of asking for written responses to photographic images was drawn from the work of Joel Walker, M.D., a psychiatrist in Toronto, Canada.

Major Research Question

If human subjects are presented with ambiguous photographic images, will the responses be subject-specific or card-specific?

Walker (1983) notes that "the way people look at photographs reflects the way they feel. It is these feelings that influence the way an image is perceived (p. 137). He also states "some photographs elicit certain responses more consistently than others" (p. 137). These statements present somewhat of a dilemma to the researcher. As a photographer, the researcher is aware that photographs can be manipulated to elicit certain responses, so she is in agreement with the latter statement. As a psychology student, the researcher is also aware of the theory of projectives, and the idea that feelings come from within the person. Stewart (1979) describes projectives such as the Rorschach and the Thematic Apperception Test:

> Based on the principle that when confronted with an abstract image, the
> individual will transform it into something which is personally
> meaningful, the projective test is useful in getting at problem areas which
> the client is psychologically blocking or is not bringing to consciousness.
> Photographic images can likewise be used in many different ways as
> projectives, finding use in the areas of sexual, family, relationship, and
> individual counseling. (p. 26)

Significance of the Problem and Justification for Investigating It

The researcher was looking for thematic content when the subjects were presented with ambiguous photographic images. The research is relevant to whether this type of phototherapy can be used as a tool for uncovering emotional

themes. Walker (1983) discusses his use of abstract images in therapy:

> With the abstract images, people quickly begin to structure them in the way they tend to deal with their own world. They take these unstructured stimuli and put them together in the way they live in the outside world or their inner world. How one copes and how one relates is reflected in this process. I found it very economical in that it could quickly cut through resistance and define major conflict areas. (p. 136)

Weiser (1983) talks about the use of photographs in therapy with various populations:

> These adjuncts to therapy are especially useful with those for whom the usual verbal channels of interaction and expression are not available, either physically (such as hearing-impaired, cerebral palsied, autistic, mentally retarded, aphasic, stroke-damaged, etc.) or emotionally or culturally (different languages, traditions, etc.), though certainly in no way limited to just these specific types. They work equally well for the nondisabled or the cultural majority, as they do for people who might not even be in therapy who simply want to explore how much they can learn about themselves from photos and their reactions to them. (p. 176)

Feasibility of the Study

The study was feasible because the researcher had access to the Walker Visuals, ambiguous photographs developed by Joel Walker, and to a group of subjects. Ten volunteer subjects were sought from adults living in the San Francisco Bay Area.

REVIEW OF THE LITERATURE

Introduction

In this review the application of photography by psychiatrists in the last century will be discussed. The beginnings of phototherapy in the 1970s and the significance of Weiser's (1984) contribution to phototherapy is brought to the reader's attention. The Gestalt concepts of photography and psychology are explored, relevant to how a photograph is seen by the viewer and manipulated by the photographer (Zakia, 1975). Walker's (1980) ideas that a viewer can project onto the photographic images their own gestalt, feelings, and emotional themes are explained. The development and use of the Walker Visuals is presented. The review concludes with Weiser's (1986) comments regarding phototherapy ethics.

Historical Background

Louis Daguerre discovered photography in 1839 (Weiser, 1984). In 1856 Hugh W. Diamond, a photographer and psychiatrist, published "On the application of photography to study the mentally ill" (Phillips, 1987). Diamond used photography for identification purposes, to record the appearance of the mentally ill. He also used it in treatment to show an accurate self-image to the client.

In this century, Minor White and Ralph Hattersley have had a major influence on the development of phototherapy (Weiser, 1984). White explored the concept that each image was in part a self portrait, and used the term "equivalent" to describe the relationship of the photograph to other aspects of the viewer's life. Hattersley wrote Discover yourself through photography.

Although Weiser attributes the concept of the equivalent to Minor White,

Steiglitz, a noted photographer of his time, developed the concept in the early 1900s. Examples of his photographs were published in the magazine, <u>Camera Work</u>. Some of the famous photographs depicting the concept of the Equivalent were photographs of clouds. The concept is illustrated in this excerpt from a conversation Steiglitz had with a man looking at a Steiglitz Equivalent:

> Man: . . . Is this a photograph of water?
>
> Steiglitz: What difference does it make of what it is a photograph?
>
> Man: But is it a photograph of water?
>
> Steiglitz: I tell you it does not matter.
>
> Man: Well, then, is it a picture of the sky?
>
> Steiglitz: It happens to be a picture of the sky. But I cannot understand why that is of any consequence. (<u>Minor White</u>, 1984, p. 9)

The concept of equivalence operates in three different ways. At the first level, the graphic level, Equivalence "pertains to the photograph itself, the visible foundations of any potential visual experience with the photograph itself" (<u>Minor White</u>, 1984, p. 12). At the next level, the word relates to what goes on in the viewer's mind while he looks at the photograph, and corresponds to what he knows about himself. At the third level, the word refers to the inner experience of the observer after the image is no longer in sight. The reason we remember images is because we either love the image or dislike it, or because it has made us realize something about ourselves.

> When any photograph functions for a given person as an Equivalent we can say that at that moment and for that person the photograph acts as a symbol or plays the role of a metaphor for something that is beyond the subject photographed . . . When the photographer shows us what he

considers to be an Equivalent, he is showing us an expression of a feeling,

but this feeling is not the feeling he had for the object that he

photographed. What really happened is that he *recognized* an object or a

series of forms that, when photographed, would yield an image with

specific suggestive powers that can direct the viewer into a specific and

known feeling, state, or place within himself. (Minor White, 1984, p. 12,

italics in original)

Jung (1971) also speaks about the concept of "knowing":

We speak of 'knowing' something when we succeed in linking a new

perception to an already existing context, in such a way that we hold in

consciousness not only the perception but parts of this context as well.

'Knowing' is based, therefore, upon the perceived connection between

psychic contents. We can have no knowledge of a content that is not

connected with anything, and we cannot even be conscious of it should our

consciousness still be on this low initial level. (p. 6).

Minor White states that "the viewer of a photograph nearly always

responds subconsciously to the design embedded in photographs" (Minor White,

1984, p. 13). If manipulated well enough, the photographs or video images will

pull for certain emotional responses.

In the 1970s many people began writing and sharing ideas about

phototherapy (Weiser, 1985). After learning from others, Weiser opened the

world's first center for casework, research, and training in phototherapy in

Vancouver, Canada (Weiser, 1984).

However Fryrear and Krauss (1983) found a paucity of literature on the

diagnostic use of photographs as projective tests. There is a need for more

systematic studies in visual and art therapy (Arrington, 1992).

<u>Theory Relevant to the Research Question</u>

When clients are shown ambiguous images, themes such as death, sexuality, hostility, fear, or aspiration may be elicited (Walker, 1986). These projectives are recalled feelings, past experiences, memories, present needs, and expectations (Krauss, 1981; Weiser, 1984). Psychoanalysts believe that the roots of pathological conflicts occur in the first few years of life. According to Levinson (1979), phototherapy provides a direct road to these earliest conflicts:

> While human beings are known to think in words alone, it is far more
> frequent that one's thoughts are first experienced as visual images, before
> seeking verbal translation. This is even more obvious developmentally
> where the child's first words are generally believed to occur only after the
> child has the visual capacity for object displacement and constancy
> (Flavell, 1963). The developmental literature also points out the early
> sophistication of the visual system (Carmichael, 1970) very shortly after
> birth. . . .
>
> [During] the first few years of life, according to psychoanalysts. . . .
> the child is at a pre-verbal, or verbally immature stage of communication
> and growth. When conflicts occur any time during the first three or four
> years of life, the child's experience of those conflicts is primarily sensory-
> motor and not verbal or intellectual. The visual apparatus is an important
> part (art therapists might say it is the most important part) of the child's
> way of experiencing the world at that time. Photo Therapy activities
> directly tap this early visual way-of-knowing in the client. Furthermore,
> they establish links with childhood motoric experiences by asking that

client to put the internal representation on film, or on videotape. Photo Therapy, therefore, is believed to provide a direct road to the client's earliest underlying conflicts. Verbal therapy is less direct as it fails to the address the client at his actual level of understanding. (pp. 14-15)

Walker's ambiguous photographic images take into consideration these theories of the roots of early pathological conflicts. They help break through resistance, work through conflict, mobilize affect, and confront the issue of transference (Walker, 1982). The theory behind this statement is that an ambiguous image will elicit an emotional feeling.

Often, the point at which [clients] realize they are really talking about themselves as they ostensibly describe the image is the point at which they "lose themselves" in their description of the image. The revelations about the self which so often emerge are of such inherent interest, they absorb the client's attention, and thereby continue to reduce the elicitation of defenses. (Walker, 1986, p. 246)

By reducing defenses the therapist or researcher can attempt to get to the core of any early emotional conflict. By allowing clients to free associate, they are allowed to express emotional themes in a less threatening manner. "The stream of thought triggered by the photographs provides ongoing feedback and actually contributes to the client's creations of new images which have a unique and very personal meaning" (Walker, 1986, p. 247).

Weiser (1984) notes that phototherapy is a way of communicating on a nonverbal level. The Walker Visuals are not as abstract as the Rorschach, but neither are they as representational as the Thematic Apperception Test cards (Walker, 1982). The advantage of using photographs is that it helps clients tap

into their core issues and emotional themes. Photographs are used to enable the clients to respond in a less defended manner. Through the use of the photographs the client tells the therapist how he or she perceives the world. It is not an interpretation of how the therapist analyzes the client (Walker, 1986).

It was the intent of this research project to elicit emotional themes from the subjects by having them view the Walker Visuals. Rather than the researcher or psychologist interpreting the data to surmise what the subjects might mean to say, the research subjects were asked direct questions as to what the image evokes in them, and they were asked to select from a series of words that have connotations of emotional themes. The 16 emotions listed were those which Plutchik (see Appendix E) designated as primary and secondary emotions (Huffman, Vernoy, Williams, & Vernoy, 1991).

Relevant to the process of phototherapy is Krauss's (1981) explanation of how people try to make sense out of ambiguous photographs so that they fit into their own personal cognitive map of reality. By observing how people make sense of ambiguity, a therapist can glean knowledge about how that person makes sense out of ambiguity in the outside world.

Krauss explains how our past experiences influence the way we see in the here and now. Again, we are reminded that early experience or conflict influences our present imagination, free association, or gestalt of the moment. These concepts are taken into consideration when the researcher asks subjects: What do you see? What does this image evoke in you? Krauss (1981) notes that:

> every photograph is an organization of experience and viewing
>
> photographs involves perceptual mechanisms analogous to those which
>
> are used in creating meaning from the world itself. . . . The viewer through

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his or her experience and expectations has learned to selectively disregard
certain aspects of the object and change others so that the photograph can
make sense and fit into the frame of a personal cognitive map of reality; a
process not unsimilar to responding to a Rorschach inkspot. Our past
experience, our present needs and expectations greatly influence our
ability to see in the here and now. (p. 61)

Zakia (1975) explained that the concept of figure-ground in psychology is
the same as the concept of positive-negative space in the world of art and
photography. "When figure-ground or negative-positive space are similar . . .
perception is usually very difficult" (p. 23). Zakia noted the importance of the
concept of gestalt and how figure-ground relationships help the viewer "see
objects as patterns or good figures" (p. 32). He explains four gestalt principles
pertinent to photography:

Proximity: The closer two or more visual elements are, the greater is the
probability that they will be seen as a group or pattern. . . .

Similarity: Visual elements that are similar (in shape, size, color, etc.)
tend to be seen as related. When we see things that are related we
naturally group them and therefore see them as patterns. . . .

Continuity: Visual elements that require the fewest number of interruptions
will be grouped to form continuous straight or curved lines. . . .

Closure: Nearly complete familiar lines and shapes are more readily seen
as completed (closed) than incomplete. (pp. 32-67)

Zakia (1975) commented that "if a photographer knows how a person most
probably organizes or groups visual elements when looking at a picture, he can
then arrange the elements to favor or disfavor certain groupings" (p. 32).

Based in part on these principles, the process of phototherapy also "utilizes both symbolism and projection as the basic technique or tool for treatment" (Krauss, 1983, p. 42). Elsewhere, Krauss (1979) has explained that individuals differ in their "metaphoric maps" (p. 9) and discusses those things which influence "the components of this map: biology, socialization, and personal experience" (p. 9).

Individuals are limited by their biological makeup (Krauss, 1979). Their eye-brain connection selects, disregards, and prioritizes "the vast amount of stimuli our system is programmed for and subjected to" (p. 10). Biological needs govern selections and priorities. "We create our individual and personal perception of reality as a total schema and as a response to our needs of the moment" (p. 11).

Gregory (1990) noted that when individuals suffer illusions, they can experience things that are logically impossible. In a detailed account of the biology and psychology of seeing and the mechanisms of the eye, he explains the eye-brain connection:

> The perceptual system of the eye and brain has many channels, and many sources of information; the brain must serve as judge. Sometimes different sources of incompatible information are at least for a time accepted together, and then we experience a paradox -- things that cannot possibly occur together (pp. 117-118).

Biology is not the only basis of perception. It also has a sociological and individual basis (Krauss, 1979). We are influenced by our "cultural perspective and individual experience" (p. 12). Krauss commented that "humankind continually wages a psychic war to maintain the belief that a cultural map of

reality is reality itself" (p. 13) and concluded that "that which we deem real is nothing other than a perception of reality limited by our perceptual equipment" (p. 13). This leads to a discussion of the role of symbolism in perception and the effect of socialization on symbolism:

> Our personal experience of the world comes about via a symbolic representation of incoming information . . . . unconscious symbols share the same process of formulation as do conscious symbols; the product of unconscious symbols is simply out of our awareness. Both conscious and unconscious symbols seek to represent our needs and perceived relationship to the world. Unconscious symbols may simply be more spontaneous or less censored by the socialization process.

> Clearly the influence on conscious and unconscious symbol system by socialization is enormous. Attitudes learned from socialization influence our perceptions and association with and of object, concepts, and places. (pp. 15-18)

Arnheim (1986) added that "all perception is symbolic. Since all structural qualities are generalities, we perceive individual appearance as *kinds* of things, *kinds* of behavior. The individual precept stands symbolically for a whole category of things" (p. 253, italics in original).

Krauss concluded his discussion of the relationship between socialization and symbolism by noting that "the more we are socialized, thereby learning and accepting the cultural values and symbols, the more we lose our own internal symbol system; and, therefore, our unique and personal experience of the world is diminished" (p. 19).

In summary, it is important to consider our biological limitations to

perceptions, our past individual experience, and the cultural influences we have incorporated into our own cognitive map of reality. Perception is influenced by all of these aspects. The ideas expressed above were taken into consideration in this research project, when subjects were writing what they perceived as their reality or emotional theme while observing Walker's ambiguous images. One thought that comes to mind for the researcher is that the images might not only be able to overcome resistance or deflect defenses (Walker, 1985), but they may also elicit unconscious symbols previously not recognized because of the influences of socialization (Krauss, 1979).

Current Literature Relevant to Research Question

Joel Walker created the Walker Visuals in 1984, and revised them in 1992. The Walker Visuals originally contained 10 images; Walker now uses only four cards. From experience, these are the four cards that pull for the most feeling responses (Walker, personal communication, November 14, 1993).

When Walker first began private practice, he decorated his office with photographs, and began to notice the comments of his patients. He summarized his thoughts on the experience of his patient's initial comments and the ensuing process:

In fact, what they were revealing was what they were feeling at that moment. With abstract images, people structure them in the way they perceived their world, or their personal Gestalt. . . . Each of the responses must be interpreted in the context of the whole situation, being aware of the history and what is going on in therapy over time. People respond differently depending upon their mental set and their individual life situation and background. What is important is the dialogue and thematic

content that follow from the response. It is how they knit the response into the fabric of their lives that is significant. (Walker, 1982, p. 450).

Between August 21 and September 8, 1979, Walker had an exhibition of his photographs, titled "See and Tell," at the Nikon House Showcase, Rockefeller Center, in New York City. Viewers were asked to write down their feelings and fantasies elicited by the ten ambiguous or abstract photographic images. According to Walker (1980), "the images allow the viewer to project onto them their own gestalt, the way they perceive the world at a given moment in time" (p. 14).

Elsewhere, Walker (1983) presents some cautions regarding the use of phototherapy. He indicated that sometimes gifted people have what seem to be pathological responses to the photographs, and notes that "isolated responses often mean nothing in themselves. What is important is what follows from the response. It is the dialogue and thematic content that is pursued that is essential" (p. 137).

What Walker has done is make his Visuals ambiguous by applying the similar concepts of figure/ground and positive/negative space. Also, the concept of the Equivalent must be taken into consideration, since by making the photographs ambiguous, Walker is forcing the observer to project onto the image his own gestalt and feelings.

Walker has used the Walker Visuals with his clients and has elicited emotional themes such as loneliness, low self-esteem, problems with intimacy, rage, anger, and depression (Walker, 1983). The initial response to the photograph acts as a cueing mechanism and the beginning of a dialogue. Walker has found the photographs "helpful in terms of breaking through resistance,

mobilizing affect, and useful in terms of transference" (p. 137). Colleagues of his have also used the Walker Visuals (Walker, personal communication, November 14, 1993). Instructional guidelines are available.

Walker stated that the visuals are a tool to be used in psychotherapy, and that they can lead the patient to self discovery. "Patients generate this self-discovery by their play behavior with the images. . . . Because of the play experience evident with many patients, their defenses are less likely to impede the flow of unconscious material" (Walker, 1992, pp. 2-3).

Walker described two techniques of using ambiguous images: the directive and the nondirective approach. While the techniques are different the process is the same, and the goal is "to activate dialogue around the relevant theme" (Walker, 1983, p. 138), with the photograph acting as a catalyst. The nondirective approach involves using a spontaneous response by the patient to a photograph. In the directive approach (used in this research) Walker inquires about the photograph or photographs. He selects the photographs to be discussed, and asks the clients to respond to the images in written form (Walker, 1983).

Walker stated that therapists can use the photographs in their practices to check out some underlying theme or affect in the patient. He also suggested that a more concrete image be used before introducing a more abstract image. The image can be titled by the therapist or the client. By rotating the images additional content material may be elicited. Walker stated that the Visuals can be used with individuals, dyads, families, and groups (Walker, 1992).

The use of photographic images is similar to free association techniques, and can bypass defenses which are often aroused by confrontation and interpretation techniques. Walker has used his photographic images to elicit

emotional themes from his clients; thousands of participants at galleries have also reacted to them. He believes that this experience of viewing and responding to the photographs can be used to gather information, explore themes, or release an emotional block. "They also help some patients to understand aspects of themselves which were previously not in their awareness. This new awareness can often help a patient reduce anxiety, or develop self-esteem, thereby helping them out of a depression" (Walker, 1985, p. 141).

In addition content information of immense emotional significance can be revealed and "process information is made available regarding how imaginative or concrete the individual is, and the extent of the individual's cognitive flexibility as revealed by the number of themes or responses to a single image" (p. 141).

John C. Rubel, psychologist and clinical director of the Bastrop (Texas) Correctional Institute, U. S. Department of Justice, has used the Walker Visuals in his practice. He has stated that "the net result is that therapy can be quicker and more effective -- a real advantage in the ever-increasing managed mental health care marketplace" (Walker, 1992, p. 18).

In a personal communication to the researcher (November 14, 1993) Walker expressed an interest in a study using the Walker Visuals with subjects without psychiatric disorders.

Walker is not alone in his use of this technique. Fryrear (1980) found 11 main categories of phototherapy, three of which are: evocation of emotional states, diagnostic adjunct to verbal therapies, and a form of nonverbal communication from client to therapist. He noted that "other writers have reported the use of photographs to evoke cathartic emotions, abreaction, in verbal psychotherapy sessions" (p. 7). Weiser (1986) noted that phototherapy should not

be used as an assessment tool, since not enough research exists to validate this use, and that it should not be used for external diagnosis. She stated emphatically that "it is a basic anathema to phototherapy ethics to think that one could ever externally get the 'actual' truth by giving *just* one's own reaction to a photograph, or interpreting someone else's responses by some external set of criteria" (p. 15, italics in original).

METHODOLOGY

Restatement of Major Question

Will the subjects in fact state emotional themes when shown ambiguous

photographic images? What kinds of emotional themes will they show? Will the

subjects provide the same emotional theme in response to all four images or will

each of the images elicit a certain theme from all of the subjects? In this study the

researcher asked only whether or not emotional themes are actually elicited by

viewing Walker's Visuals. The question of from whence they came, or what early

life influences, socialization processes, or perceptual/ biological influences caused

these present free associations, gestalts, or emotional themes to surface, is left to a

future study.

Research Design

The research in this project was an exploratory study. Four photographs

from the Walker Visuals will be shown to 10 subjects. The researcher sat at a

table across from the subject and held the visual vertically so that the subject

could look at it while writing the answers to three questions: 1) What do you

see?; 2) What does this image evoke in you?; and 3) How would you title this

image? These questions were drawn from material supplied with the Walker

Visuals. The researcher then asked the subject to choose from a list of words

expressing emotional themes the word which best described the experience of the

image. As the subjects chose one of these theme words, they were not viewing

the visual.

General Characteristics of the Study Population

The population to be sampled were adults working full time and living in

the San Francisco Bay Area. Ten volunteer subjects were solicited. A demographic questionnaire (Appendix C) was used to obtain information about the subject's gender, age, ethnicity, occupation, educational level, and present marital status.

Location or Setting in which Study Took Place

Subjects were asked to respond to the images in their place of business or in their homes, whichever was more convenient for them.

Calendar of Events in Carrying Out the Study

Data collection began immediately after the proposal was approved and took. Four additional weeks were needed to analyze data and write up results.

Sampling Design and Procedures

Volunteers were solicited from newspaper advertisements and notices posted in the community. See appendix A for the text of the solicitation.

Instrument

The instrument used in this project was the Walker Visuals Kit, consisting of four ambiguous color photographic images.

Validity and Reliability

There is no known validity or reliability for the demographic questionnaire or the instrument known as the Walker Visuals.

Definition of Important Terms and Concepts Used in the Research

Collective Unconscious.

Term employed by analysts for those elements in the individual's unconscious derived from the experiences of the race; employed to a considerable extent by Jung (Drever, 1964, p. 43).

Emotion.

Differently described and explained by different psychologists, but all

agree that it is a complex state of the organism, involving bodily changes

of a widespread character -- in breathing, pulse, gland secretion, etc. --

and, on the mental side, a state of excitement or perturbation, marked by

strong feeling, and usually an impulse towards a definite form of behavior.

If the emotion is intense there is some disturbance of intellectual

functions, a measure of *dissociation*, and a tendency towards action of an

ungraded or *protopathic* character. (Drever, 1964, p. 82)

Emotional.

Characteristic of, pertaining to, or caused by emotion; used in a semi-

technical sense of a *bias*, due to emotional *attitude*, in observation or

interpretation of facts (Drever, 1964, p. 82).

Gestalt.

(German.) Form, pattern, structure, or configuration; an integrated whole,

not a mere summation of units or parts; gives its name to the type of

psychology which is known as Gestalt psychology, and which originated

in Germany during the early decades of the present century, mainly as a

psychology of perception. (Drever, 1964, p. 108)

Perception.

The process of becoming immediately aware of something; usually

employed of sense perception, when the thing of which we become

immediately aware is the object affecting a sense organ; when that object

is recognized or identified in any way perception passes into apperception.

(Drever, 1964, p. 206)

Perception, one might be tempted to say, is the direct exploration of what is out there (Arnheim, 1969, p. 24).

Projection.

Historically in the older psychology, the objective reference of sensations, that is, their reference to an object, as the origin or source of the stimuli, or their localization within or without the body; more recently the interpretation of situations and events, by reading into them our own experiences and feelings; also recently, by the psychoanalysts, the attributing unconsciously to other people, usually as a defence against unpleasant feelings in ourselves, such as a feelings of guilt, or inferiority feelings, or thoughts, feelings, and acts towards us, by means of which we justify ourselves in our own eyes. (Drever, 1964, p. 225).

Projection Tests.

A type of mental test aiming at the determination of personality traits through the completion of sentences, interpretation of ink-blots, and the like, or interpretation of pictures, making of designs, where, in all cases, there is no right or wrong, but the individual is left free to follow his own inclinations and phantasies (Drever, 1964, p. 226).

Projective Techniques.

Any test, device or set of procedures designed to provide information about or insight into an individual's personality by allowing the individual the opportunity to respond in an unrestricted manner to art-based materials or visual constructs (Reber, as cited in Arrington, 1992, p. 158).

Symbol.

An object or activity representing, and standing as a substitute for,

something else; in psychoanalytic theory, a representation by something

not directly connected with it, of unconscious, usually repressed sexual,

material (Drever, 1964, p. 290).

Symbolism.

Systematic employment of symbols; in special sense, in psychoanalytic

theory, of the employment of symbols to represent repressed material, so

that the real meaning may not be recognized by the normal consciousness,

in other words, may evade the censorship, as in dreams (Drever, 1964, p.

290).

Visual Perception.

"Visual Perception is Visual Thinking" (Arnheim, 1969, p. 14).

Data Processing Procedures

The responses were summarized and compared to determine if emotional

themes elicited were subject-specific or card/visual-specific.

Procedures of Data Analysis

Because of the small sample size (10) and relatively large (16) possible

choices of emotions, reliable statistical analysis was not possible. The researcher

described the nature of the themes elicited from the research subjects after they

viewed and responded to the Walker Visuals.

Human Subjects Consideration

The researcher asked direct questions, but did not probe for information

beyond what the subject wrote down. Volunteers were informed of the process

(see Appendix B) and were also informed that they could discontinue at any point

in the process. Subjects were provided with references for follow-up referral if they should require it. The research procedure was approved by the Notre Dame Committee for the Protection of Human Subjects and followed ethical principles for research with human subjects as developed by the American Psychological Association.

RESULTS

There was an overall card specific response pattern. Agreement across image was greater than agreement across subject. There were some differences in individual responses, and some difference by gender. While there was not total agreement on types of emotional responses, there were general tendencies.

Demographic Information

Table 1, page 28, summarizes the demographic information for the ten participants. The mean age of the subjects involved in the study was 45.2 (SD=12.4). Six females and four males participated. All of the subjects were Caucasian. All but one subject had some college education.

Two of the females were single and never married, and two females were living with significant others. Four of the males and two of the females were married. All subjects were employed, with paying jobs. Questions were administered at either the place of employment or the home of the subject.

Responses to Image 1

Responses to Image 1 are summarized in Table 2, page 29. The general response to question 1 ("What do you see?") for Image 1 was that it was a person, male or female, on a ledge, edge of a building, or precipice. The figure was contemplating jumping. One subject gave the image the same sex as himself; other subjects saw a "person" or person of the opposite sex. Various responses were expressed for question 2 ("What does this evoke in you?"), including courage, compassion, sadness, anxiety, curiosity, depression, suicide, and despair.

If the subject had feelings of sorrow, sadness, suicide, depression, despair, or loneliness evoked in them they then chose the emotion sadness in response to question 4 (the list of emotions). If the subjects saw courage, power, standing on

Table 1
Demographic Information

S#	Age	Gender	Education	Marital Status	Occupation
1	21	Female	B.A.	Never Married	Adm. Assistant
2	50	Female	M.A.	Liv. w/ Sign. Other	Architect
3	48	Female	B.A.	Never Married	Accountant
4	45	Male	M.A.	Married	Administrator
5	50	Male	H.S.	Married	Investment Advisor
6	24	Female	B.A.	Liv. w/ Sign. Other	Research Assistant
7	55	Male	Ph.D.	Married	Chemist
8	52	Female	M.A.	Married	MFCC
9	51	Female	A.A.	Married	Nurse
10	56	Male	M.A.	Married	Engineer

Table 2

Responses to Image 1

Subject	What do you see?	Evokes in you?	Title?	Emotion?
Female				
1	A person standing on a diving platform about to jump.	A sense of courage	About to Jump	Anticipation
2	Horrible image of a man on edge of a building who is going to jump off, young adult, foggy, may be deliberating.	Sorrow, compassion, try to help him, need to respond quickly.	Gross	Sadness
3	A man standing on the edge of a building.	Something powerful	Ascent	Anticipation
6	Person, mostly likely male, standing and seemingly contemplating, would assume introspection.	Makes me think of depression, suicide, loneliness.	Man without a World	Sadness
8	A tall, hopeless person, perhaps male, contemplating suicide.	Sadness, despair, challenge.	How Can I Resist This Pull?	Sadness
9	Man	Standing on the edge	Uncertain	Anticipation
Male				
4	A woman and shadows.	Mystery, sadness.	Woman on the Edge	Sadness
5	An image, man reflectively looking down over a cliff.	Moderate anxiety, curiosity, empathy.	Precipice: Point of Decision	Optimism
7	A person standing on the edge of a precipice and thinking.	A person maybe considering jumping off.	Don't Jump	Sadness
10	Human figure.	Somebody about to take a plunge.	The Diver	Anticipation

the edge, or someone about to take a plunge, they chose the word anticipation for question 4. The one subject in whom the image evoked anxiety, curiosity, and empathy chose optimism in response to question 4. Four subjects chose anticipation, five subjects chose sadness, and one subject chose optimism.

Responses to Image 2

The general response to question 1 was that this image was a person or woman swimming underwater. The various thoughts evoked by this image were grace, freedom, coolness, lightness, release, beauty, bodily wellbeing, relaxation, calm, and a feeling of action. The emotion of joy was chosen by five subjects; one other subject chose the word happiness, which was not on the list of emotions and was treated as a response of joy. Anticipation, optimism, acceptance, and awe were each chosen by one subject. Table 3, page 31, summarizes responses to this image.

Responses to Image 3

In this image most subjects saw a running horse or horses. Other responses were a charging or rampaging bull or elk. Descriptions of what the image evoked were varied, ranging from hostility to gentleness. Words chosen to describe emotion were also varied. Three subjects chose joy, two chose aggression, and two chose awe. Both subjects choosing aggression were female. Fear and anticipation were each chosen by one male subject, and optimism was chosen by one female subject. Table 4, page 32, summarizes Image 3 responses.

Responses to Image 4

Subjects generally saw two people in this image, but the activities seen were varied. Either two people were in a race or sport, or were lovemaking, or

Table 3

Responses to Image 2

Subject	What do you see?	Evokes in you?	Title?	Emotion?
Female				
1	An underwater swimmer.	Grace	Woman Under Water	Happiness
2	Swimmer, woman, free under water.	Relaxed, dynamic, freedom, pleasant, musical.	Fluid	Optimism
3	A woman swimming under water.	Flowing, free.	Swimming Free	Joy
6	Person in water, seems to be diving.	Coolness, soothing, relaxation.	In the Cool	Joy
8	A very skilled and graceful swimmer executing a swan dive.	A sense of grace and energy and strength.	Now, Yes!	Anticipation
9	Person in a swimming pool.	Calm	Ripples.	Joy
Male				
4	Woman in a swimming pool.	Lightness, coolness, energy.	The Dip	Joy
5	A female swimmer, just after a dive into water.	Freedom, release, beauty, bodily well-being.	Transmutation	Joy
7	A person doing a swandive.	Gracefulness.	Graceful Flight	Awe
10	Human figure underwater.	Feeling of action.	Diver Underwater	Acceptance

Table 4

Responses to Image 3

Subject	What do you see?	Evokes in you?	Title?	Emotion?
Female				
1	Charging bull.	Hostility	On the Run	Aggression
2	Race horse, power, spirit, dynamic.	Strength, freedom, power, winning.	Go for It	Optimism
3	A horse running.	Horses, freedom of movement.	Rodeo	Awe
6	Seems to be horse or some animal with similar physical structure. It is moving forward.	Serenity	Bounding Glory	Joy
8	A mare and foal running side by side.	A sense of delight, beauty, energy, gentleness, along the serenity and spaciousness of the desert.	Unbounded Support	Joy
9	Head of an elk.	Motion.	Charging Elk	Aggression
Male				
4	A shadowy horse galloping.	Motion, thrill, heat.	Through the Desert	Anticipation
5	A rampaging, untamed bull, running through a verdant southwestern landscape.	Power, speed, unstoppability, strength, beauty.	Taurine Royalty	Awe
7	A charging elk.	A stampede.	Charging Elk	Fear
10	Running horse.	Free spirit.	Running Horse in a Desert	Joy

one person was being tackled by another. The feeling evoked matched the emotion chosen by each subject. The subject in whom the image evoked strength, conflict, and action chose the emotion aggression in question 4, as did the subject who replied "caught by my pursuer" to question 2. Another subject chose the word anticipation for both question 2 and question 4. Question 2 responses varied from evocation of love, freedom, extreme caring, and sexual pleasure to conflict, striving, and contesting. Emotions chosen in response to question 4 were also varied, with three subjects choosing optimism, two subjects each choosing love, anticipation, and aggression, and one subject chosing acceptance. Both subjects who chose love were female; both subjects who chose aggression were male. . Table 5, page 34, summarizes Image 4 responses.

Types of Emotional Responses

Table 6, page 35, lists emotional responses by subject to each of the four images. The possible number of responses (16) and the small number of subjects (10), did not permit Chi-Square analysis of the differences, but the responses by image are more similar than responses by subject.

Responses were also categorized as primary or secondary emotions, according to Plutchik's categorization (Huffman, Vernoy, Williams, & Vernoy, 1991) described in Appendix E. Chi-square analysis showed that subjects gave significantly ($p<.02$) more primary responses (9) to Image 1, and a near significant difference (8 Primary, $p<.06$) in Image 2. For Image 3, subjects gave an equal number of primary (5) and secondary (5) responses. For Image 4, subjects gave more secondary (7) than primary (3) responses, but the difference was not significant.

Table 5

Responses to Image 4

Subject	What do you see?	Evokes in you?	Title?	Emotion?
Female				
1	Two people getting ready to run a race.	Anticipation.	Waiting for the Start Gun	Anticipation
2	Man and a woman, lovemaking ecstasy, climax, pleasure.	Consent, joy, abandon, freedom.	Trust	Love
3	A man pulling another person up a mountain.	Support, helping.	Working Together	Optimism
6	Two figures, seemingly both male in nude.	Love, extreme caring, God.	With Love and Respect	Love
8	Husband and wife engaged in sexual (foreplay) pleasure.	Tenderness, sexual, pleasure, mutual pleasure and unity.	Worthy of Pleasure!	Acceptance
9	Two people, one retreating.	Anxious.	Retreat	Anticipation
Male				
4	Two men engaged in a sport.	Strength, conflict, action.	The Competition	Aggression
5	(Male?) humanoid figures hurdling a low barrier, dream-like state.	Striving, contesting, exertion, grace, flowing.	Flowing	Optimism
7	A person being tackled	Caught by my pursuer.	Down You Go	Aggression
10	2 human figures in a race.	Competition.	Competition	Optimism

Table 6

Summary of Emotional Responses to Images

Subject	Image 1	Image 2	Image 3	Image 4
Female				
1	Anticipation - P	Happiness* - P	Aggression - S	Anticipation - P
2	Sadness - P	Optimism - S	Optimism - S	Love - S
3	Anticipation - P	Joy - P	Awe - S	Optimism - S
6	Sadness - P	Joy - P	Joy - P	Love - S
8	Sadness - P	Anticipation - P	Joy - P	Acceptance -P
9	Anticipation - P	Joy - P	Aggression - S	Anticipation - P
Male				
4	Sadness - P	Joy - P	Anticipation - P	Aggression - S
5	Optimism - S	Joy - P	Awe - S	Optimism - S
7	Sadness - P	Awe - S	Fear - P	Aggression - S
10	Anticipation - P	Acceptance - P	Joy - P	Optimism - S
Primary Emotions	9	8	5	3
Secondary Emotions	1	2	5	7
Chi-Square(1)=	6.4	3.6	---	1.6
p	< .02	< .06	---	> .10

* This unlisted response was coded as "Joy," which was the closest listed response.

Note: P = Primary Emotion; S = Secondary Emotion.

Distribution of Emotional Responses.

Figures 1 through 5 (pp. 37-41) show the distribution of the emotions

checked by each subject on Plutchik's wheel of emotions. According to Plutchik,

"emotions that lie next to each other are more alike than those that are located

father away. For example, anger is similar to disgust, and both are very different

from acceptance" (Huffman et al., 1991, p. 398).

Image 1 responses (Figure 1) were on both sides of the wheel, and showed

opposite responses. Image 2 responses (Figure 2) were on one side of the wheel,

except for one secondary response. Image 3 responses (Figure 3) were grouped in

two sections that were relatively close together. In Image 4 (Figure 4) all

response were grouped on one side of the wheel. This also indicates that

responses were image-specific.

Figure 5 (page 41) combines all responses to all images. Except for the

five responses of sadness to Image 1, emotional responses to these images were

clustered on one half of the emotional wheel. None of the images evoked any of

the following emotions listed: anger, contempt, disappointment, disgust, remorse,

submission, or surprise.

Figure 1

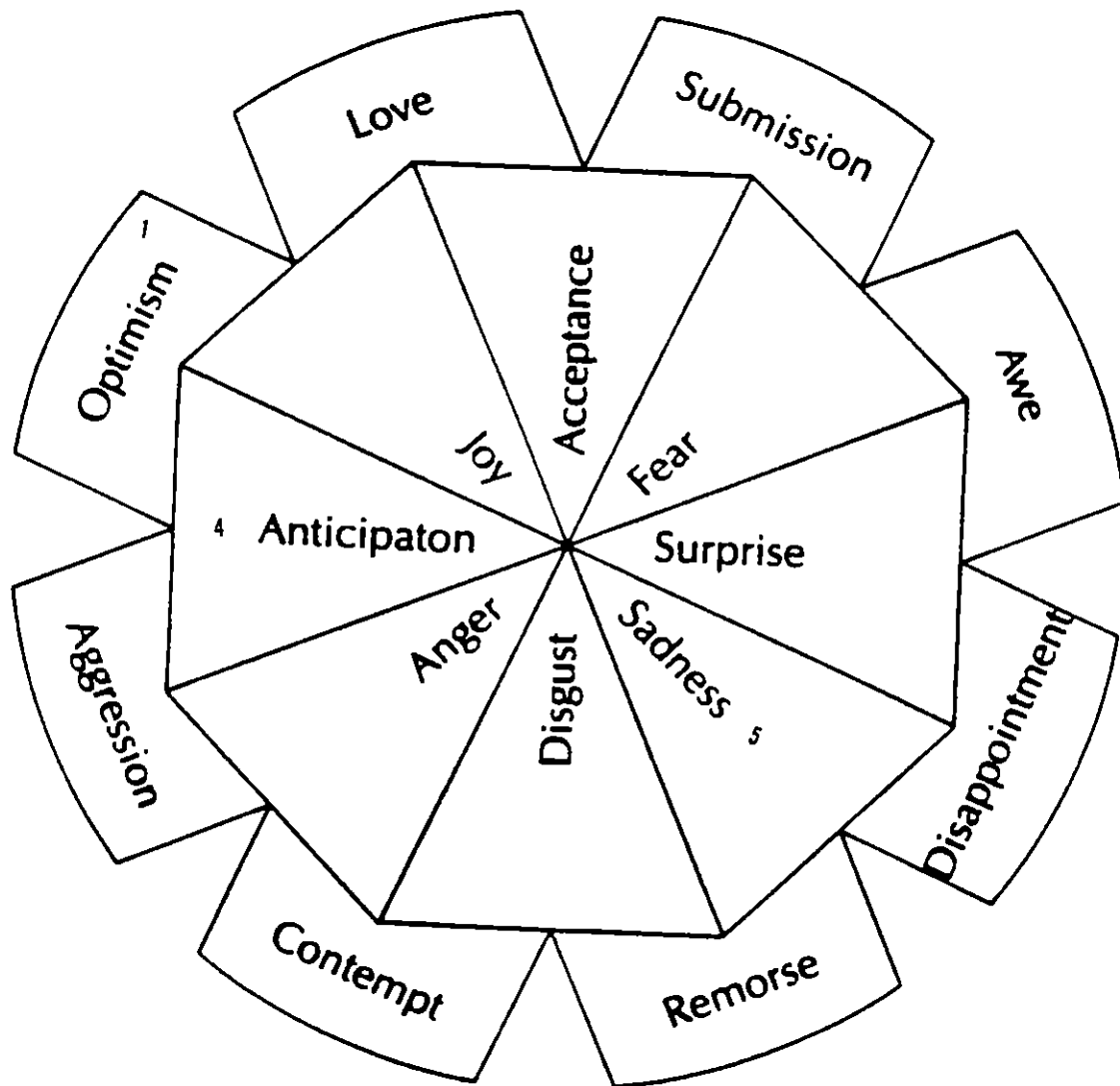Distribution of Emotional Responses to Image 1

Figure 2

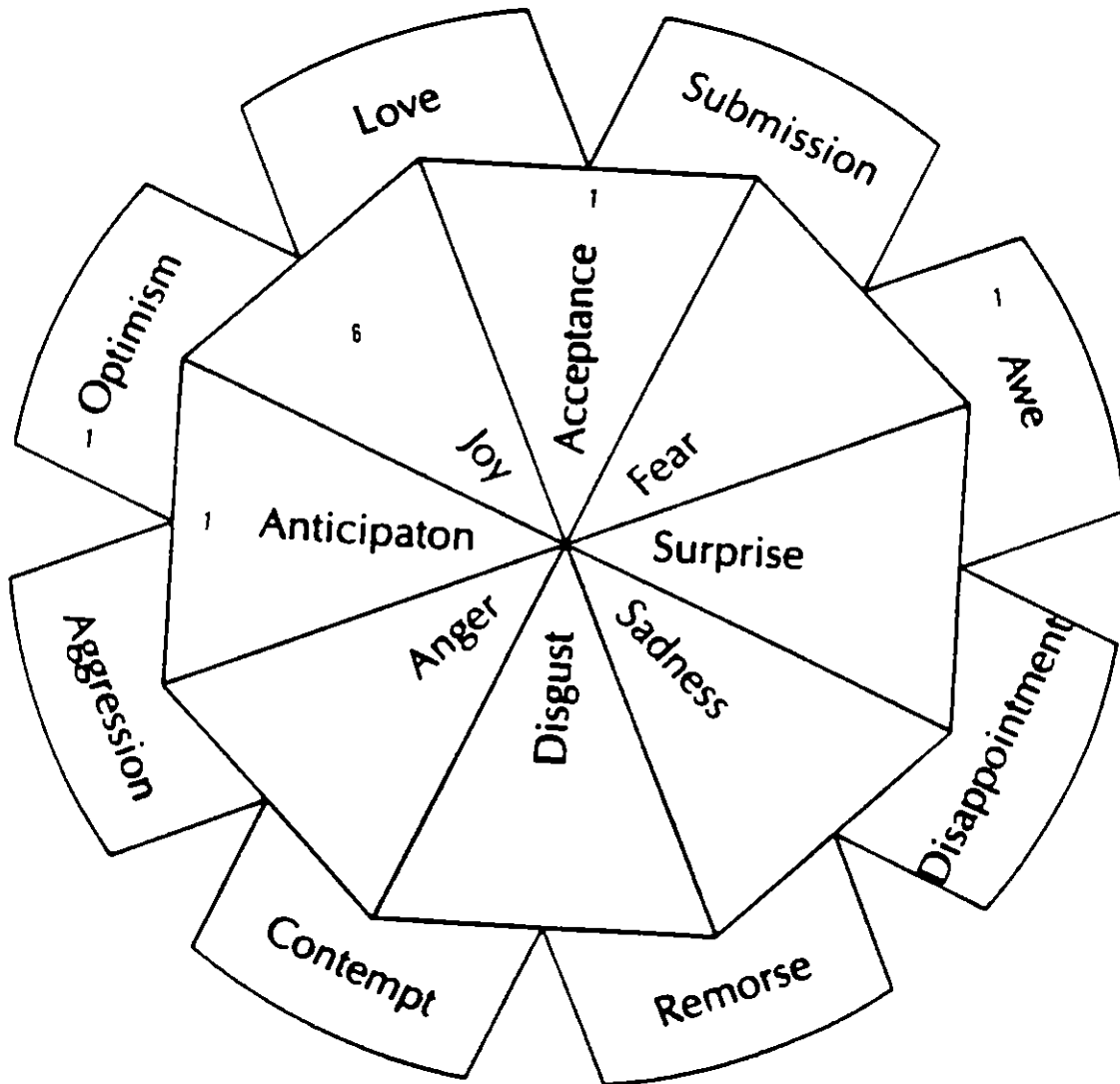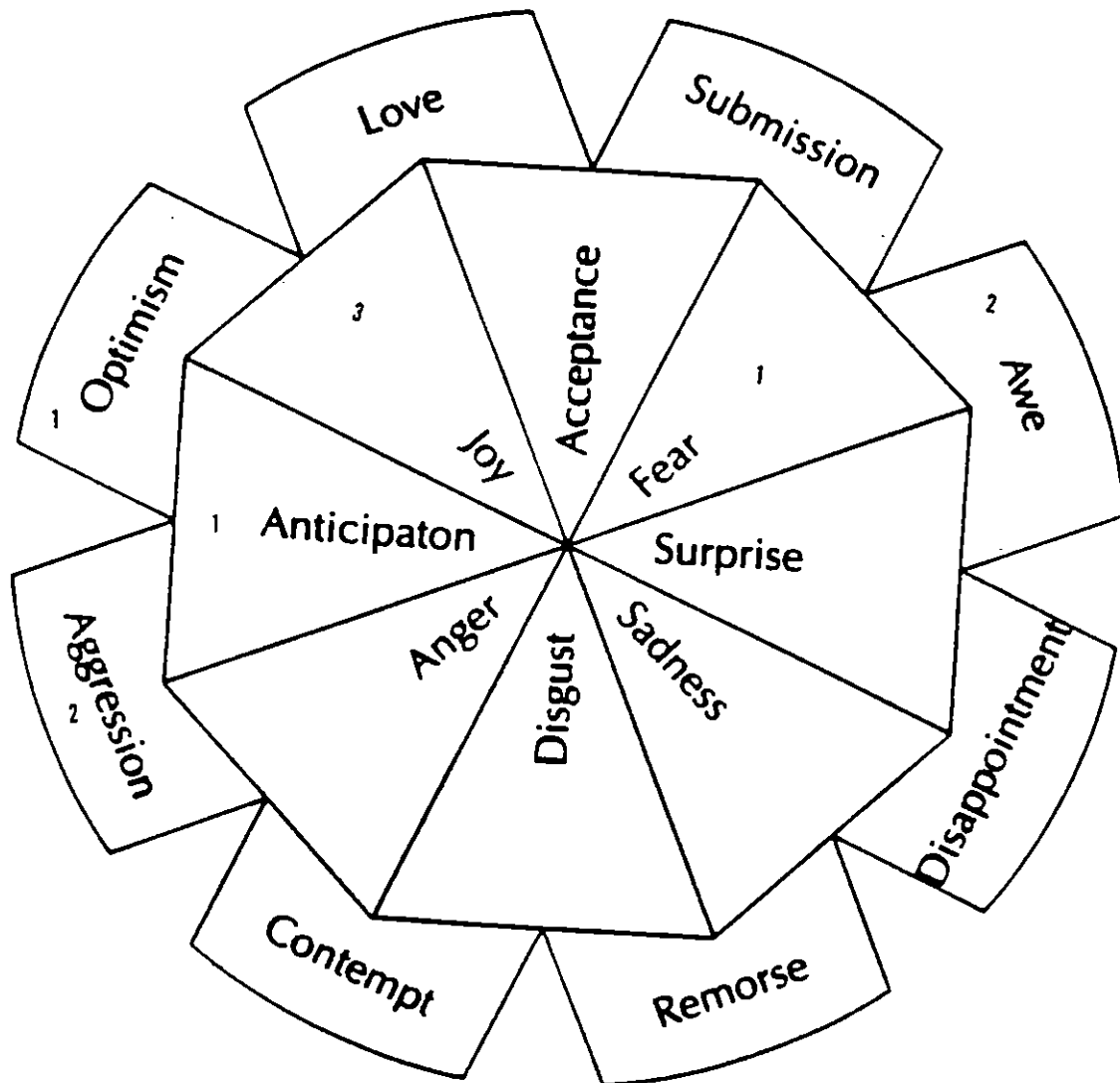Distribution of Emotional Responses to Image 2

Figure 3

Distribution of Emotional Responses to Image 3

Figure 4

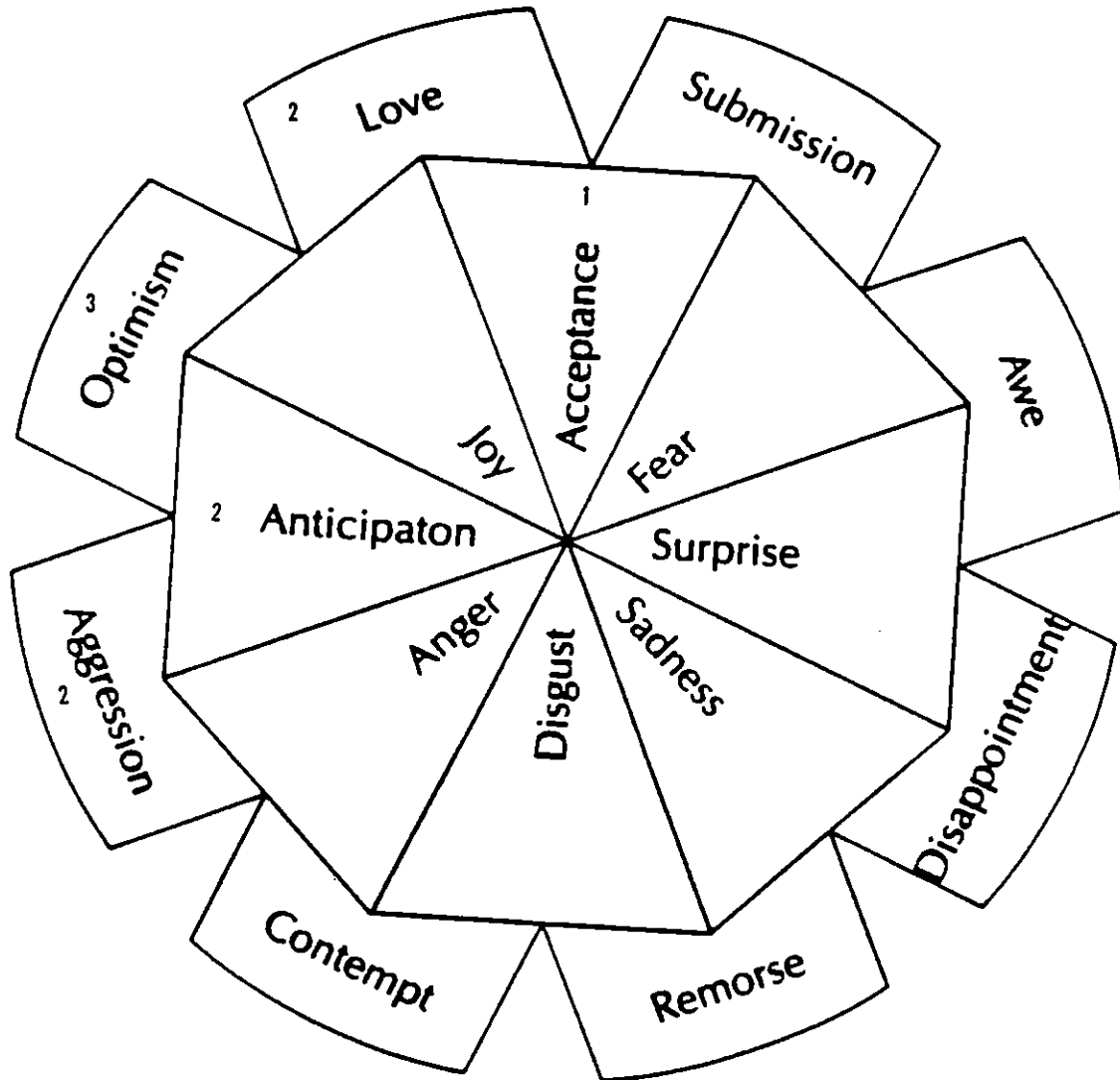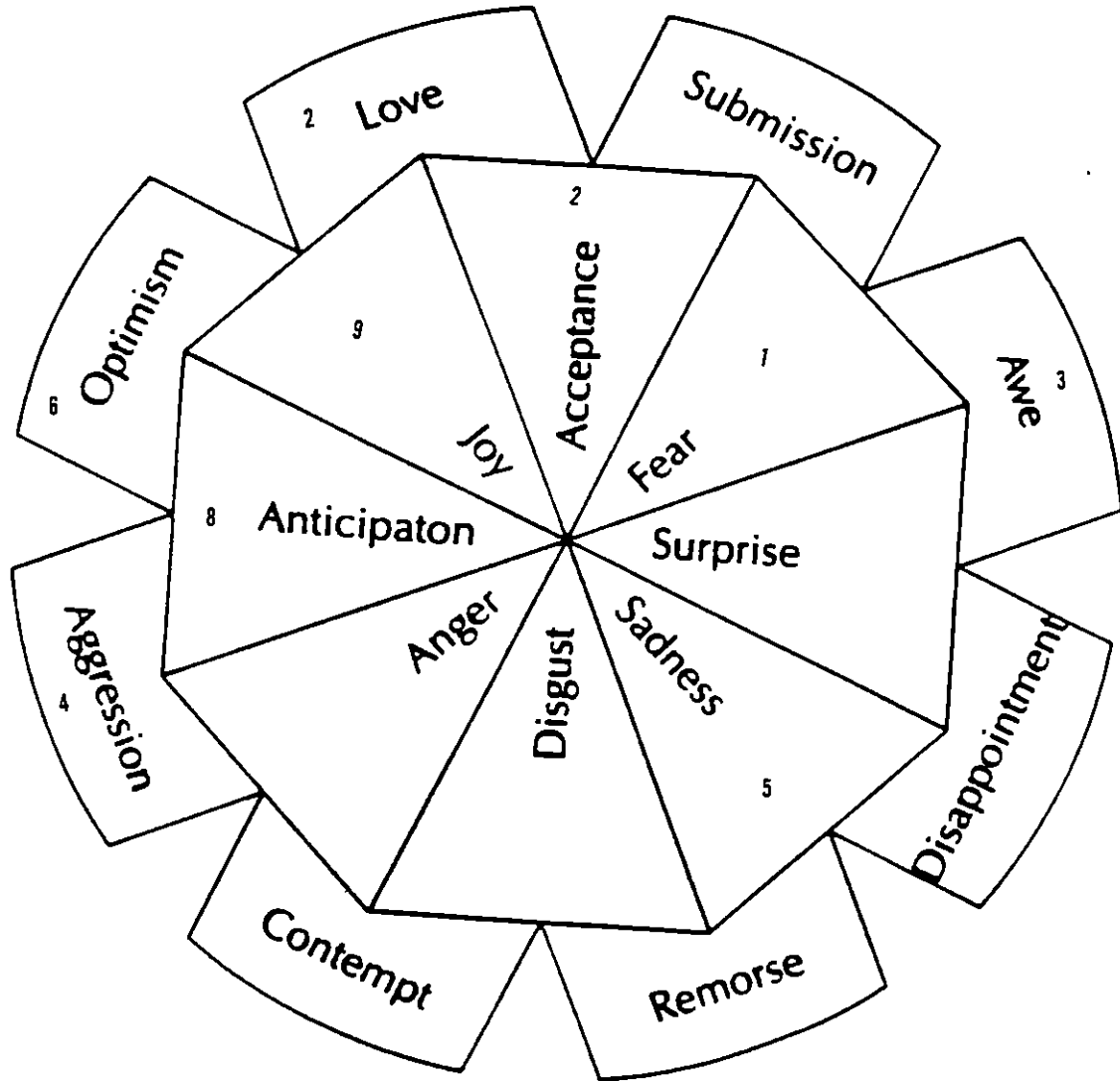Distribution of Emotional Responses to Image 4

Figure 5

Distribution of Emotional Responses to All Images

DISCUSSION

The subjects did in fact state emotional themes in response to question 2, which asked what the image evoked in them. When subjects were asked to name an emotion (question 4), results indicated that responses were image/card-specific rather than subject-specific. Agreement across image was greater than agreement across subject. Table 6, page 35, shows which themes were selected for each image. Responses are divided according to gender. There were some differences in individual responses, and some differences by gender.

Image 1 pulled for the primary emotions of sadness and anticipation, with only one secondary response of optimism (which lies adjacent to anticipation on Plutchik's emotional wheel). It is the researcher's opinion that this image pulls for a subject's direction in life: Is the subject anticipating optimism or about to "jump off the edge" in sadness and disappointment. As stated before, the images are a starting point for that particular discussion with a subject or client.

In Image 2, the underwater swimmer, there is a feeling of motion and aliveness. Perhaps it was this obvious aliveness and nudity that influenced the subjects to feel a sense of joy. The responses to this image were the most image-specific of all the card responses. It may also be that because it was the second in the sequence, subjects sensed that the previous "jumper" had survived the dive into the water and was definitely still alive. The was mentioned off-handedly by one subject. Water and free movement might evoke a return to the safety of the womb. Not one subject in this study mentioned a sense of death, drowning, or suffocation.

Image 3 may be a metaphor for power. This image was more ambiguous photographically than the other three images. A sense of uncontrollable motion and an abundance of color in the red, orange, and yellow tones may have tapped into the core of the subjects' "alert" response. All subjects saw motion in Image 3. How they perceived this emotion was indicated in their responses to question 4 (see Table 4, page 32). These

responses might indicate a person's individual attitudes toward power. Do they fear it, tame (control) it, or enjoy it? While the emotional responses to this card were slightly different, seven of the ten responses were clustered with connecting emotions on Plutchik's Emotional Wheel (see Figure 3, p. 39).

In Image 4, it is noticed that no male subjects indicated love responses. They indicated feelings of competition, contest, aggression, and optimism (see Table 5, page 34). Perhaps this indicates whether they thought they would win the contest or be defeated by the aggressor. Are the male subjects not seeing sexuality, or are they masking sexual feelings? Perhaps the fact that the researcher was female inhibited their first response, or perhaps males, when they see an image of two figures, one behind the other, think of a race, contest, or threat of aggression.

For Image 4, one female subject (#1) indicated a sense of a contest in her response that it was a race about to start, but her emotional theme was anticipation. Subject 9 took a long time to respond to this image, and seemed quite anxious. The remaining four female subjects indicated a sense of love, caring, or sexuality, though only two females reported seeing a man and woman in the image.

None of the male subjects reported seeing any female in this image. Perhaps if the image were more clearly an image of a male and female, these male subjects would have indicated more love responses.

Observations and Suggestions for Further Research

As can been seen from Figure 5, page, 41, These four cards did not tap into the full range of emotions on Plutchik's emotional wheel. More cards need to be developed that evoke the emotions of submission, surprise, disappointment, remorse, disgust, anger, and contempt. Only one response of fear was obtained; perhaps one more image evoking this emotion could be developed. Perhaps some black and white images could be added, expanding the number of cards.

Responses to Image 1 might be combined with a psychological test of

optimism/pessimism. In a future study, a larger sample size could be used to confirm the card-specificity of Joy in image 2. Image 3 responses could be compared with some other test of subjects' attitudes toward power. Image 4 needs further study to determine whether the responses really are gender-specific.

The size of the images is considerably larger than materials used in other standard projectives. The researcher believes this should stay the same, as the size might contribute to the evoking of an emotion. During the testing experience, the researcher kept the image in full view of the subjects while they wrote their responses to questions 1-3. The image was then removed from their view while they were selecting the specific emotion from Plutchik's list, indicating that what was remembered of the image was the feeling evoked. It is the opinion of the researcher that this procedure should remain the same.

A major limitation of this study was the small sample size and self-selection procedure. The study could be replicated with more subjects, sampling a more diverse group. Future research might examine gender differences in responses. It is the opinion of this researcher that men and women do perceive differently when shown the same image. Understanding these differences could be useful not only in therapy, but in other areas as well, such as advertising and the law, where it is important to know how individuals perceive images emotionally.

Since the responses were image-specific rather than subject-specific, it seems that if an image is manipulated well enough, the photographer's "equivalence" can be evoked in the person viewing the image. Future studies might explore the issues of how various images pull for certain themes. A related question, not explored in this study, regards whether the emotional themes evoked relate to core issues for the subject, or to early psychological conflict. If this is the case, the Walker Visuals, or similar photographic images, can have application in a wide variety of therapeutic situations.

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Appendix A

Request for Volunteers

The following announcement will be sent to the Palo Alto Weekly and posted at bookstores in Palo Alto:

Researcher needs volunteer participants for graduate research project to study responses to photographic images. Must be over 18 years of age. Study will take approximately one hour. Some background information will be asked; all information is anonymous and confidential. If you would like to participate, call (voice mail number) or write this newspaper care of box (assigned number).

Appendix B

Consent Form

Informed Consent Agreement

I, _____, hereby agree to participate in the research study being conducted by Cheryl Aymerich. I understand that I will be shown four photographs and be asked to write my responses to questions after having looked at the photographs.

All information pertaining to me and all contacts I may have with Cheryl Aymerich will remain confidential, and my basic human rights will be protected and preserved at all times. I understand that I am free to withdraw my consent and to discontinue participation at any time.

_____   _____

Date   Signature of Participant

_____   _____

Date   Signature of Interviewer

Appendix C

Demographic Questionnaire

Background Information

Age: _____   Gender: ____ Male   ____ Female

Ethnicity:

____ African-American

____ Asian-American

____ Caucasian

____ Hispanic/Latino

____ Other (Please specify: _____)

Occupation: _____

Educational Level (check highest level completed):

____ Elementary School

____ High School

____ Associate of Arts Degree

____ Business or Technical School

____ Art Institute

____ Bachelor's Degree

____ Master's Degree

____ Doctoral Degree

Present Marital Status:

____ Married

____ Living with Significant Other/Partner

____ Single, never married

____ Divorced/Separated

____ Widowed

Appendix D

Response Sheet

Subject # _____   Image # _____

1. What do you see?

2. What does this image evoke in you?

3. How would you title this image?

Subject # _____   Image # _____

From the following list, circle the word that best describes your emotional feeling to this photograph.

Anticipation   Contempt

Anger   Remorse

Disgust   Disappointment

Sadness   Awe

Surprise   Submission

Fear   Love

Joy   Optimism

Acceptance   Aggression

Appendix E

Plutchik's Theory of Emotions

The list of 16 emotions on the response sheet are taken from Plutchik's

theory of primary and secondary emotions. Plutchik indicates there are eight

primary emotions and eight secondary emotions. The secondary emotions are a

combination of the eight primary emotions. The eight primary emotions are

anger, disgust, sadness, surprise, fear, joy, acceptance, and anticipation. These

emotions combine into secondary emotions in the following manner:

Anger	combined with	Disgust	=	Contempt
Disgust	combined with	Sadness	=	Remorse
Sadness	combined with	Surprise	=	Disappointment
Surprise	combined with	Fear	=	Awe
Fear	combined with	Acceptance	=	Submission
Acceptance	combined with	Joy	=	Love
Joy	combined with	Anticipation	=	Optimism
Anticipation	combined with	Anger	=	Aggression.