

METAPHORICAL RESPONSES TO VISUAL STIMULI

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PREFACE

This study is concerned with the external features of buildings that constitute style or design of the façade and how people respond to various styles or designs of buildings. It specifically uses the metaphoric process of describing or explaining one thing through the terms of another to devise a measurement of these responses. This type of procedure, potentially, can lead to new perspectives in understanding behavior to and in environment.

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CHAPTER I

INTRODUCTION

Does the exterior visual appearance of a building have meaning beyond a functional or literal meaning as shelter? Is appearance more than frosting on the cake? Can visual appearance be integral with meaning? Does meaning of a building vary from person to person? Do meanings vary chaotically and capriciously like the White Rabbit's words that meant whatever he wanted them to mean (Carroll, 1946)? Or does the exterior visual appearance of a building present some commonalities, or universalities of meaning? If so, could these commonalities be measured and by what process could such meanings be measured?

Mumford (1924), assessing American building, stated that it was difficult to tell if classical visual appearance of buildings of the Jeffersonian era reflected social changes or were an incentive to change. The fledgling democracy needed overt measures to prove to both domestic constituents and foreign observers that the new democracy was working efficiently and in an orderly manner. However, the formal classical architecture so paralleled the classical system of rational thought that Mumford was prompted to speculate there was reason to question which was cause and which was effect. Had thought patterns caused the building appearance or was it the other way around?

Fitch (1966), analyzing the effect of the "White City" of the 1899 Chicago World's Fair, said that the gleaming white architecture set the stage for subsequent American building that had no relation to the behavior Americans were experiencing through rapid industrialization, urbanization, and the proliferation of paper monopolies. Fitch meant that architecture contained certain meanings while experience held different meanings. Idea and image diverged in the White City whereas idea and image had merged in buildings of Jeffersonian's Washington.

A logical syllogistic method could be employed such as: This building is made of brick; bricks are strong material; therefore, this building represents strength. However, this method of organizing thinking about the visual appearance of a building seems incapable of producing numbers of responses that would not be absurd. Also, this method might measure the meaning of the visual appearance of a building that would not really reflect what people actually thought of the building appearance. It might impose responses consistent with the method but not consistent with people's "gestalt" reaction to the appearance of the building. A method that would allow a wide range of responses to building appearance yet still be within a coherent framework for interpretation might assess the meaning of visual appearance of a building to people. Such a method might allow an individual to express relationships between the meaning of the appearance of a building and other life experiences.

Could metaphor be used as a system of thinking that could be a tool for exploring the meaning the visual appearance of a building has for people? Metaphor has generally been a thinking process used

by philosophers, artists, and poets. During the 1930s and 1940s much was written about metaphor.

Little was published on metaphor in the 1950s but it enjoyed a brief popularity in the early 1960s. But, by the mid 1970s the concepts of metaphor began to be explored by sociologists, anthropologists, scientists, and educators as a creative method for understanding aspects of the outer world. It was because of an interest in metaphor and an awareness of the recent concern for expanding the uses of metaphor that this study was undertaken.

Purpose

The purpose of this study of metaphor and visual appearance of buildings was to identify a testing procedure using a metaphorical method to gather student responses that reflect attitudes toward the visual appearance of buildings. Much research of environment employs methods that examine directly component aspects, i.e., color, light, materials, space, and pattern. Rating scales have been devised to measure these component parts. However, few measures use comparative methods to examine attitudes toward visual appearance in relation to some other life experience. If comparative methods are used they are used within the same realm, i.e., is one color more appealing than another color? This study sought to sort-cross information; that is, to take information from one realm and use it to explain another realm. The method explored to utilize this sort-crossing was metaphor.

CHAPTER II

MEANING OF METAPHOR

Metaphor is usually thought of as a literary device mostly used by poets, sometimes used by writers of fiction, and almost never used by scientific researchers. A dictionary definition of metaphor generally defines metaphor as a word or phrase used to denote an object or idea it does not literally represent, such as, "The trees are re-appearing in poverty" (Stevens, 1967, p. 360). However, such a cursory look at metaphor is limiting and is almost completely misleading as to the scope of metaphor. The "figure of speech" image of metaphor is both uninformative and gives the impression that metaphor is an alternative to rational speech and thought (Leatherdale, 1974).

Metaphor is much more than a figure of speech. There are definitions which are more illuminating and express the diversity of metaphor. A definition which stresses the relational quality of metaphor is given by Wheelwright (1962, p. 29): ". . . any element in human experience which is not merely contemplated for its own sake alone, is employed, to intend, to stand proxy for, something beyond itself." A classical definition which stresses naming is that of Aristotle:

Metaphor (meta-phora) consists in giving the thing a name that belongs to something else, the transference (epi-phora) being either from genus to species, or from species to genus, or from species to species, or on the grounds of analogy (Turbayne, 1962, p. 11, quoting from Aristotle's Poetics).

Black (1962, p. 38) stresses interaction of two unlike components in the following definition:

In the simplest formation, when we use a metaphor we have two thoughts of different things acting together and supported by a single word, or phrase, whose meaning is a resultant of their interaction.

A definition which acknowledges the experiential aspect of metaphor is given by Olney (1972, p. 31):

Metaphor is essentially a way of knowing. Only by perceiving the relationship between this experience and another experience already placed, ordered and incorporated can one organize a new experience.

The concept of transference of meaning beyond a literal understanding is expressed by MacCormac (1971) that a metaphor is the juxtaposition of two elements. If interpreted literally this juxtaposition produces absurdity as in the example "Life is just a bowl of cherries." However, if one interprets "a bowl of cherries" as meaning all the good aspects of life, the meaning of the thought is not absurd. The integration of emotion and intellect in metaphor is expressed by Gordon (1961, p. 106), "Metaphor is an expressed or implied comparison which produces simultaneously meaningful intellectual illumination and emotional excitement." Finally, the aspect of unlike comparisons is addressed by Leatherdale (1974, p. 91), "Essential to metaphor is the comparison of things not normally compared and which are not literally potentially the same property."

From the preceding definitions one may speculate on the relational capacity of metaphor as an expression of the visual appearance of buildings and the meanings they have for people. Drawing from the broadened concepts of metaphor and the concepts of what the visual

appearance of buildings could mean, the following metaphors are possible: Visual appearance of a building could be seen as a remote unknown, as a myth one wants to believe, as alienation, as mechanization and dehumanization, as religious belief, as the rational mind, as democracy, as positive or negative values, as individualism, and as a democratic system.

From this expanded view, metaphor now can be seen as a tool for understanding how one experiences the world of which the visual appearance of a building is a component. One could hypothesize that metaphor can be used to interpret people's understanding of the visual appearance of a building.

Relationship and Equivalents

Metaphor involves thinking in relationship and it is the relational capacity of metaphor which allows it to be a method for understanding numbers of aspects of our environment, including visual appearance of buildings. Leatherdale (1974, p. 98) said

. . . somehow all meaning is grounded in or refers to (however indirectly) an actual sensual and physical experience of the world. This is but one aspect of the vacuity of merely verbal definitions. To put it another way, it might be said that in the last analyses, all meaning is ostensive, or to use different terminology, dependent on knowledge by acquaintance.

If knowledge is ostensive then metaphor can provide the means to find, in the search for equivalents, the very equivalents needed for understanding. The importance of understanding visual appearance of buildings may come not from a direct study of component parts such as space, light, color, scale, sound pattern, plumbing, landscaping,

or materials, but indirectly, through understanding some other "in place" meaning in people's life experience.

A number of authors have written about the search for equivalents as a means of understanding. Pepper (1942) writes of the root metaphor theory as a method for developing and clarifying world hypotheses. In Pepper's view there are three methods for forming world hypotheses. The first is the dogmatic method. In this method one arbitrarily states an hypothesis and defends it against all questions. The second method is the common sense method in which one makes an hypothesis after trying various ways of doing something and deciding by inductive reasoning that one way works the best. The third method involves examining a group of facts, comparing them to other selected facts which previously were understood, and making an hypothesis based on these comparisons. For Pepper the comparative method is the way large numbers of people organize experience.

The ways that people organize their experience on a less grand scale have been dealt with by a number of recent authors. Sapir and Crocker (1977) have applied metaphor to anthropological data as a means of understanding group orientations. They make the distinction between internal and external metaphors. Internal metaphors utilize shared features. In the statement, "this building is a dump," building and dump share a similar feature--messy. Or, in the statement, "this building is a gem," building and gem share a jewel-like quality. Information may be organized around the shared feature. External metaphors juxtapose two dissimilar entities, ignoring shared features if there are any and deriving similarities from relationships each has to its own domain. Superimposing a classic order of columns on

the façade of a single story tract home is an example of external metaphor. Understanding the juxtaposition must come from both house and columns because there is no shared feature.

Sapir and Crocker (1977) also state that the directional movement between the two elements of metaphor is bilateral. For example, this bilateral movement could be seen in commercial buildings. The business ethic may be the cause and the building may be the effect, or the building may be the cause and the business ethic the effect.

Organizing understanding of objects is much the same as organizing the understanding of activities, events, and ideas, according to Lakoff and Johnson (1980). The understanding of objects is characterized by multidimensional gestalts which emerge naturally from experience and is metaphoric understanding because two (and sometimes more) elements are included in the all-at-once dimension of the gestalt. Lakoff and Johnson (1980) state that these types of metaphorical meanings are irreducible and may not be separated into component parts for better understanding. Lakoff and Johnson (1980) believe that metaphor, more than being an organizing method for understanding experience, is a fundamental structure for thinking and acting and that the fundamental metaphorical structure for thinking and acting is consistent with fundamental cultural values.

The way information is learned and valued in culture has been examined by Gordon (1961, 1966) and Samples (1976). The thesis of Gordon's The Metaphorical Way of Knowing (1966) is that all knowing comes from comparisons. The structure of the universe can be understood through an analogue, the amoeba. Gordon (1961) asserts that metaphorical knowing is an integral characteristic of human thought

but that this characteristic is not evidenced in people who live in a society that stresses rational thought. Rational knowing denotes literal non-metaphoric knowing and metaphor denotes comparing knowing (Samples, 1976). Learning by the rational method of knowing has created what Samples (1976) calls the rational neurosis. Metaphorical knowing, according to Samples, is equivalent to left-handed knowing and rational knowing is equal to right-handed knowing.

Knowing by relationship requires the involvement of more than one component. Crucial to metaphor is the concept of two elements and transference of meaning from one element to the other. MacCormac (1971) states that a metaphor juxtaposes two elements and also two meanings; the literal meaning and the transferred meaning. If one uses only the literal meaning an absurdity is produced.

The two elements are referred to as vehicle and tenor by Richards (1956). The vehicle is considered the main subject while the tenor is considered the secondary, or imagined, subject (MacCormac, 1971). The two subjects are not always constant. Which element is vehicle and which element is tenor is determined by context. If one says, "this building is a gem," either building or gem may be vehicle, depending upon the context in which it is used. According to Ramsey (1972), the two elements and the contexts in which they are used are held together by metaphor. The bilateral nature of metaphor allows meaning to be transferred within each metaphor or to change altogether, depending upon the context in which the metaphor is used. Therefore, innumerable relationships are possible. Certain cultural or subcultural groups may produce metaphors not produced by other groups.

Although most authors stressed the importance of two elements as necessary to metaphor, Gordon (1961) especially stressed the value of metaphor in finding similarities in grossly dissimilar elements. He included anthropomorphisizing inanimate objects as being empathic metaphors. This concept allows an inanimate object to be characterized in animate terms.

The transference of meanings from the animate to inanimate objects includes transferring cultural values from thing to thing or from person to thing. Lakoff and Johnson (1980) state that cultural values are coherent with metaphorical concepts held by a group and are not independent of cultural values. The values, such as those developed by Maslow (1967), that one ascribes as necessary to self-actualizing groups of individuals could be transferred to values necessary for the visual appearance of a building to be successful.

The transference of meaning across media to further understanding of the visual object environment can be a function of metaphor. Lewis (1961) gave an example of this when he stated that modern art [and architecture] failed to include both the elements of the specific and the universal. Buildings, painting, and sculpture that depend on the universal for their meaning may find their meanings lost in generalities. Those buildings, paintings, and sculptures that deal only with the specific lose their meaning in the myopic.

The interpretation of what one sees visually has been dealt with by Turbayne (1962). He states that when one talks about what one sees, one really is talking about the interpretation of what is seen. There is a gap between the literally seen object and the significance of the object. If the connection between the two is not innate,

it must be learned. Turbayne (1962) believes that the physical object viewed is often overlooked for its own sake and attention transferred to the thing signified. Most of western thought drops the thing in exchange for the thing signified which results in the loss of metaphor. Therefore, meanings for the visual appearance of a building may be set arbitrarily because comparisons are not made between object and its signification.

Turbayne (1972, p. 105) is also one of a few to attempt an analogy between language and vision, "Once I make believe that vision is a language, I can apply as many features as I need of the latter to the former in order to illustrate how we see."

Arnheim (1969) believes that one sees in relationships that are not arbitrary but are rooted in Gestalts' or simultaneously perceived complete patterns or maps. The laws of association work to make connections between items which resemble each other in some way or appear in relationship over a period of time. The mind and the eye perceive a physical image, compare the image with other information already held, and arrive at a meaning or meanings for the visual object. Arnheim's thesis is that seeing is thinking. Shahn (1957) states that form is the shape of content. Forms arise from the desire to recreate ideas, attitudes, and beliefs into physical entities that will not depart fitfully as they do from the mind. Ideas endure as actual things. Shahn believes that visual form is a metaphor for content that is determined by time, geography, culture, and the individual. An example Shahn uses is the relationship of abstractionism in art to existentialism in Jackson Pollack's paintings where paint is the form of content. Drawing from Shahn's thinking one could say that

the visual appearance of a building is a metaphor for content that is determined by a number of considerations.

Miller (1980) and Arnheim (1969, 1974) have studied how people understand metaphor. Knapp (1960) used metaphor to study people's attitudes toward time. In a second study, Knapp (1960) examined six areas of life experiences; success, time, death, conscience, love, and self-image, using metaphor scales because of the capacity of metaphor to discriminate attitude differences among subjects. Knapp selected 25 metaphorical images for each of the six life experience categories from books of quotations and by asking colleagues and friends for metaphors they thought were appropriate. His subjects were asked to read the 25 metaphors for each life experience and rate each metaphoric relationship to the life experience on a seven point scale. Knapp believed the significance of his studies of metaphor lay in the use of a new device, semi-projective in nature, for the evaluation of attitudes toward life orientation experiences.

Asch (1958) used a metaphor scale to measure attitudes in a cross-cultural study. He found that attitudes are expressed across cultures by similar metaphors, suggesting that commonalities of attitudes may be assessed by the use of metaphorical thinking.

Problems With Metaphors

There are three problems with metaphors that need to be mentioned. First, metaphor and symbol are not the same. According to MacCormac (1971) certain metaphors are rooted in our experience. When such metaphors become commonplace and no longer carry both literal and transcendent meanings they become symbols. A symbol represents something

else and there does not need to be specific analogy between the symbol and the thing symbolized. In metaphor, however, there must be an integral analogy between the two elements. For example, the skull and crossed bones on seventeenth century New England gravestones are more apt to retain their meaning as metaphors of death because there is considerable organic analogy to the death state. MacDonald's arches may represent food but because there is no direct analogy between arches and food the metaphor may become commonplace over time and become symbol.

Second, metaphors do not have to be true to have meaning. The truth or falsity of a metaphor may be independent of its meaning. In fact, according to Olscamp (1970), some culturally generated metaphors may function better if they are false. The design concept, less is more, may or may not be true, but may function adequately in a cultural group.

Third, the "rules" of metaphor have been made primarily by the literary and philosophical disciplines. Studies of visual metaphors have been speculative and experimental and have not yielded information which could serve as a basis for scientific investigation of visual metaphor. Those who study visual metaphors must use the rules of other media and they need to perform the metaphorical transfers which they seek to explain. Sapir and Crocker (1977) and Lakoff and Johnson (1980) have applied the ideas of metaphor as analogue to anthropological and cultural data. Pepper (1942) used metaphor as a root theory for hypothesizing world views. MacCormac (1971) applied metaphor as a method for organizing information, and Gordon (1961) and Samples (1976) explored metaphor as a learning tool. Arnheim

(1969, 1974), Shahn (1957), and Turbayne (1962) are among the few who have discussed metaphor in the context of visual appearance.

Summary

Metaphors help one to understand information received from the environment. A lesser known aspect may be understood by comparing it to a more known aspect. Through metaphor the unfamiliar is made familiar. The relational capacity of metaphor allows it to be a tool for sorting information across media.

According to Weissman (n.d.), form is not a mere collection of functional parts any more than a person is a collection of arms, legs, head, and body. To have meaning, form transcends the literal into a whole that is more than a jumble of parts. The visual appearance of a building is the carrier of metaphorical information from which the viewer draws analogies. The collection of parts and materials that make up a Victorian Queen Anne house are given whole meaning by the viewer. This meaning is more than the sum of parts and materials. For a number of viewers the Victorian Queen Anne home may be a metaphor of romance, a simple life, or a carefree life.

Although different people may have different metaphors for a building, in general, metaphors are shared by a culture group. For most Americans a state capitol is a metaphor for democracy rather than tyranny. A building which has a massive and angular shape and is made of solid and heavy materials may be a metaphor for despair or authority but will be seen by most people as only one of the two.

The transfer of meaning passes from one realm to another. Goodman (1976) says that pictures express sounds or feelings more than

they express colors. It is not enough to say that if a building is sad it must be sad. "Establishment of the referential relationship is a matter of singling out certain properties for attention of selecting associations with certain other objects" (Goodman, 1976, p. 88). If a government building is a metaphor for democracy the relationship must be real for the viewer and not arbitrarily imposed. However, sometimes arbitrary relationships become integral. A parable of an oriental ceremony illustrates this (Shiff, 1978). Leopards break into a temple and lap up all the sacrificial wine. This event is repeated over a long period of time until the event is predictable and it is then incorporated into the ceremony.

However, if, over a long period of time, a building looks a certain way and holds a certain meaning, then this appearance and meaning are expected and the building's appearance loses its metaphorical associations and becomes a dead metaphor (MacCormac, 1971). A square shaped building with reflecting glass façade may become so incorporated into an equation with orderliness that its meaning becomes dogmatically assigned and one is not able to easily associate other façades with orderliness.

Once these metaphors become standardized (Shiff, 1978) it is not necessary to understand them as they are recognized by the majority of a group's members. New metaphors challenge the stability of a group and the older, more known metaphors are promoted as the most meaningful. A church designed to resemble a space station may not be accepted as holding religious meaning so much as Gothic-styled church buildings.

It would be of value to know what metaphorical meanings buildings convey to viewers. If it were known what image a building was projecting to viewers, then designers, planners, or architects would be better able to select the physical appearance of a particular building that would be coherent with viewers' attitudes and beliefs. If a building's appearance is a metaphor for impersonal authority to large numbers of viewers, the successful use of the building may be limited.

It is unrealistic to seek a single metaphor for each building but it is necessary to look for similarity and pattern in metaphors. One must look for the appropriateness of the relationships which are involved in visual appearance as metaphor. To compare Winston Churchill to a lion is more apt than to compare him to a lamb (Olscamp, 1970). To compare physical appearance of a building with the characteristics of a machine may not be so apt nor so potentially useful as to compare physical appearance of a building with the characteristics of a person.

What the physical appearance of a building means to viewers can be examined comparatively and by using the terms of one realm to explain another realm. As Shahn (1957, p. 122) stated ". . . style is the shape of one's meaning. It is the why of building, not the how."

Through metaphor one makes the conceptual leap to connect unlike information for better understanding. Through metaphor one orients himself to information received from the environment. Metaphor provides a framework for organizing attitudes, feelings, and beliefs that are consistent with culturally held concepts. How metaphor is used to respond to the physical appearance should expand awareness of cultural values and their relationship to the visual appearance of buildings.

The reason for studying visual appearance of buildings is that by relating visual appearance to another aspect of experience an orientation to the meaning of environment is made available that is not available by other devices that do not use comparison of unlike elements.

Metaphor Defined

Metaphor is a method of thinking. When a person uses metaphor he takes information he possesses about one aspect of life and applies it to another aspect for better understanding of the second aspect. The nature of the metaphor depends on what information the person has and what aspects he chooses to connect. But in a culture group most individuals hold information in common. Because of this, metaphors have a degree of universality that make them common to a group or subgroup.

Traditionally, metaphors involved naming one thing in the terms of another. But in recent rethinking of metaphor by scientists (Leatherdale, 1974), sociologists (Lakoff and Johnson, 1980), and anthropologists (Sapir and Crocker, 1977), definitions have expanded to include metaphor as model, as analogue, as similitude (likeness), and as comparison. However, metaphorical thinking still retains its "as if" quality, i.e., explaining one thing "as if" it were something else. For the purpose of this study metaphor is defined as thinking in relationships between the physical appearance of building and a selection of other life experiences.

CHAPTER III

TESTING

To obtain responses that would relate metaphorically the physical appearance of buildings to other realms, six tests were administered to selected groups of college students.

Samples

Tests one through five were given to two groups, a visually oriented subject matter class and a non-visually oriented subject matter class. The non-visually oriented group was a home economics education class in the College of Home Economics and the visually oriented group was a painting and drawing class in the Art Department. Both classes were at Oklahoma State University. There were 30 students in the home economics class and 25 in the painting and drawing class.

The first part of Test Six was given to 92 lower division humanities students at Oklahoma State University. The second part of Test Six was given to four upper division classes. These were an architecture class with eight students, an art class (drawing) with 14 students, a creative writing class with seven students, and a business (marketing) class with 18 students. For the second part of Test Six a total of 47 students were tested.

Visual Material

For Tests One through Five, nine buildings were selected. These buildings were all in Oklahoma City and were selected for their association with religion, culture, commerce, education, medicine, business, and government. The buildings were also chosen for the diversity of their physical appearance. The nine buildings, shown in Figures 1-9, were: the Oklahoma Theater Center, a downtown office building, Central Innovative High School, the activities building of First Christian Church, Baptist Hospital, the sanctuary of First Christian Church, Quail Springs Shopping Mall, Atrium Towers office complex, and the Murrah Federal Building.

The Oklahoma Theater Center is a controversial, contemporary assemblage of square and rectangular modules, ramps, water ponds, and glass enclosures. The office building is a 12-story building of reflecting glass curtained wall, broken in the center and both ends by 12-story brick piers. Central Innovative High School is an imposing stone Gothic structure with central crenallated tower. First Christian Church, activities building, is a circular building of vertical metal exterior wall units set at an approximate 45 degree angle around the circle. The rectangular entry and first floor are entirely of glass. Baptist Hospital and medical offices is a complex of buildings of a style which Whiffen (1969) termed "brutalism." First Christian Church sanctuary is a white hemispherical dome with glass walled entry and art deco spire. Quail Springs Shopping Mall, center section, is an angular glass curtained wall, fronted with a massive abstract metal sculpture and flanked by rectangular brick, windowless department stores. The Atrium Towers Complex is composed of preformed concrete



Figure 1. Oklahoma Theater Center, Sheridan Street, Oklahoma City, Oklahoma



Figure 2. Downtown Office Building, Main and Walker Streets,
Oklahoma City, Oklahoma



Figure 3. Central Innovative High School Building, North Robinson Street,
Oklahoma City, Oklahoma



Figure 4. First Christian Church, Activities Building, Walker and 63rd Streets,
Oklahoma City, Oklahoma



Figure 5. Baptist Hospital, Northwest Expressway, Oklahoma City, Oklahoma



Figure 6. First Christian Church Sanctuary, Walker and 36th Streets,
Oklahoma City, Oklahoma



Figure 7. Quail Springs Shopping Mall, Center Section, Memorial Road,
Oklahoma City, Oklahoma



Figure 8. Atrium Towers Complex, Grand and 63rd Streets, Oklahoma City, Oklahoma

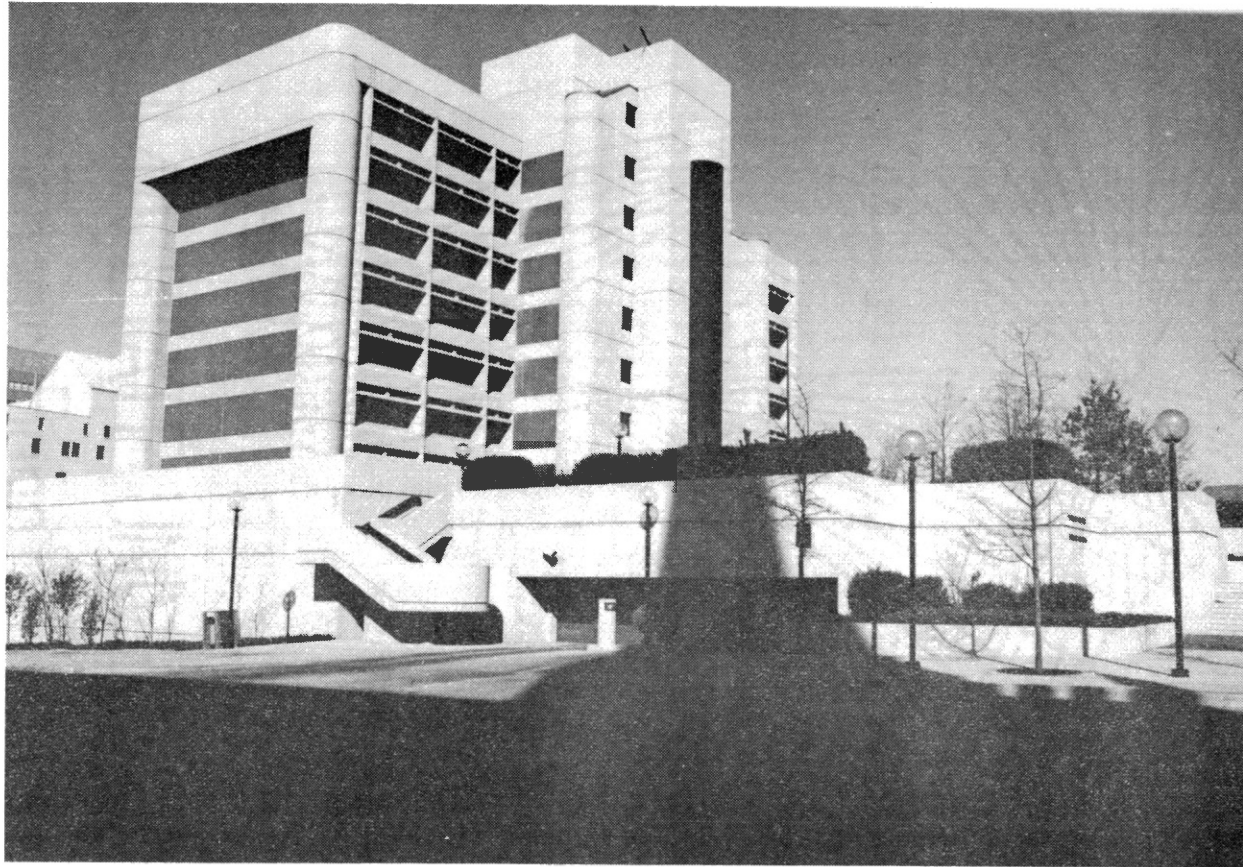


Figure 9. Murrah Federal Building, Robinson Street, Oklahoma City, Oklahoma

vertical walls alternating with glass curtained wall sections. A plain entablature bands the top. The Murrah Federal Building is eclectic styling incorporating both brutalism and international characteristics. Exterior walls are white and contrasted with dark glass. The entry is reached by tiers of steps interrupted by landscaped levels.

For Test Six, 14 buildings were used. Eight of the 14 buildings were the same as those used for Tests One through Five. The number of buildings was expanded to include a dwelling, a rural structure, and two views of the same building. One building was replaced because a large sign detracted from its visual appearance, and for another building a different view was used, also because a large sign detracted from its appearance.

The 14 buildings used for Test Six are listed below:

1. Oklahoma Theater Center, Sheridan Street, Oklahoma City
Oklahoma.
2. Office Building, Rear Elevation, Main and Walker Streets,
Oklahoma City, Oklahoma.
3. First Christian Church, Activities Building, Walker and
63rd Streets, Oklahoma City, Oklahoma.
4. Baptist Hospital, Northwest Expressway, Oklahoma City,
Oklahoma.
5. First Christian Church Sanctuary, Walker and 36th Streets,
Oklahoma City, Oklahoma.
6. Quail Springs Shopping Mall, Center Section, Memorial Road,
Oklahoma City, Oklahoma.
7. Atrium Towers Complex, Grand and 63rd Streets, Oklahoma
City, Oklahoma.
8. Murrah Federal Building, Robinson Street, Oklahoma City,
Oklahoma.
9. Dwelling, Heritage Hills, Oklahoma City, Oklahoma.

10. Office Building, Front Elevation, Main and Walker Streets, Oklahoma City, Oklahoma.
11. Lee Way Freight Building, Grand and 63rd Streets, Oklahoma City, Oklahoma.
12. Emerson School, Walker Street, Oklahoma City, Oklahoma.
13. Baptist Church, Downtown Oklahoma City, Oklahoma.
14. Arcadia Round Barn, Arcadia, Oklahoma.

The additional buildings are shown in Figures 10-16.

For Tests One through Five each student was given a xeroxed copy of a photograph of each of the nine buildings. The xeroxed copies were numbered in the lower right hand corner.

For Test Six color slides of the 14 buildings were shown to the students. A specific amount of time was allowed for the presentation of each slide and the number of each slide was announced as each slide was shown.

Description of Tests One Through Six

The forms used for all tests are shown in Appendix A. Test One was a word association test. There were no restrictions placed on the types of word associations to be made by the subjects. Test Two asked the students to associate a specific list of values with the visual appearance of two of the nine buildings and to rate them on a seven point scale. Test Three asked the students to respond with metaphors but the type of metaphor was not specified. Test Four asked the students to respond to the visual appearance of each of the nine buildings with a metaphor of an activity for each building and then to rate the appropriateness of the relationship between activity and visual appearance. For Test Five only the students in the painting and

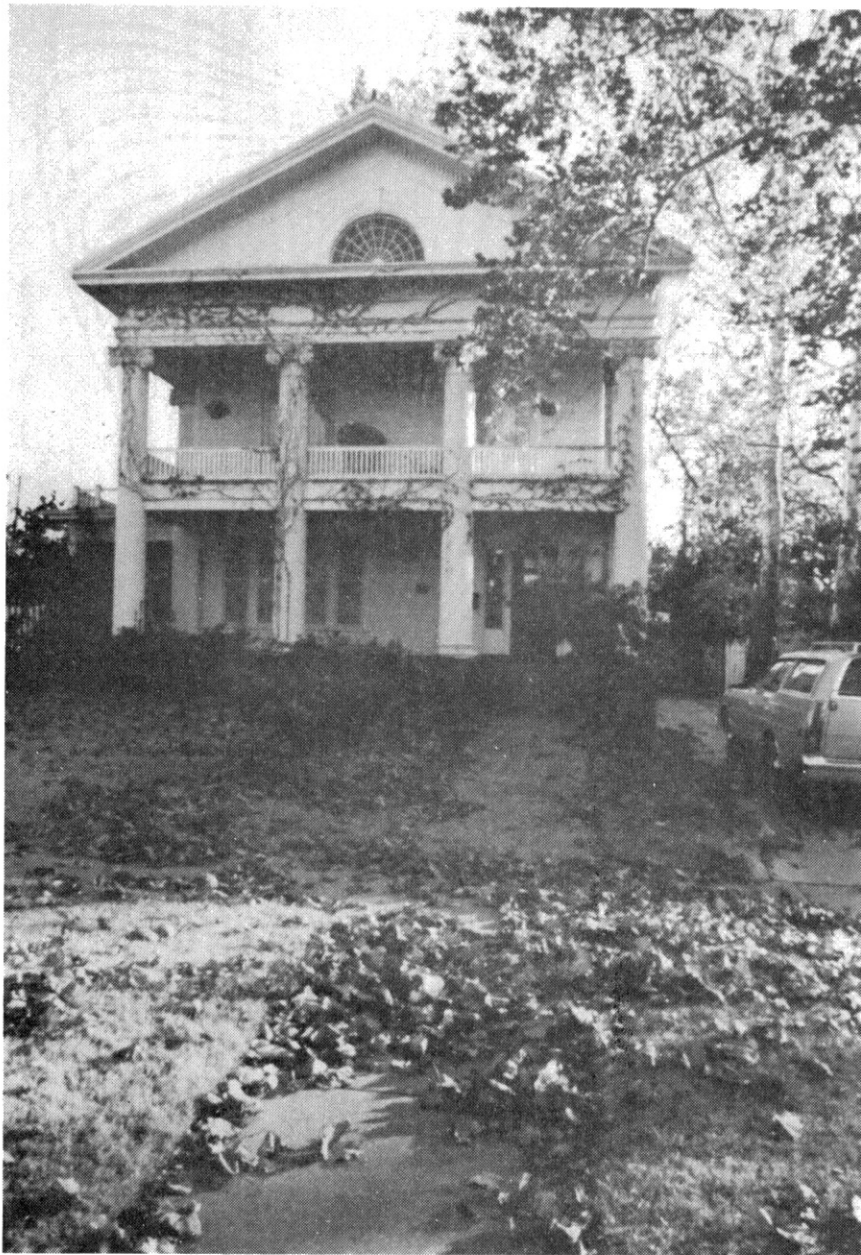


Figure 10. Dwelling, Heritage Hills, Oklahoma
City, Oklahoma



Figure 11. Office Building, Main and Walker Streets, Oklahoma City, Oklahoma

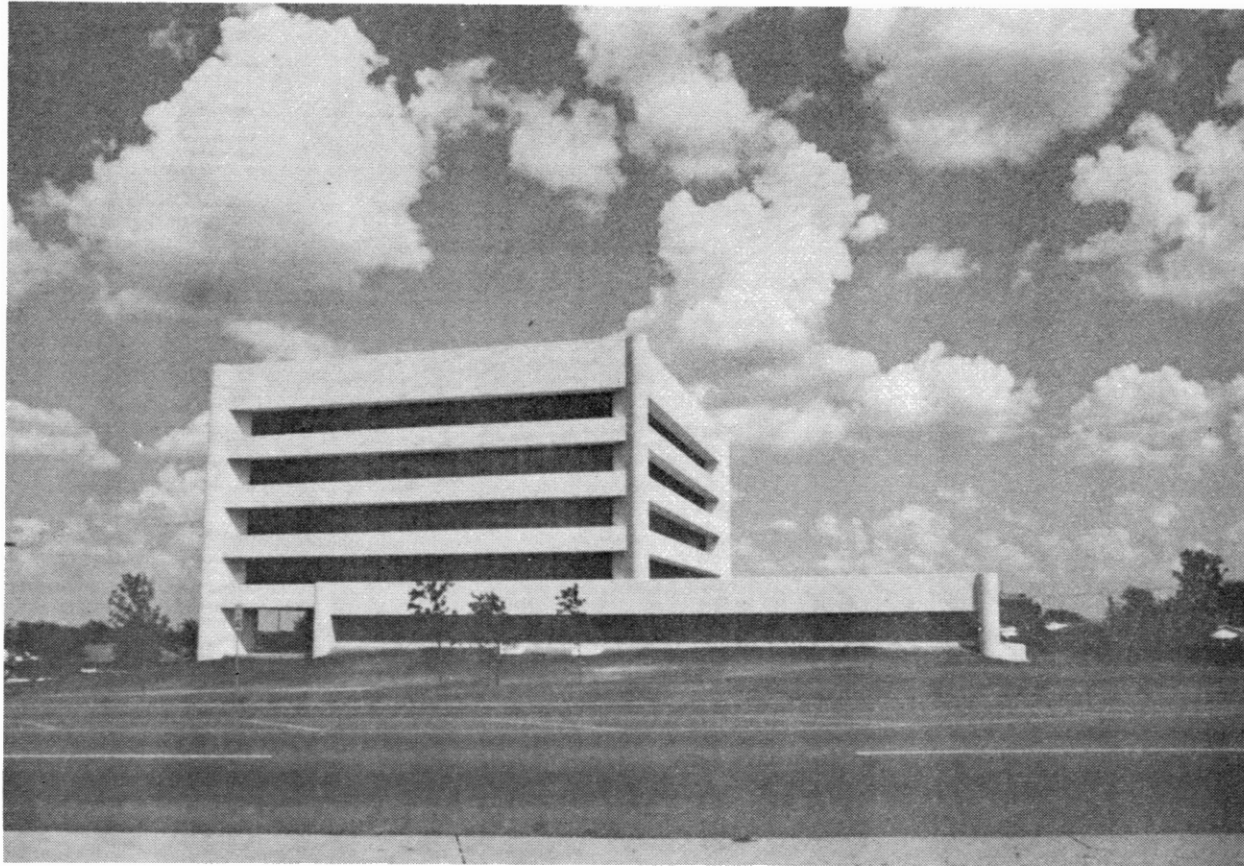


Figure 12. Lee Way Freight Building, Grand and 63rd Streets,
Oklahoma City, Oklahoma



Figure 13. Emerson School, Walker Street, Oklahoma City, Oklahoma

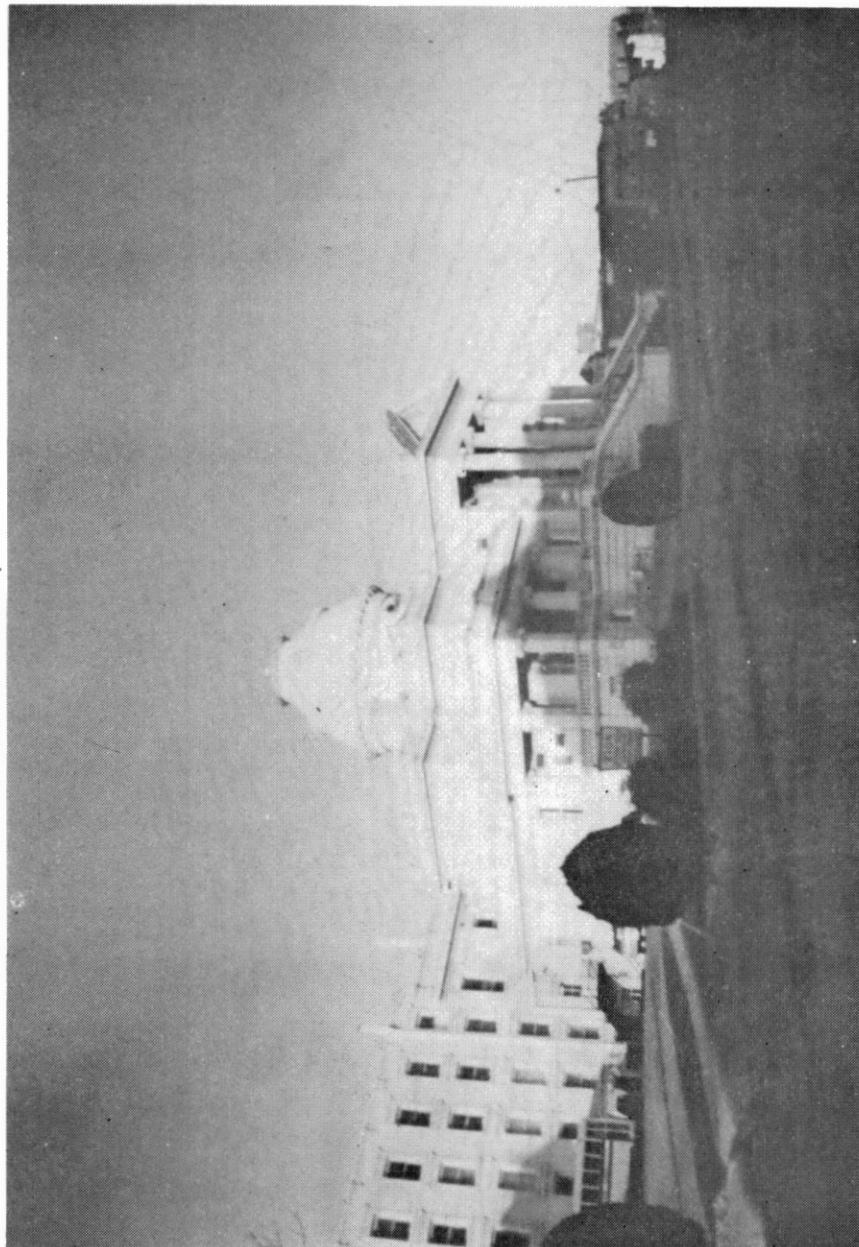


Figure 14. Baptist Church, Downtown Oklahoma City, Oklahoma

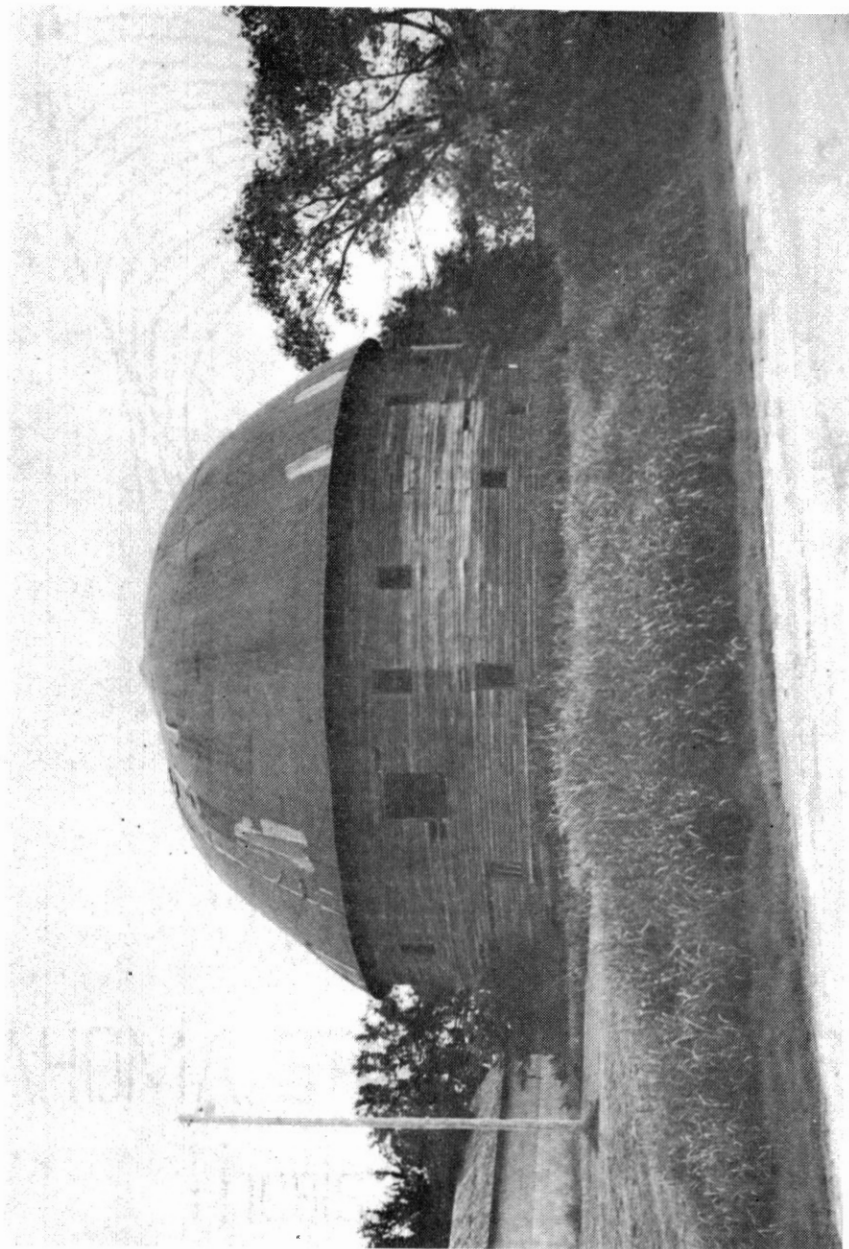


Figure 15. Arcadia Round Barn, Arcadia, Oklahoma

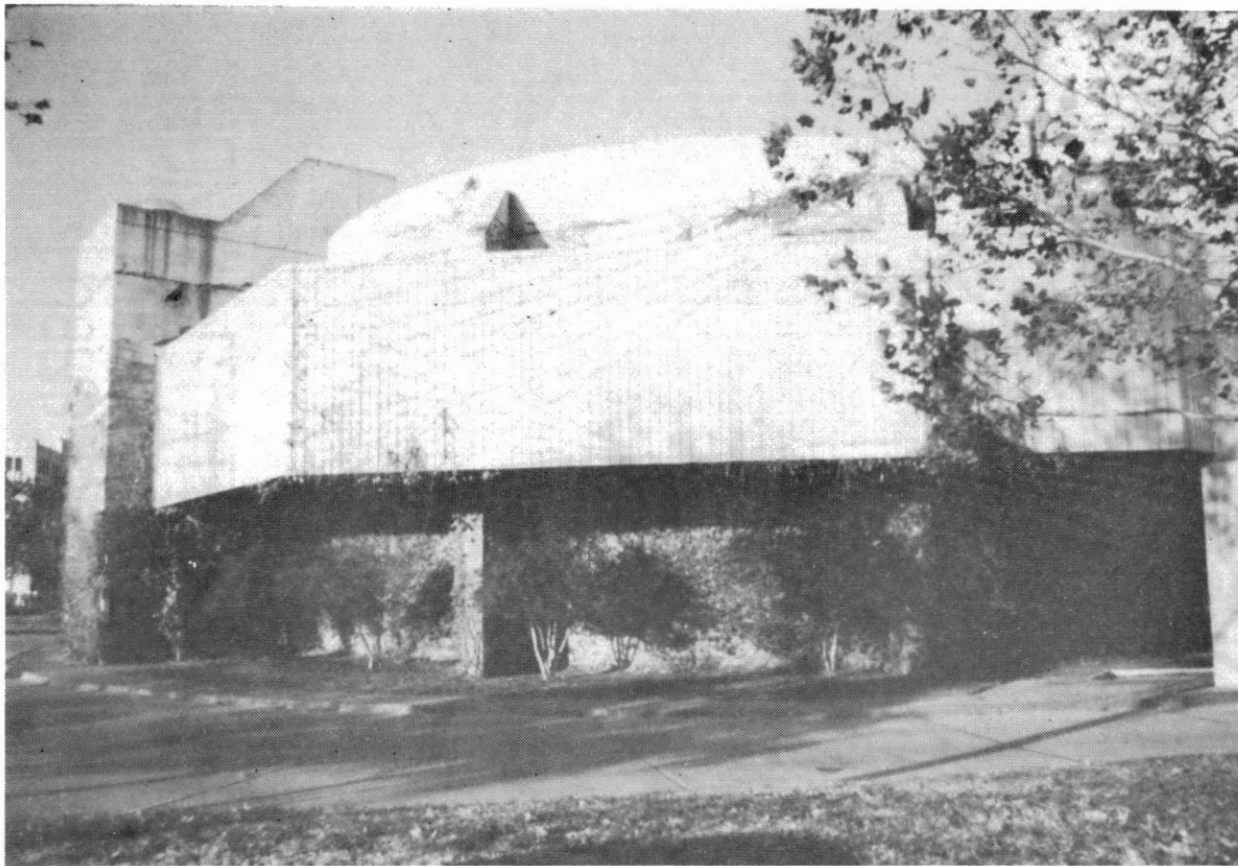


Figure 16. Oklahoma Theater Center, View from California Street,
Oklahoma City, Oklahoma

drawing class were asked to respond to each building with a metaphor of personification. This focused and limited the metaphors associated with the visual appearance of the nine buildings.

Test Six included two parts. For part one, the humanities students were asked to respond to each of the 14 slides of buildings as though the buildings were persons. For the second part of the test students from business, art architecture, and creative writing were given a list of seven metaphors for each of the 14 buildings. These metaphors were selected from the metaphors generated by the 92 humanities students who completed part one. The students were asked to choose one of the seven metaphors for each building that they felt associated most closely with the physical appearance of the building.

Procedures for Administering the Tests

The procedures for administering Tests One through Five to the painting and drawing class and the home economics education class were similar. The tests were administered at the beginning of the class period. Each student was given a set of the numbered, black and white, xeroxed copies of photographs of the buildings. They were told the tests were part of a study to gather responses to the physical appearance of buildings.

The form for Test One, word association, was distributed to each student first. Instructions were given verbally. The students were asked to look at the pictures of buildings and then as quickly as possible to write a word or phrase they associated with the building on the corresponding line on the test form. When the students had completed Test One, Test Two was distributed and instructions appropriate

for Test Two were given orally. This procedure was followed for the five tests. At the finish of the testing time response forms and xeroxed copies were collected.

For part one of Test Six the following procedure was used. Color slides of the 14 buildings were used. The projection equipment was set up before the class period began. As the humanities students entered the room they were given the test form and asked to provide the biographical data requested. When this was completed the following instructions were given verbally to the students:

This is a test to measure how you respond to your environment. This will be done through the use of metaphor. Do you know what metaphor is? It is a method of explaining and describing one thing in terms of another in order to clarify both, and especially the one which is the least understood. For example, a hard rain is described as 'raining cats and dogs.' I want you to look at each slide and respond verbally in the correct space to each picture of a building. I want your responses to describe and explain each building as though it were a person. For example, you might describe an old looking building as an elderly man. Please give the first response you think of. Do not take time to try to think of a right answer. I will say the number of each slide when I change the slide so you will be sure to put your response in the correct space. Now let us begin.

The procedure for part two of Test Six was the same as for part one, except that the verbal instructions were as follows:

This is part of a study to measure how people respond to their environment. The technique used for this particular study is metaphor. A metaphor is a method of describing and explaining one thing in terms of another. For instance, 'it is raining cats and dogs' describes a pouring rain. Previously, 92 students were shown 14 slides of buildings and described each building as though it were a person. From these 92 answers, seven were chosen using a pre-selected set of criteria. I am going to show you the same 14 slides of buildings. I want you to read the seven metaphors for each building carefully, choose the metaphor that you think describes the building best, and check that answer.

The students were then given approximately 45 seconds to mark their answer for each building.

Discussion of the Six Tests

Test One

Tables I through IX show responses to Test One. In order to organize the responses from the disparate words and phrases, the responses were categorized by function reaction, aesthetic reaction, and intellectual and emotional reaction. The decision as to appropriate categories was made after examining all responses. This examination showed that many responses involved building use. These were listed under the term "function reaction." Other responses referred to building appearance. These were listed under "aesthetic reaction." The remainder of the responses appeared to be the result of an intellectual and/or emotional response. These were listed under "intellectual/emotional reaction." The data so categorized suggested some similarities, differences, and emphases between the two groups of students, as well as within each group.

For building #1, the home economics students showed a greater interest in function than the art students. The responses of the home economics students in the emotional/intellectual reaction category were negative, whereas the art students' responses were positive and related to pleasant associations. Aesthetic reactions of the home economic students and the art students were in terms of shape and time; however, the home economics students thought the building odd, whereas the art students felt the building expressed bleakness. For both groups, responses to visual appearance appeared to be more negative than positive.

For both the art and non-art group, building #1 was a metaphor for the contemporary with emphasis on squareness of shape. For non-art

TABLE I
RESPONSES TO TEST ONE: BUILDING #1,
OKLAHOMA THEATER CENTER

Function Reaction	Aesthetic Reaction		Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)			
theater (4)	ugly	ostrich-shaped	cheap
hospital	boxy	ugly	congested
movie	awkward	odd	crowded (2)
bank	new	weird	blurred
park	plain	mess	uninviting
plumbing	modern (2)	dark	
		open	
b. <u>Painting and Drawing Class</u> (N=25)			
entertainment	tree	gray	afternoons
air condition- ing	plain	cube	fun
	bleak	darkness	Saturday
	dirty	out-of-place shapes	spring
	cold	straight	
	square (2)	boxes	
	modern	cubicles	
	ordinary		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE II
RESPONSES TO TEST ONE: BUILDING #2,
DOWNTOWN OFFICE BUILDING

Function Reaction	Aesthetic Reaction		Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)			
bank	mirrors	reflection (2)	powerful
OKC-Dallas (3)	modern (2)	formal	classy
parking	shiny (2)	neat	distinguished
executive	pretty	tall	hot
offices (2)	glass	fancy	metallic- monster
medicine	skyscraper		
	vision (re- flecting qualities)		
b. <u>Painting and Drawing Class</u> (N=25)			
bank	grid	reflection (2)	Erickson
downtown (com- mercial)	modern	glass (3)	winter
	simple	rectangular	
work (2)	modern	mirror	
	block	huge	
	soaring	modern art	
	attractive	sleek	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE III
 RESPONSES TO TEST ONE: BUILDING #3,
 CENTRAL INNOVATIVE HIGH SCHOOL

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Reaction	
a. <u>Home Economics Class</u> (N=30)			
university (5)	Gothic (2)	old (4)	England (2)
castle	artistic	ancient	majestic
academic		histori- cal (2)	classic
school		unique	medieval
O.U. Library		majestic	imposing
Roman cathedral		powerful	
church (2)			
b. <u>Painting and Drawing Class</u> (N=25)			
O.U.	Gothic	medieval	sturdy
castle (2)	Baroque	old (4)	Ivy League
village	structure	austere	original
church		scary	summer
library		colonial	ancient
		character	knowledge

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE IV
 RESPONSES TO TEST ONE: BUILDING #4,
 FIRST CHRISTIAN CHURCH,
 ACTIVITIES BUILDING

Function Reaction	Aesthetic Reaction		Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)			
activities	round		weird (2)
attractive library	van		confusing
auditorium	massive		outrageous
bank (3)	modern (2)		odd
coliseum	building		unusual
power plant	textured		cold
air filter	accordion		unique
amphitheater	pleats		strange
state fair			
b. <u>Painting and Drawing Class</u> (N=25)			
salt palace	style	contrast	restricted
coliseum	accordion	tower	scientific
theater (2)	linear	circular	future
bull fight	ugly		complicated
	lines (2)		Saturn
	modern (2)		comfort
	cylinders		
	round fringe		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE V
RESPONSES TO TEST ONE: BUILDING #5,
BAPTIST HOSPITAL COMPLEX

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Complex
a. <u>Home Economics Class</u> (N=30)		
hospital (6)	cardboard boxes	cold (2)
dormitory (4)	hi-rise	cluttered
university (3)	overnight hi-rise	distant
cheap apart- ments		common
		formal
		dull
		sterile
		clean
		plain
		set off
b. <u>Painting and Drawing Class</u> (N=25)		
campus	seashell	simple
dorm	modern art	open
business	good architectural design	independent
school	contemporary	rigid
collegiate	Phillips building	big deal
	tall (2)	
city hall	horizontal	autumn
medicine	ugly	trapped

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE VI
RESPONSES TO TEST ONE: BUILDING #6,
FIRST CHRISTIAN CHURCH SANCTUARY

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)		
Oral Roberts Univ. (3)	round (2)	interesting
church (4)	outer space (5)	nice
auditorium	breast	yuck
bank	ice cream	bold
gymnasium	modern	
	dome (2)	
	beehive	
b. <u>Painting and Drawing Class</u> (N=25)		
Oral Roberts Univ. (2)	curves	complex
theater	dome	nice
church	modern	soft
museum	space age (4)	
astrodome	helmet	
	hat	
	egg (3)	
	squat	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE VII
 RESPONSES TO TEST ONE: BUILDING #7,
 QUAIL SPRINGS SHOPPING MALL

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)		
shopping center (11)	sculpture	unusual
stadium	ice cube tray dividers	rich
	angular	money (3)
	geometric	unfinished
	modern	fragile, yet dominating
	artistic (2)	cluttered
	abstract	original
b. <u>Painting and Drawing Class</u> (N=25)		
living	squares (2)	fragile
shopping (5)	glass	phallic
	modern (2)	complicated
	beautiful	solar-powered
	technical	balanced
	space frames	lost
	functional	ordinary
		falling

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE VIII
 RESPONSES TO TEST ONE: BUILDING #8,
 ATRIUM TOWERS OFFICE COMPLEX

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Reaction
a. <u>Home Economics Class</u> (N=30)		
office (2)	boxes (3)	uninteresting (2)
diplomatic center	stripes	hard to get to
manufacturing	new/undeveloped	boring (2)
	symmetrical	active
	unlandscaped	unfriendly
	Oklahoma City	stark
		distant
		lonely (3)
		bare (2)
		cold
		unappealing
		confining
b. <u>Painting and Drawing Class</u> (N=25)		
Golgatha	verticals (2)	economical
hospital	grain elevator	boring (2)
	faded	lonely (3)
	Greek style	ordinary
	horizontal	simple (2)
	up and down lines	serious
		dull

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE IX
 RESPONSES TO TEST ONE: BUILDING #9,
 MURRAH FEDERAL BUILDING

Function Reaction	Aesthetic Reaction	Intellectual/ Emotional Reaction
a. <u>Home Economics Class (N=30)</u>		
hospital (6)	heavy stone	confusing
mental hospital	white (2)	neat
commercial	modern (3)	
work	outer space (2)	
apartments (2)	Tulsa (2)	
parking	skyscraper	
	handsome	
	Frank Lloyd Wright	
	geometric	
b. <u>Painting and Drawing Class (N=25)</u>		
fallout shelter	massive (2)	poor
hospital	compartmental	time
hotel	heavy	confused
	compact	bare
	clean lines	clean
	circles/squares	partridge
	beach/white	luxurious
	modern	impersonal
	futuristic	
	shadow	
	Moscow modern	

Note: The number in parentheses following a response indicates the number of times that response was given.

students, the building was a metaphor for crowdedness, but for the art group the building was a metaphor for the opposing forces of bleakness and pleasant associations.

Both art and non-art students associated building #2 with its reflecting qualities and modern design. However, the art students did not see the building in emotional/intellectual terms, but the home economics class students did and the reactions were positive and indicative of strength. Building #2 was a metaphor for commercial functions and feelings of strength for the home economics students but not for the art students. For the art students, the building was a metaphor for materials (glass, reflection, mirrors) and time (contemporaneity).

Unlike buildings #1 and #2, neither the home economics students nor the art students expressed interest in building #3's aesthetic characteristics. Both groups viewed the building in terms of function and attitude. Home economics students again expressed strength and time; art students expressed time, fear, and character. For both groups building #3 was a metaphor for function and attitudes.

For building #4, home economics students reacted primarily to function. The building is an activities building for the First Christian Church; however, responses do not indicate any visual coherence with religious function. Home economics students found the attitudinal connections strange and unfamiliar, whereas art students were not concerned with its strangeness. Again, art students were not so concerned with function as they were with visual and attitude characteristics. For both groups, the building is a metaphor for entertainment and business activities and not for religious activities which are its real association.

It is probable that some of the home economics students were aware of building #5 and used its function as its association. However, 13 of the 30 expressed their reaction toward the building through its use. Eleven associated it with its intellectual/emotional component and only three with its aesthetic comparisons.

The responses from painting and drawing class were more evenly divided among the three categories. They were more optimistic about the design but answers show ambiguity of feelings. Function was educational, commercial, and only one medical.

For the home economics students, the building was a metaphor for use as a hospital. Yet, the associations were somewhat negative for the intellectual/emotional component. For the painting and drawing class, building #5 was a metaphor for contemporary design and associated with educational use.

For building #6 the painting and drawing class responded to the building in terms of function more times than for previous buildings. The home economics students made the comparisons in a literal manner through function. Both groups considered the building a metaphor for the future and the few emotional/intellectual responses were mainly positive.

For building #7, the home economics students were more apt to define the building by the use they ascribed to it, although a number did consider its aesthetic qualities. Both the home economics students and the painting and drawing students gave similar responses as to which aesthetic qualities to ascribe to the building. For this building, art students expressed considerable interest in emotional/intellectual content of the building, judging by the number of

responses. In general, the building appeared to be a metaphor for the shopping ethic and associations were made quite literally and accurately. There was less ambiguity in definition than with the church activities building (building #4).

Building #8 appeared to be a metaphor for boredom. Neither group could respond with many activities for the structure and even the art group seemed to find fewer aesthetic responses to be appropriate. The art students responded more negatively in the emotional/intellectual category than for other buildings, with the exception of building #3.

Building #9, which is a government building and ideally should be a metaphor for democracy, was actually seen primarily as a metaphor for medical services. Home economics students did not compare the building in significant numbers to any intellectual/emotional component. Although considered handsome and modern by both groups, the building did not convey meanings beyond physical and functional characteristics. Although the building did not stand for negative metaphors, neither did it stand for positive ones. It seemed to convey a sense of neutrality.

Test One Summary

The responses to the word association test, while not conclusive, do present patterns. By assessing subjectively the numbers of responses in (a) each of the three reaction categories, (b) the positive/negative quality of responses, and (c) the kinds of words used, some preliminary conclusions can be drawn.

Designed to elicit responses from which metaphors could be reconstructed, the test did elicit such responses and showed some differences

and similarities in a visually oriented subject matter class of students from students who were not in a visually oriented class. In the three categories, home economics students tended to make a more literal transference of meaning by responding to the buildings in terms of function. Both groups tended to agree on the aesthetic characteristics, though the art group stressed these more frequently. The art group tended to ignore function and intellectual/emotional responses with specific exceptions--buildings #3 and #9. Further testing would need to control carefully for age, sex, place of origin, and education.

An important finding is the manner in which the federal building (#9) was perceived. If a group wishes to promote strong feelings of loyalty to the government among its constituents, it might be well to consider more carefully the manner in which buildings are shaped. Leone's (1977) study of the Mormon Temple in Washington, D.C. is an excellent parallel example of how a church uses its building as a metaphor for religious cohesion. Refinement of this test to include a variety of public buildings and their impact on specified populations could product significant recommendations for the design of public buildings.

Test Two

Table X shows responses to Test Two. For Test Two an attempt was made to learn if students would transfer characteristics of a particular visual stimuli to a particular life value. A list of 18 positive/negative values was used. These values were found by Maslow (1967) to be present in positive form by self-actualizing, mature

TABLE X

RESPONSES TO TEST TWO: BUILDING #2,
DOWNTOWN OFFICE BUILDING

a. Home Economics Class (N=30)

1. Truth/Dishonesty:

Scale	$+ \frac{7}{2}$	$\frac{6}{4}$	$\frac{5}{7}$	$\frac{4}{7}$	$\frac{3}{9}$	$\frac{2}{1}$	$\frac{1}{0}$	-
No. of Responses								

2. Goodness/Evil:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	$\frac{7}{4}$	$\frac{6}{5}$	$\frac{5}{5}$	$\frac{4}{13}$	$\frac{3}{2}$	$\frac{2}{1}$	$\frac{1}{0}$	

3. Beauty/Ugliness:

Scale	$+ \frac{7}{1}$	$\frac{6}{10}$	$\frac{5}{5}$	$\frac{4}{7}$	$\frac{3}{5}$	$\frac{2}{2}$	$\frac{1}{0} -$
No. of Responses							

4. Unity/Chaos:

Scale	$+ \frac{7}{7}$	$\frac{6}{12}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{0}$	$\frac{2}{2}$	$\frac{1}{0} -$
No. of Responses							

5. Transcendence/Forced Choices:

Scale	$+ \frac{7}{1}$	$\frac{6}{3}$	$\frac{5}{4}$	$\frac{4}{8}$	$\frac{3}{7}$	$\frac{2}{4}$	$\frac{1}{0} -$
No. of Responses							

- 6.
- Process/Mechanization:

Scale	+	$\frac{7}{1}$	$\frac{6}{6}$	$\frac{5}{6}$	$\frac{4}{3}$	$\frac{3}{5}$	$\frac{2}{4}$	$\frac{1}{4}$
No. of Responses								

7. Uniqueness/Sameness:

Scale	$+ \frac{7}{2}$	$\frac{6}{2}$	$\frac{5}{6}$	$\frac{4}{7}$	$\frac{3}{4}$	$\frac{2}{5}$	$\frac{1}{3} -$
No. of Responses							

8. Perfection/Shoddiness:

Scale	+ $\frac{7}{7}$	$\frac{6}{6}$	$\frac{5}{8}$	$\frac{4}{6}$	$\frac{3}{2}$	$\frac{2}{0}$	$\frac{1}{0}$
No. of Responses							

9. Necessity/Inconsistency:

Scale	$+ \frac{7}{2}$	$\frac{6}{10}$	$\frac{5}{5}$	$\frac{4}{8}$	$\frac{3}{1}$	$\frac{2}{0}$	$\frac{1}{0} -$
No. of Responses							

TABLE X (Continued)

10. Completion/Incompleteness:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		6	15	4	2	1	0	1	

11. Justice/Injustice:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		2	3	6	12	5	1	0	

12. Order/Chaos:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		11	8	5	2	1	0	0	

13. Simplicity/Disintegration:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		4	7	8	3	3	3	1	

14. Comprehensiveness/Poverty:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		8	11	6	2	0	1	0	

15. Effortlessness/Effortfulness:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		2	3	5	11	4	4	0	

16. Playfulness/Humorlessness:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		1	3	3	7	5	4	7	

17. Self-Sufficiency/Dependence:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		8	9	5	4	2	2	0	

18. Meaningfulness/Meaninglessness:

Scale	+	7	6	5	4	3	2	1	-
No. of Responses		5	8	4	5	1	4	3	

TABLE X (Continued)

b. Painting and Drawing Class (N=25)

1. Truth/Dishonesty:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	$\frac{3}{3}$	$\frac{6}{4}$	$\frac{5}{5}$	$\frac{4}{5}$	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{1}{1}$	

2. Goodness/Evil:

Scale	$+ \frac{7}{2}$	$\frac{6}{4}$	$\frac{5}{5}$	$\frac{4}{9}$	$\frac{3}{4}$	$\frac{2}{1}$	$\frac{1}{0} -$
No. of Responses							

3. Beauty/Ugliness:

Scale	$+ \frac{7}{3}$	$\frac{6}{3}$	$\frac{5}{5}$	$\frac{4}{6}$	$\frac{3}{4}$	$\frac{2}{2}$	$\frac{1}{2} -$
No. of Responses							

4. Unity/Chaos:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	11	6	2	2	2	1	1	

5. Transcendence/Forced Choices:

Scale	$+ \frac{7}{2}$	$\frac{6}{5}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{3}$	$\frac{2}{2}$	$\frac{1}{5} -$
No. of Responses							

6. Process/Mechanization:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	$\frac{7}{2}$	$\frac{6}{3}$	$\frac{5}{2}$	$\frac{4}{4}$	$\frac{3}{1}$	$\frac{2}{4}$	$\frac{1}{8}$	

7. Uniqueness/Sameness:

Scale	+ 7	6	5	4	3	2	1 -
No. of Responses	$\frac{1}{1}$	$\frac{6}{6}$	$\frac{5}{1}$	$\frac{4}{1}$	$\frac{3}{4}$	$\frac{2}{5}$	$\frac{1}{7}$

8. Perfection/Shoddiness:

Scale	$+ \frac{7}{9}$	$\frac{6}{4}$	$\frac{5}{6}$	$\frac{4}{2}$	$\frac{3}{0}$	$\frac{2}{3}$	$\frac{1}{1} -$
No. of Responses							

9. Necessity/Inconsistency:

Scale	+ 7	6	5	4	3	2	1
No. of Responses	$\frac{5}{5}$	$\frac{6}{5}$	$\frac{5}{4}$	$\frac{4}{9}$	$\frac{3}{1}$	$\frac{2}{0}$	$\frac{1}{1}$

TABLE X (Continued)

10. Completion/Incompleteness:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	9	5	2	3	2	1	1	

11. Justice/Injustice:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	3	7	0	8	3	1	1	

12. Order/Chaos:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	14	8	2	0	0	0	1	

13. Simplicity/Disintegration:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	9	6	4	3	0	1	2	

14. Comprehensiveness/Poverty:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	5	3	7	4	1	2	2	

15. Effortlessness/Effortfulness:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	4	3	3	7	3	1	4	

16. Playfulness/Humorlessness:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	2	0	4	3	0	4	12	

17. Self-Sufficiency/Dependence:

Scale	+7	6	5	4	3	2	1	-
No. of Responses	7	2	3	4	2	4	3	

18. Meaningfulness/Meaninglessness:

Scale	+ 7	6	5	4	3	2	1	-
No. of Responses	3	2	4	6	5	1	4	

individuals. Moreover, he felt they were necessary to self-actualizing persons. Test Two was an attempt to see if the appearance of a building has value content in positive or negative ways. If this is so, buildings could stand as metaphors of positive or negative valuing and could stand positively or negatively for specific values.

For Test Two, the subjects were asked to view only building #2, and then, as quickly as possible, to rate on the seven-point scale, the relative positive/negative placement for each of the 18 word pairs. Because this required finding likenesses in a set of ideas not usually associated with building appearance, i.e., transferring human characteristics to inanimate objects, students were asked to work quickly and to write their first reaction. It was felt that attempts to try to "reason out" the comparisons would reduce the spontaneity. The intent was to tap unconscious reaction (or automatic ones) rather than conscious (reasoned) reactions.

For all 18 word pairs, both groups reacted more positively than negatively. The home economics group seemed positive, whereas the art group was not as noticeably positive. This was the exact opposite of the hypothesis that the blocky, reflective style would elicit negative value responses. However, only the word pairs playfulness/humorless, process/mechanization, and transcendence/forced choices brought consistently negative ratings.

Test Two Summary

Both the home economics class and the painting and drawing class responded similarly. Building #2 seemed to stand for approximately the same values for both groups. The patterning indicates that the

idea of visual thinking and assigning values to visual stimuli has merit.

The categories order/chaos, unity/chaos, and completion/incompleteness showed the most positive patterning for both groups. Externally, the building was seen as orderly, complete, and unified. This does not necessarily mean that the building was seen as beautiful, however. The word pair beauty/ugliness showed less clean cut positive trends. Feelings of fair play were neutral while both groups assigned negative values in the playfulness/humorlessness category.

Although the home economics class and the painting and drawing class showed differences in their responses on the word association test, the responses on the positive/negative word pairs test were similar. This could mean that Maslow's (1967) values pertain to our "humanness," regardless of differences in training.

From the results it was found that the potential for assessing positive/negative value content of building appearance is considerable and that this method of measuring responses in terms of building style and values merits further study. This type of testing by comparing values and visual appearance needs extensive refining, but has the potential for giving valuable information about how appearance impacts on value systems and eventually on behavior.

Test Three

Tables XI through XX show responses to Test Three. Test Three was administered in an attempt to examine specifically the capacity of building appearance to evoke metaphorical responses in the students and to see if the metaphors would be strictly individual or if common

TABLE XI
RESPONSES TO TEST THREE: BUILDING #1,
OKLAHOMA THEATER CENTER

Personification	Construction	Abstraction
a. <u>Home Economics Class (N=30)</u>		
chicken with its head cut off	plumbing pipes (2)	boring
ant hill	tinker toys (2)	open invitation
	space ship	relaxed feeling
	grain mill (2)	confinement
	geometric shapes	dull
	factory (2)	city within itself
	cluttered bedroom	silly house
	park	Oklahoma City
	boxy (2)	
	jail	
	sewer system	
b. <u>Painting and Drawing Class (N=25)</u>		
worm	blocks	an expression of bleakness
teacher	frying pan	Dali-like
monsters in "War of Worlds"	dish rag	classical
molecular structure	pickles on a burnt ham- burger	space 1999
	truck	ugly
	baby building blocks	chaos
	matches in styrofoam cubes	cheap movie
	unrelated mass of blocks	forced passage (gerbil cage)
	a dump	
	inside a factory	
	tinker toys	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XII
RESPONSES TO TEST THREE: BUILDING #2,
DOWNTOWN OFFICE BUILDING

Personification	Construction	Abstraction
a. <u>Home Economics Class</u> (N=30)		
uncreative person	giant twin mirrors	on-coming headache
	circus mirror room	business (3)
	shiny mirrors (5)	dark and deathful
	huge mirrors	attractive
	active like a clock	classy
	cold, impersonal box	wonderland
	freezer--cold (2)	
	hospital	
	boxy	
	tombstone, bathroom mirror	
	looking glass	
	block of ice	
	tile-like	
b. <u>Painting and Drawing Class</u> (N=25)		
vain, shallow person	tower	systematic
	hotel	imposing and impressive--"Big Brother"
someone who takes advantage of others	motel furniture	impersonal
	sillhouette	wasteful bureaucracy
like a lawyer	crystal box	crazy
	glass house	high life
	big mirror	
	checkerboard	
	desert	
	bricks	
	modern business building	
	ice cube tray	
	graph paper	
	looking glass	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XIII

RESPONSES TO TEST THREE: BUILDING #3,
CENTRAL INNOVATIVE HIGH SCHOOL

Personification	Construction		Abstraction
a. <u>Home Economics Class</u> (N=30)			
stern school master	museum	dungeon	strict
my old man	castle (4)	nunnery	old poem
an old friend	library	old school	loneliness
doll	doll house		warm feeling
	church		boring
	old church (2)		antique (2)
			old book
			tradition
			forceful
b. <u>Painting and Drawing Class</u> (N=25)			
Queen Elizabeth	U. Admin. Building		protective
king on a throne	wood block		European style
sphinx	castle (6)		thwarted dreams
a king	church		ordinary
King Arthur			Transylvanian building
old women			a musty smell
			beautiful (2)
			solid as a rock
			a good book

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XIV

RESPONSES TO TEST THREE: BUILDING #4,
FIRST CHRISTIAN CHURCH,
ACTIVITIES BUILDING

Personification	Construction	Abstraction
a. <u>Home Economics Class</u> (N=30)		
snail	gold foil	big mistake
	bank	banking atmos- phere
	accordion (4)	beautiful
	divided cup	an exciting ballgame
	filter	ridiculous
	water cleaning facility	fun
	railroad roundhouse	
	cage	
	box of pick up sticks	
	air filter for a car	
b. <u>Painting and Drawing Class</u> (N=25)		
contemporary	fan	uniqueness rather than utility
dancer trying a new routine	cogina machine	smooth running
	accordion	(modern engine society)
person with no friends who wants to be accepted (tacky and depressing)	dustpan and brush	columnar impres- sion
	a slinky	nothing
	cords standing on end	mechanical
	fringed hamburger bun	
superman	machine	
dentist	power plant	
	auditorium	
	space ship	
	washing machine	
	air filter for a car	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XV
RESPONSES TO TEST THREE: BUILDING #5,
BAPTIST HOSPITAL COMPLEX

Personification	Construction	Abstraction
a. <u>Home Economics Class (N=30)</u>		
	Tinker Toys	product of 605
	clinic	boring movie
	refrigerator	sickness
	dorm (2)	frightening
	matchbox	antiseptic
	normal city buildings	hospital archi- tect's dream
	book of matches	impersonal test
	Lincoln Logs	silly
	institution (3)	beautiful
	grain elevator	seclusion
	college campus	lonely
	piece of swiss cheese	cold day
	hospital	
	neat yard	
	offices	
b. <u>Painting and Drawing Class (N=25)</u>		
lost child	prairie grain elevator	constructive
like a troll	slab	cheap
smart, well- dressed, ele- gant woman	just a regular building	crazy stuff
	ugly building	
trying to run away	boxes on end	
robot	university	
headache	boxes	
soldier	vending machine	
	building	
	dorm	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XVI
 RESPONSES TO TEST THREE: BUILDING #6,
 FIRST CHRISTIAN CHURCH SANCTUARY

Personification	Construction	Abstraction
a. <u>Home Economics Class</u> (N=30)		
half an egg	space ship (4)	historical mean- ing
egg (2)	half a football	scary story
bug that crawls	dome shape (2)	space travel
	German helmet (4)	
	moon	
	space helmet (4)	
	tepee	
	knight's helmet	
	OKC church	
	igloo	
b. <u>Painting and Drawing Class</u> (N=25)		
bald man's head	beanie hat	unique
iron orange	Star Wars head dress	enigma
apple	knight's helmet (2)	stuck to the ground
"Jetsons"	space material	out of place
egg (2)	ice cream/syrup and chocolate	lots of fun
	helmet (2)	
	queen's hat	
	martian's house	
	U.F.O.	
	overrated pinball machine	
	greenhouse	
	moon	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XVII
RESPONSES TO TEST THREE: BUILDING #7,
QUAIL SPRINGS SHOPPING MALL

Personification	Construction	Abstraction
a. <u>Home Economics Class</u> (N=30)		
waterfall	wine rack	creative design
garden	stadium	expensive
pigeon's heaven	mall	future
honeycomb	fancy vacation hotel	
	space ship	
	river dam	
	stairs	
	solar house (2)	
	leaning	
	maze	
	glass menagerie	
	cubby holes	
	steel skeleton	
	ice tray	
	graph	
b. <u>Painting and Drawing Class</u> (N=25)		
bees' nest	fence	looks nice--like heaven
waterfall	rear of a stadium	
	pigeon hole desk	dull
professor	river dam	incomplete (construction site)
	Roman Colosseum	
	roomy/bright interior	too low
	football stadium (3)	
	like it will fall in	
	glass house, modern	
	ice cube trays (2)	
	window	
	stairs	
	solar collector	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XVIII
 RESPONSES TO TEST THREE: BUILDING #8,
 ATRIUM TOWERS OFFICE COMPLEX

Personification	Construction		Abstraction
a. <u>Home Economics Class</u> (N=30)			
lost dog	museum	pin striped suit	deserted
bull in a china closet	institution (2)	steel vault	sophisticated
dad and mom	box (4)	cereal cartons	like a drag
	bar-like	dorm	abandoned (after an explosion)
	shoe boxes	striped box with lids	
	blocks (3)		
	jail (4)	cement blocks	
b. <u>Painting and Drawing Class</u> (N=25)			
like a cow	shoe box (3)	jail	linear outlook
	brick	apartment that shouldn't have been built	lonely, strict
	shelter		
	computer	Greek temple	
	fallen tower	university dorms	
	train boxcars	prison (4)	
	2001 monolith	ice cream blocks	
	boxes	bird cage	
	O.S.U. residence halls		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XIX
 RESPONSES TO TEST THREE: BUILDING #9,
 MURRAH FEDERAL BUILDING

Personification	Construction	Abstraction
a. <u>Home Economics Class</u> (N=30)		
unsure child	power plant	future
	space city (2)	interesting
	picture on General	mass confusion
	Hospital	"natural" person's
	fortress	nightmare
	mental institution (2)	death--cold--
	NASA	can't see in-
	children's blocks	side
	parking lot	good imagination
	United Nations	
	toy	
	parking garage (3)	
	rounded	
	black/white space station	
	maze	
	sanitary structure	
	hospital	
	white motel	
	contemporary	
b. <u>Painting and Drawing Class</u> (N=25)		
powerful but	hospital (2)	roomy
just man	grainery	forceful-organized
pigeon	Lego Blocks	but impersonal
eagle	stark, unfriendly peni-	stupid test
giant tooth	tentiary	
like a doctor	abstract painting	
	buildings in space movies	
	fun, twisty, block	
	Crown Center (Kansas City)	
	dry sculpture	
	well put together car	
	big plant	
	car park	
	boxes	
	tunnels	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XX
TOTALS OF RESPONSES BY CATEGORIES

Bldg. No.	Personification	Response Patterns Construction	Abstraction
a. <u>Home Economics Class (N=30)</u>			
1	2	19	8
2	1	19	8
3	4	13	10
4	1	13	6
5	0	18	11
6	4	20	3
7	4	16	3
8	3	22	4
9	<u>1</u>	<u>22</u>	<u>6</u>
Totals	20	162	59
b. <u>Painting and Drawing Class (N=25)</u>			
1	3	11	8
2	3	16	6
3	6	9	9
4	3	13	5
5	7	10	3
6	6	14	5
7	3	16	4
8	2	21	2
9	<u>6</u>	<u>15</u>	<u>3</u>
Totals	39	125	45

metaphors would evolve. It was also possible to see if two different groups would generate different metaphors. The students were given these specific instructions: "Metaphor is describing one thing as though it were something else. I want you to describe each building as though it were something other than a building."

The responses were organized in the following manner: Those responses that related to anthropomorphization or personification were listed under personification. Some responses seemed to suggest references related to structure, physical make-up, or construction. These responses were listed under construction. The remainder of the responses did not relate to the physical aspect but related to abstract ideas. These responses were listed under abstraction.

The purpose was to test the capacity of visual appearance to evoke metaphor. Therefore, the building must represent something other than building characteristics, and answers must be more than descriptive. When a student responded that building #3 was an old friend, that student was thinking comparatively in metaphor. If a student responded that building #3 was boring or traditional, he was not evoking a metaphor but the response had metaphoric qualities.

An important component is the student's ability to think in metaphor. Training in logical thought processes many times gives students little practice in describing one thing in terms of another. However, studies have shown that generally, given the chance to do so, most people can make simple but meaningful metaphors, but the students' inability to think metaphorically affects their responses.

Although responses may not be given initially in metaphor, the descriptive responses can be constructed into metaphor. If students

consistently responded to a building with similar descriptive words, a dull or boring building can turn into, "This building is boredom, itself." This may be exactly what the students meant, but were unable to state it in that manner. The students may have been trained to see the statement, "this building is boring" as an acceptable phrase. "This building is boredom" or "this building is a boring life" is generally not acceptable because it is analogical and not rationally descriptive (Leatherdale, 1974).

The responses to building #6 may have been influenced by the current (spring, 1981) crop of movies or by the interest in Dragons and Dungeons games. The home economics group seemed more likely than the painting and drawing class to have been influenced by these outside considerations. The capacity of a building to hold its metaphorical image in face of "trendy" influences may be an important question here. Can the strength of visual appearance be a prominent feature of a building's potential to act metaphorically over time?

It must also be noted that the idea images for this and the other buildings carry rather weak connections to the specific buildings. Boring, beautiful, unique, historical, or constructive could pertain to anything. These descriptive images are not tightly linked to the buildings but seem vague and wandering.

These vague responses seem less frequent when a building makes a strong appearance statement (building #6) and more frequent when the building's appearance is ambiguous. Perhaps in buildings as in poetry, there are good metaphors, bad metaphors, and sometimes no metaphor at all. And, as in poetry, the good metaphors are applauded by the knowing, the bad are deplored, and the non-metaphors make little lasting impression.

Probably one of the dangers in buildings as in poetry is thinking there is a metaphor when there is, in fact none. Recognition of the building's metaphor potential is essential.

Few students in either group made reference to the recently completed addition to the Oklahoma State University stadium. Considering the proximity and size of the addition, it would seem more students in both groups would have noted the comparison to the pictures of buildings in their responses. However, only four out of the 55 did so. The act of making connections to the object in question may not be based on what one sees frequently.

Test Three Summary

According to the response patterns, it appeared that visual appearance had the capacity to elicit more responses in the construction category. These responses tended to be strong in number for both groups. The less often used category was the personification. However, the responses in the personification were strong metaphors. The weakest responses came in the idea images which tended to be merely descriptive and the least explicitly connected to the specific building. It would be valuable to do further testing to determine if these responses are the function of the ambiguous nature of the building, the training of the students, or a combination of both.

Comparing Test One and Test Three, it seemed that asking for comparisons in the form of metaphors caused the students to think somewhat differently than when asking for word associations. When asked to associate first thoughts, responses were more often descriptive by function for both groups. However, when asked for comparisons,

students tended to do just that, to think of the buildings in terms of something else. The value of asking for metaphorical responses is that one can more accurately determine what the buildings stand for in the students' understanding. It also caused the students to view the buildings differently. As Gordon (1966) says, metaphor makes the familiar strange and gives a new perspective from which to view the world. Gordon also states that metaphors which rely on personification and anthropomorphization are more empathic. Personifying a building may be a way of finding real attitudes toward building appearance. Although the students did not respond with metaphors of personification without being specifically asked to do so, Gordon's remarks support the use of this method.

Test Four

Tables XXI through XXIX show responses to Test Four. Test Four attempted to assess an activity aspect of metaphor. Metaphor functions as a process of thought in which connections are made as to how one thinks about something. How one intends to act or behave in relation to a thing perceived entails not only "idea" responses, but "action" responses. In order to test and understand this aspect of metaphor, students in both the home economics class and the painting and drawing class were asked to name an activity for each of the nine buildings and then rate the activity/building relationship on a rating scale. The rating scale was a measure of the integration of the activity with the building appearance. The intent was to find out if the students could relate building appearance to an activity. According to Arnheim (1969), visual stimuli may directly affect behavior.

TABLE XXI
 RESPONSES TO TEST FOUR: BUILDING #1,
 OKLAHOMA THEATER CENTER

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
nursery school	see a display	0
society people's	going to plays	
entertainment place	borrow money	
industrial/janitorial	pay a ticket	
place	go to the bank	
office building	see a movie	
school setting	people walking in	
plays (2)	a daze	
musicals	pay a hat check	
movies	go to a show (2)	
ballet		
banking		
prison		
place to eat		
entertainment		
basketball		
sleeping		
b. <u>Painting and Drawing Class</u> (N=25)		
theater (3)	wash clothes	cubic
medical building	work in an assembly	shopping
meat processing	plant	
plant	watch movies	
book stores	gain weight	
sports center	go shopping	
entertainments (3)		
medical center		
nursery		
rat cage (watch		
rats)		
building for		
learning		
fitness		
bank		
observation		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXII
 RESPONSES TO TEST FOUR: BUILDING #2,
 DOWNTOWN OFFICE BUILDING

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
secretarial building	go for an interview	0
doctor's office	conduct office matters	
job interview	go in for judgment	
paper work	visit stock broker	
government building		
work		
sickness		
be a step on someone else's ladder		
insurance		
office work		
accounting office		
oil coporation		
doctor's visit		
b. <u>Painting and Drawing Class</u> (N=25)		
mortgage company	play racquetball	0
office building	go to the office	
stress	get a loan	
office jobs	seek legal help	
offices	swim	
glass	getting lost	
bank	buy real estate	
funeral office	work	
courthouse	dance	
data processing	get married	

TABLE XXIII
 RESPONSES TO TEST FOUR: BUILDING #3,
 CENTRAL INNOVATIVE HIGH SCHOOL

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
museum	read a book	0
lots of praying	attend class (4)	
junior high school	go to study	
learning	go to church (3)	
cleaning	look at artifacts	
classes (2)	attend church	
lectures	explore	
recitals	go to lecture	
Oxford		
wedding		
lecture (2)		
prayer or songs		
library		
b. <u>Painting and Drawing Class</u> (N=25)		
tower	recite poetry	historic
peace	have to religion	
campus building	go to school (5)	
classes	go on strike	
church (2)	fight dragons	
school		
municipal building		
courthouse		
learning		
town hall		
museum		

Note: The number in parentheses following a response indicates the number of times that response was given.

TEST XXIV

RESPONSES TO TEST FOUR: BUILDING #4,
FIRST CHRISTIAN CHURCH,
ACTIVITIES BUILDING

Nouns	Verbs	Adjectives
a. <u>Home Economics Class (N=30)</u>		
dentist's office	attend a concert	church-like
reading area	attend a boring lecture	
concert	get a loan	
concert hall	go to get money	
utilities building	go to sports	
bank	pay bills	
exhibit hall	watch a basketball game	
church	watch a concert	
no-fun work	register to vote	
	shopping	
	banking	
	make a deposit	
	go to sports event	
	deposit money	
	pay bills	
	banking	
	watch a rodeo	
	listen to an evangelist	
	take out a loan	
	go to a convention	
b. <u>Painting and Drawing Class (N=25)</u>		
musical performance	seek entertainment	0
bank building (2)	watch a show	
hyperactivity	find a total experience	
auditorium	listen to an orchestra	
museum	attend sports events	
Roman stadium	go for a movie	
cafeteria	do physical exercise	
theater (3)	see a play	
hotel	watch 3-D movie in the	
doctor's office (2)	round	
movie		
basketball		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXI
 RESPONSES TO TEST FOUR: BUILDING #5,
 BAPTIST HOSPITAL COMPLEX

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
hospital (4)	live in at school	0
doctors' building	visit a sick friend	
doctor	living in a dorm	
lab work	see a doctor	
health care	go to get well	
dorm (3)	go to court	
corporate offices	going to a doctor	
illness	to get surgery	
learning area	live in	
place of employment	see a doctor	
	take a class	
	paying a bill	
	go to if injured	
	visit someone sick	
b. <u>Painting and Drawing Class</u> (N=25)		
hospital (2)	sleep	constructive
industrial building	live temporarily	
dorms (3)	work	
bomb	work in an office	
hotel	take a trip	
apartments	live at school	
club and condo-	pay bills	
miniums	sleep	
research (2)		
TV station		
high schools		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXVI
 RESPONSES TO TEST FOUR: BUILDING #6,
 FIRST CHRISTIAN CHURCH SANCTUARY

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
church (4)	sightseeing	0
fairground exhibit building	listening to a concert	
dormitory building	worship	
sports arena	look at exhibits	
organization	going to church (3)	
space museum	typing	
bank	go to a lecture	
sports	go to a conservatory	
	going in for athletics	
	go to a basketball game	
	visit a planetarium	
	get a loan	
b. <u>Painting and Drawing Class</u> (N=25)		
comedy act	pray (3)	0
State Fair building	go to space	
restlessness	visit an exposition	
offices	rent a plane	
church (2)	attend church	
science center	go to school	
museum (4)	play basketball	
theater		
agricultural center		
market		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXVII
 RESPONSES TO TEST FOUR: BUILDING #7,
 QUAIL SPRINGS SHOPPING MALL

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
shopping (14)	go shopping (2)	0
splurging	spend	
place to use your eyes	spend lots of money	
visual activity	shop	
shopping mall	buy clothes	
shopping center	to be looked upon or studied	
	get lost--literally	
	shop for moderate/expensive current style things	
	shop (I like the activity but not the building)	
	go to and spend money	
b. <u>Painting and Drawing Class</u> (N=25)		
shopping mall	watch Ben Hur	0
shopping (3)	shop (3)	
incompletion	go shopping (3)	
dam	have a game	
modernism	go to eat	
shopping center (3)	watch people	
market	sunbathe	
shopping store		
department store		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXVIII
 RESPONSES TO TEST FOUR: BUILDING #8,
 ATRIUM TOWERS OFFICE COMPLEX

Nouns	Verbs	Adjectives
a. <u>Home Economics Class (N=30)</u>		
place of confinement	rinky-dink companies	0
place of boredom	lease here	
job interview	be employed	
place to work	go to a doctor (psychi-	
4-wall job	atrlist)	
interview	visit a patient	
experiments	pay bills (2)	
business offices	work (2)	
headquarters of	carry on business trans-	
companies	action	
lawyer's offices	do nothing	
low income housing	interview for a job	
executives	go to the dentist	
b. <u>Painting and Drawing Class (N=25)</u>		
engineering building	sell real estate	0
warehouse	pay phone bill	
useful container of	sleep	
anything	be bored	
pre-fab classrooms	live in it	
apartment	work (2)	
linear line		
high school (2)		
banking		
residence halls		
jail		
rest home		
power plant offices		
doctor's appointment		
prison		
factory		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXIX
RESPONSES TO TEST FOUR: BUILDING #9,
MURRAH FEDERAL BUILDING

Nouns	Verbs	Adjectives
a. <u>Home Economics Class</u> (N=30)		
place for shopping/ sightseeing	visit a sick friend	0
place to pay fines (courthouse)	go to see the doctor	
parking garage (2)	be ill	
intelligent techni- cal work	going to the doctor	
executives/lawyers/ doctors	people running up and down halls	
orchestra performance	live (3)	
health care	visit police station	
place to park cars	go to work	
hospital	to have your facial ex- pressions removed	
oil investment	die	
condominium	stay in a hotel	
government office	visit someone sick	
work	go to park my car	
patients/doctors	park the car	
b. <u>Painting and Drawing Class</u> (N=25)		
professional building	get well and leave	0
hospital (7)	go to a convention	
unrest, disturbance	work on pipes	
modernism	go to a hospital	
apartments	build for apartments	
parking garage	park your car	
hotel	live in it	
condominium	take a holiday	
parking lot/ shopping center	see a doctor	
	get hospital attention	

Note: The number in parentheses following a response indicates the number of times that response was given.

The students were asked to respond with an activity, something they would do in each building. However, many students named an activity. These responses were categorized as nouns. The responses that expressed an action were categorized as verbs. The remainder of the responses were descriptive terms and these were categorized as adjectives.

Categorizing the responses by noun, verb, and adjective may be capitulating to verbal rules. However, responses seemed to be categorized by description, action, and place or thing. This seemed to be a process of transforming action into activity, and description of activities.

Most of the students in both groups were trying to make relationships either with the picture of the building presented to them during testing or to past experience that the picture recalled. Study of the responses led the researcher to believe that the home economics students were more apt to try to recall where they might have encountered the building previously and answer accordingly, and as a result gave responses less integrated with their own feelings. There are two round buildings on the State Fairgrounds in Oklahoma City, Oklahoma; however, neither of the round buildings (#4 and #6) in the test photographs are the fairground buildings. The connections were incorrect. It is possible that the home economics students thought they should be able to recognize the buildings, which, of course, was not the purpose of the testing at all. Another possibility is that the building appearance of the four buildings (the two on the test and the two at the fairgrounds) do not present forms unambiguous enough to be visually recognized as a certain building to persons not consciously

seeking to differentiate form. This might mean that clearly delineated forms may be able to carry greater metaphoric content than forms which do not make clear visual statements.

The verb responses do not all express action. Most responses began "go to . . ." and then listed some physically passive activity such as watching an event. The acts of shopping, buying, and making purchases were the only consistent participation response. Also, most activities tended to be very general rather than specific.

With the exception of building #2, the home economics students generally were better able to express activities in terms of verbs than painting and drawing students.

Test Four Summary

Testing for a building's style as likeness for its activity via Test Four seems to be less conclusive than Test Three where students were asked to make direct likenesses. Naming appears to be easier for making metaphors than doing (acting). It is noteworthy that associating positive and negative relationship between building appearance and activity revealed distinct positive trends for both groups. The home economics group rated the shopping center a positive value for activity, but the painting and drawing group was less positive about building #7. The home economics students rated #5 and #8 negatively, whereas the painting and drawing students appeared to be neutral. This may have been due to the painting and drawing students' relative inability to think of the building in terms of acting, while the home economics students were more able to do so.

The responses themselves did show associations with building use that reflected the students' perceptions of building use. These perceptions were sometimes not coherent with the building's use. Judging by the responses, the physical appearance of some of the buildings did not bring forth responses that represented a consensus for one kind of activity.

Test Five

Tables XXX through XXXVIII show responses to Test Five. Test Five was administered as an attempt to measure the kind of thought transfer that occurs when descriptions generally used for human beings are applied to a visual inanimate stimulus. Twenty painting and drawing students who had taken the preceding four tests were given Test Five. The students were asked to describe each of the nine buildings as though it were a person.

At first, it seemed appropriate to make a list of descriptive words usually associated with people for each of the nine buildings and ask students to mark those adjectives they thought most fit the building. However, this would have made the descriptive choices more those of the researcher than of those being tested. Also, an adjective form does not make so clear nor so strong a metaphorical statement. Therefore, it was decided to let a group of students generate the metaphors. Limits of vocabulary of individuals were obviously a concern, but it was felt most college students would have an adequate vocabulary to express what was being asked of them. In a few cases, the responses were not strictly anthropomorphic. For example, a person may be unorganized, but the term "unorganized" refers to inanimate material as well as a person.

TABLE XXX

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #1, OKLAHOMA
 THEATER CENTER
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
level-headed	dirty	busy
loving	grim	flat
funny	unorganized	crazy
bubbly	stiff, dumb	moderate
familiar	bored	
	impersonal	
	unloving	
	alienated	
	confused	
	forced	

TABLE XXXI

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #2, DOWNTOWN
 OFFICE BUILDING
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
dignified	cold (2)	reflective
relaxing	untrustworthy	modern
gentle	depressing	quiet
forceful	haughty	flashy (2)
intelligent	aloof	
classy	stuffy	
	over-powering	
	vain	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXII

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #3, CENTRAL INNOVATIVE
 HIGH SCHOOL
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
capable	boring	caring
scholarly	tough	eccentric
peaceful	sad	old
warm		
knowledgeable (2)		
strong (2)		
powerful		
proud		
educated		
interesting		
serene		
strong		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXIII

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #4, FIRST CHRISTIAN
 CHURCH, ACTIVITIES BUILDING
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
neat	carefree	dizzy
happy	lively	misleading
special	happy (2)	uncoordinated
motivating	open and happy-	unreachable
great	ish	pompous
	active intelli-	flighty
	gent	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXIV

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #5, BAPTIST
 HOSPITAL COMPLEX
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
intellectual	plain	reserved
	sad	far-out
	cold/unfeeling	structured
	irrational	business-
	lonely	like
	dominating	old fashioned
	boring	prim and
	lonely (3)	proper
	childish	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXV

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #6, FIRST CHRISTIAN
 CHURCH SANCTUARY
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
well-rounded	spacey	meditation
funny	gaudy	
humorous	irrational	
modish	egotistical	
warm	depressing	
relaxed	silly	
daring	weird	
fun (2)		
funny		
humorous		
stylish		

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXVI

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #7, QUAIL SPRINGS
 SHOPPING MALL
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
sporty	self-conscious	businessy
happy	incomplete	domestic
excited bore	bored	busy
knowledgeable	dominating	conversity (?)
carefree, but or-	sad	structured
ganized	tiring	business-
bustling	unusual, puzzling,	like
	tricky	

TABLE XXXVII

PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #8, ATRIUM TOWERS
 OFFICE COMPLEX
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
great	secretive	normal
	barren	intended (?)
	mad	formal
	drab and dull	
	boring (2)	
	shy	
	lovely	
	sad	
	lonely (4)	
	tired but proud	
	bare-faced	

Note: The number in parentheses following a response indicates the number of times that response was given.

TABLE XXXVIII
 PAINTING AND DRAWING CLASS RESPONSES TO TEST
 FIVE: BUILDING #9, MURRAH
 FEDERAL BUILDING
 (N=20)

+ Positive Person	- Negative Person	0 Neutral Person
old-timer	introverted	dominant
independent	vain	cool
loving	overpowering	living
serene	nervous	
crazy and playful	authoritarian	
happy (2)		
meaningful		
up-to-date		
spontaneous		
active		

Note: The number in parentheses following a response indicates the number of times that response was given.

All of the adjective responses were assumed to be related to people because of the instructions for completing the test. Those responses that described the building as having positive qualities were categorized as positive. Those responses that characterized the building negatively were categorized as negative responses. The remainder of the responses were put in a neutral category. In some cases, the answers seemed either ambiguous or neutral in quality. If someone said a building was crazy it might not be assumed to be negative valuing as the meaning of "crazy" is not necessarily perjorative. Some buildings elicited more neutral responses while others brought strongly positive or negative descriptions. Buildings #5 and #8 were

thought of negatively. Buildings #3, #4, #6, and #9 were considered positive and buildings #1, #2, and #7 brought no clear consensus.

Test Five Summary

Building appearance, it seems, can be viewed anthropomorphically. Seen through the perspective of human description, buildings can reveal what meanings they have for us. A building that one feels to be pompous or vain may not receive the same kind of care and good treatment as does one that is seen as peaceful, warm, and knowledgeable.

Repeating this test with a variety of groups could provide a lengthy list of descriptions from which a representative list could be selected. Refined in this way, the test could be administered to various groups to ascertain which metaphors were accepted by the different groups. This would provide the standardization needed to replicate the study and employ a statistical analysis of differences between groups.

Using the metaphorical method of assigning human qualities to visual appearance of a building offers possibilities for further research for the following reasons:

1. The associations made by the respondents may be more honest and personal and less academic or socially programmed than those made when other methods of assessing impact are used.
2. The perspective of thinking in metaphorical connections may lead to knowledge about visual appearance not learned by methods not requiring such connections.
3. Human qualities involving ties to friends, family, and community are strong and enduring. In a mobile society, these qualities

may or may not be readily available, but are desired as an ideal. Metaphors that transfer meanings of these human qualities to the physical appearance of buildings may lead to better understanding of how buildings promote or hinder these qualities.

4. Behavior may be more predictable in regard to other humans than to buildings. Thus, treating building appearance as though it were human may provide insights regarding behavioral response to the environment.

Summary of Tests One Through Five

In these five tests the search was for equivalents to represent values, perceived activities, and attitudes that may ultimately affect behavior. Metaphor is that conceptual leap made only when connections are made between categories of meaning. Gordon (1966) and Samples (1976), among others, feel metaphor may be one of the most important ways of orientation to the world and one of the most creative ways of organizing material to expand knowledge.

These five tests provided evidence that metaphor does not operate only in the verbal domain, but in the visual domain as well. Metaphor can sort meanings of the environment.

The responses showed that students can respond to the visual appearance of buildings by relating visual appearance to activities, to people, to abstract ideas, and to values. The responses gave information about how students relate visual appearance to other experiences and also showed patterns of thinking about the appearance of buildings. The responses also showed much diversity, suggesting that there are many ways to organize information about environment.

What the first four tests did not do was to narrow the focus of the responses. Test Five did set limits for responses. Limiting responses to one specific kind of metaphor allowed more control over the kind of information the metaphor gave. It also gave the students a framework for expressing relationships.

All five tests showed that the visual appearance of buildings has the capacity to evoke metaphorical responses that can further the understanding of one's reaction to the physical environment. In the instance of attributing human qualities to buildings, the process of thinking metaphorically clarifies information about a certain part of the environment by relating environmental information to information about people.

Test Six, Part One

Test Six was an attempt to further develop Test Five into a form that could be used to identify specific metaphors. The first part of Text Six generated a list of approximately 92 metaphors for each of the 14 buildings from two groups of lower division humanities students who were given the instructions explained in the "Procedures for Administering the Tests" section on page 39. Slides rather than xeroxed prints of black and white photographs were used. The expense involved in obtaining the needed number of black and white photographs was prohibitive and the xeroxed copies, though of good quality, could possibly influence responses because of the quality of the reproduction. Using slides made possible the regulation of response time.

Some biographical data of respondents were collected, including sex, age, major, and place where they grew up. Previous research

(Samples, 1976) had suggested that these characteristics of individuals might be related to metaphorical responses.

The responses to Part One of Test Six are shown in Appendix B. The analysis of the 92 metaphors for each building proceeded in the following manner: First, the responses were categorized by building. This categorization revealed similarities and differences and made evident the prevalence of positive or negative response and references to male or female characteristics associated with the buildings.

The second step was to actually categorize all responses into positive, negative, or neutral categories. The criteria for putting a response in one of the three categories was that the response be accepted generally as part of the American cultural experience. For example, a tycoon is generally accepted as a positive figure in American society even though some subgroups may see a tycoon as a negative image. Also, a teacher, a professor, and an astronaut are generally seen as positive figures, whereas a bum; a fat, old man; and a lonely person are usually regarded in a negative manner. A neutral response was one which might simply describe the building in terms of physical characteristics such as a man with big feet or a man with glasses on.

Third, the responses were categorized by whether the metaphors were related to males or females. It became apparent that many responses were "a man" or "a woman" type of response. Although the use of the male image as the prevalent image in our society does not seem unusual or new information, it does seem worth noting in the perspective of description of building appearance. Both male and female respondents ascribed more male characteristics to the buildings than female characteristics.

Test Six, Part Two

From the metaphors generated and categorized in Part One of Test Six, seven metaphors were chosen for each building to be used for Part Two of Test Six. The following criteria were used to select the seven metaphors for each building:

1. Specificity with universal application. Answers should reflect those traits that were characteristic of an individual but that could be seen as traits of groups of individuals.
2. Nominative descriptions. Many answers were given as similies--homely, fashionable, elderly; however, these were made more explicit by using the nominative form such as a homely person or a fashionable person.
3. Similarity of responses. Numbers of similarities were considered. Therefore, if "businessman" (in variant form such as "young businessman" or "rich businessman") was used 10 times, whereas "professor" was used only twice, at least two of the seven metaphors selected would refer to a businessman.
4. Cliches not acceptable. Cliches such as "snug as a bug in a rug" were not used. These types of cliches proved limited; generally, no more than one or two out of the total responses. One exception was "egghead," that was frequently given in response to one building and was therefore included as one of the seven selected metaphors.
5. Positive, negative, and neutral responses as general consideration. Positive, negative, and neutral answers were given consideration in that numerous responses in any of these categories

resulted in at least three such choices in the second part of Test Six.

6. Personalized statements not acceptable. Statements that represented completely personal views were not used. These included responses such as "Howard Kirsch, an engineer I know," and "my grandmother." These responses cannot be ascribed to a large group of people and therefore were not appropriate.

7. Categories of responses considered:

- a. age
- b. sex
- c. personality traits
- d. role models
- e. physical characteristics

As the responses were sorted, it became evident that the metaphors could be placed into five sub-categories: (a) age, (b) sex, (c) personality trait, (d) role model, and (e) physical characteristics. For example, building #4 yielded references to youth, i.e., teenager, college student; to sex, i.e., a proud father, a grandpa; to role models, i.e., a salesman, a doctor, an architect, a banker, a businessman; to personality type, i.e., a level-headed person, a loner; and to physical characteristics, i.e., a stubby and stocky person or a short, squat man. Therefore, these sub-categories were used as a guide in choosing the metaphors. If there were numerous references to executives and few references to other occupations, more than one executive type response was used.

After the seven metaphors were chosen for each building, a committee consisting of both visually and verbally trained professionals

analyzed the choices for appropriateness. The metaphors were changed only to produce parallel form for Test Six, Part Two. Wording change can easily shift meaning of the metaphor and invalidate the meaning intended by the respondent. For example, for building #4 the response, "a person who thinks he is always right," is somewhat un- gainly, but a change in wording such as, "a person who is always right," yields a change in meaning. Metaphors that seemed to be questionable were discussed by the panel of judges and alternate ones selected if a more appropriate metaphor that met the criteria was available among the responses.

For the second part of Test Six, two forms were prepared with the seven metaphors for each of the 14 buildings in different order. This was done to reduce bias toward the metaphors that were listed first and to lessen the ability of students to copy an answer. The tests were handed out to students in an every-other-one sequence. Test Six, Part Two was administered to four groups of students in these classes: architecture, creative writing, art, and marketing. They were given verbal directions explained in the "Procedures for Administering the Tests" section on page 39.

The architecture students appeared to take the testing seriously, considering their answers carefully with much eye and head movement between the screen and the answer sheet. The art students were somewhat more relaxed, joking with the instructor and each other before the test began. During the test the art students seemed to concentrate more on the screen than on the answer sheet and answered more quickly than the architecture students. They giggled at some of the choices on the answer sheets, especially the responses to building #11.

The creative writing students appeared somewhat flippant in their attitude while taking the test. They looked at the screen less frequently for each slide and were openly intrigued by the verbal choices to each building. In the marketing class, all 18 students appeared to give full attention to the testing process. They took a little more time to respond than did the creative writing, art, and architecture students. They seemed to give more eye contact time to the slides than to the answer sheets. They did not seem to find some of the metaphor choices as humorous as did the art and creative writing classes. Their attitude appeared more like the architecture class.

Table XXXIX shows the frequencies of responses to the metaphors for each of the 14 buildings. The test forms in Appendix A indicate the metaphor which corresponds to each of the seven numbers for each building. The order in which the slides of buildings were shown to the students are on the response lists in Appendix B.

From Table XXXIX it can be seen that answers clustered around two or three metaphors for almost all the buildings. Building #1 was most frequently seen as "a stately country gentleman," building #2 as "a sparkling young executive," building #3 as "a person in the arts," and so forth.

The responses to the 14 buildings by each of the four groups of students are given in Table XL. The clustering of responses around certain metaphors may be seen. The marketing and creative writing classes appeared to cluster more tightly around certain answers for some of the buildings than did the art and architecture classes. This may point to differences between visual and non-visual orientations in relation to visual stimuli. However, across the classes

there did seem to be a general consensus in responses to the visual stimuli. This leads the researcher to believe that the metaphorical process may be applied to a variety of respondents in measuring their responses to visual environmental stimuli.

TABLE XXXIX
COMBINED TOTALS
(N=47)

Building No.	Response No.						
	1	2	3	4	5	6	7
1	1	0	18	3	10	5	6
2	4	12	0	6	3	2	19
3	30	4	3	2	6	1	1
4	7	13	0	4	3	8	10
5	6	15	2	5	12	5	2
6	5	7	21	3	1	0	10
7	9	13	3	12	2	2	6
8	12	1	3	10	8	9	4
9	4	8	18	5	2	7	3
10	10	13	2	5	1	10	6
11	2	4	6	24	7	2	2
12	9	1	10	3	20	3	1
13	3	9	8	9	1	9	8
14	2	2	3	5	18	11	6

TABLE XL
RESPONSE TOTALS

Building No.	Architecture (N=8)							Art (N=14)							Creative Writing (N=7)							Marketing (N=18)						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	0	0	6	0	0	1	1	1	0	5	1	4	1	2	0	0	2	0	4	0	1	0	1	5	2	5	3	2
2	3	2	0	0	1	1	1	0	4	0	2	2	1	5	0	4	0	1	0	0	2	1	2	0	3	0	0	11
3	3	2	0	1	2	0	0	7	0	2	1	3	0	1	6	1	0	0	0	0	0	14	1	1	0	1	1	0
4	2	2	0	1	0	0	3	2	4	2	0	1	3	2	0	1	0	0	1	3	2	3	6	0	3	1	2	3
5	0	5	0	0	1	2	0	3	5	1	1	1	2	1	0	4	0	1	1	0	1	3	1	1	3	9	1	0
6	0	2	4	0	0	0	2	1	2	6	1	1	0	3	2	1	3	0	0	0	1	2	2	8	2	0	0	4
7	1	3	0	2	0	2	0	4	3	2	1	1	1	2	0	1	0	4	1	0	1	4	6	1	5	0	0	2
8	0	1	0	4	2	0	1	4	0	1	3	0	3	3	2	0	0	3	2	0	0	6	0	2	0	4	6	0
9	0	3	1	2	0	1	1	2	3	5	1	0	2	1	1	1	4	0	0	1	0	1	1	8	2	2	3	1
10	1	0	0	3	0	4	0	1	6	0	2	0	1	4	1	1	0	0	0	5	0	7	6	2	0	1	0	2
11	0	0	1	6	2	0	0	0	4	0	7	2	0	1	1	0	1	5	0	0	0	1	0	4	7	3	2	1
12	1	0	1	0	5	1	0	3	1	3	1	5	0	1	1	0	1	1	3	1	0	4	0	5	1	7	1	0
13	0	0	3	4	0	0	1	2	3	1	2	0	2	4	0	3	1	1	0	1	1	1	3	3	2	1	6	2
14	0	1	0	0	1	3	3	1	1	0	3	3	5	1	0	0	0	2	3	2	0	1	0	3	0	11	1	2

Table XLI compares the two visually oriented classes with the two non-visually oriented classes. Both similarities and differences appear. For example, the non-visual group (N=25) responded with 10 responses to building #5 as a "young businessman," while the visually oriented group (N=22) responded to it with the same number of responses as a "domineering executive." However, both groups seemed to respond to building #6 as "a person who is not sure what he is doing."

Table XLII lists the male and female responses to each of the 14 buildings. The responses of females seemed to parallel those of the males.

Test Six Summary

The exploration metaphors of personification as a method for assessing responses to visual stimuli has produced information that indicates a direction for further study. The use of a specific form of metaphor, that is, personification metaphor, seemed to produce responses that were more focused, more easily categorized, and bearing more direct relationship to visual stimuli. Metaphorical thinking was applied by the student respondents to relate human characteristics to the visual characteristics of building exteriors. The responses indicate that these relationships were not random but patterned. This patterning showed that some metaphors are more apt than others to be identified with the appearance of a building. Test Six also showed some similarities and differences in the responses of students in visually oriented and non-visually oriented classes; in most cases male and female responses were similar.

TABLE XLI
VISUAL/NON-VISUAL RESPONSES

Building No.	Art/Architectural Students Responses (N=22)							Marketing/Creative Writing Students Responses (N=25)						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	1	0	11	1	4	2	3	0	0	7	2	9	3	3
2	3	6	0	2	3	2	6	1	6	0	4	0	0	13
3	10	2	2	2	5	0	1	20	2	1	0	1	1	0
4	4	6	2	1	1	3	5	3	7	0	3	2	5	5
5	3	10	1	1	2	4	1	3	5	1	4	10	1	1
6	1	4	10	1	1	0	4	4	3	11	2	0	0	5
7	5	6	2	3	1	3	2	4	7	1	9	1	0	3
8	4	1	1	7	2	3	4	8	0	2	3	6	6	0
9	2	6	6	3	0	3	2	2	2	12	2	2	4	1
10	2	6	0	5	0	5	4	8	7	2	0	1	5	2
11	0	4	1	12	4	0	1	2	0	5	12	3	2	1
12	4	1	4	1	10	1	1	5	0	6	2	10	2	0
13	2	3	4	6	0	2	5	1	6	4	3	1	7	3
14	1	2	0	3	4	8	4	1	0	3	2	14	3	2

TABLE XLII
MALE/FEMALE RESPONSES

Building No.	Responses													
	#1		#2		#3		#4		#5		#6		#7	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	0	1	0	0	14	4	1	2	8	2	3	2	2	4
2	1	3	8	4	0	0	4	2	2	1	1	1	10	9
3	19	11	3	1	0	3	1	1	4	2	1	0	0	1
4	5	2	9	4	0	0	3	1	2	1	4	4	5	5
5	2	4	11	4	1	1	4	1	8	4	4	1	1	1
6	3	2	5	2	12	9	0	3	1	0	0	0	7	3
7	3	6	9	4	1	2	9	3	1	1	2	0	2	4
8	6	6	1	0	1	2	7	3	5	3	6	3	2	2
9	1	3	4	4	12	6	3	2	1	1	5	2	2	1
10	6	4	7	6	1	1	3	2	1	0	8	2	2	4
11	1	1	0	4	6	0	16	8	4	3	1	1	0	2
12	4	5	0	1	6	4	2	1	13	7	3	0	0	1
13	2	1	5	4	6	2	7	2	1	0	5	4	2	6
14	1	1	1	1	0	3	1	4	12	6	7	4	6	0

Note: Number of females: 19; number of males: 28.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

This study has shown that metaphor can be a tool for measuring student responses to visual stimuli. The metaphorical process of analogy operates across realms allowing information of one realm to explain an aspect of another realm. It was found that metaphorical responses, although subjective, could be focused by controlling the type of responses. The study also showed that metaphors generated in response to visual stimuli are not purely the consequence of individual reaction but can be categorized into groups consistent with broad culture patterns. Also, the study showed that a humanistic comparative method could yield important information about an aspect of the visual environment. The comparison of unlike categories such as people and buildings produced information about attitudes toward environment not produced by less projective methods.

The use of metaphor as a tool for gathering information brought an added dimension previously overlooked in the search for understanding how people respond to the visual characteristics of environment. The empathic quality of metaphors of personification demonstrated a humanistic and semi-projective technique for looking at environment. Measuring the environment with the human being as the measure is still a new phenomenon. Measures that are available are not as precise and competent as the scientific community expects (Danford and Willems,

1975). However, such humanistic methodology appears to hold potential worth more extensive and intensive study. The interpretation, on sociological, psychological, and aesthetic grounds of the information gathered through such methodology seems to be the next logical step to make this type of testing of value to those making decisions for visual design of environments.

Because the processes of developing such humanistic tests are slow, somewhat circuitous, and without many precedents, much time and thought will be required to build a body of testing methods. Reasoning by analogy is not an integral part of scientific thinking; however, "Metaphor functions as an essential instrument of cognitive meaning" (Leatherdale, 1974, p. 119).

Depending on the cultural community, ideas and images will seem connected either meaningfully or in absurdity. Understanding metaphor, especially in a scientific context, depends on membership in a culture in which the use of metaphor is promoted (Leatherdale, 1974). Given the number of recent publications concerning metaphor, it would seem that its use as a method for understanding aspects of the world is gaining momentum.

Because of this study the following recommendations for further research into metaphor/environment are made:

1. That a body of knowledge be acquired about testing procedures that can effectively utilize metaphorical thinking. This can be accomplished through the adaptation of existing tests and/or the development of new tests.

2. That the relationship of values and the visual appearance be explored more thoroughly. Maslow's (1967) values for self-actualizing

individuals appear to hold potential for interpreting attitudes toward appearance of the built environment.

3. That metaphors other than metaphors of personification be studied for use in understanding the attitudes of people toward environmental appearance. For instance, attitudes toward the natural environment could be related to the built environment.

4. That the visual appearance of objects other than buildings be subjects for the metaphorical method of thinking.

5. That actual environments rather than simulated environments be used to gather metaphorical responses. For example, the method of metaphorical thinking could be used in post-occupancy evaluation.

6. That a variety of age groups, occupation groups, and economic groups be administered both parts of Text Six to compare possible similarities or differences across groups.

7. That a variety of building styles, i.e., International style, Post-Modern style, Gothic style, Prairie style, etc. be used to gather metaphorical responses. Different styles may produce distinctly different metaphors for each style.

8. That further studies of metaphor and environment attempt to tap underlying psychological percepts which may lead to better understanding of attitudes toward physical appearance of environment.

9. That studies of metaphor and environment be continued so that one does not become a victim of metaphorical thinking because one does not understand it.

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APPENDIXES

APPENDIX A

TESTING FORMS

TEST #1

WORD ASSOCIATION

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

TEST #2

POSITIVE-NEGATIVE WORD PAIRS

1. Truth	7	6	5	4	3	2	1	Dishonesty
2. Goodness	7	6	5	4	3	2	1	Evil
3. Beauty	7	6	5	4	3	2	1	Ugliness
4. Unity	7	6	5	4	3	2	1	Chaos
5. Transcendence	7	6	5	4	3	2	1	Forced Choices
6. Process	7	6	5	4	3	2	1	Mechanization
7. Uniqueness	7	6	5	4	3	2	1	Sameness
8. Perfection	7	6	5	4	3	2	1	Shoddiness
9. Necessity	7	6	5	4	3	2	1	Inconsistency
10. Completion	7	6	5	4	3	2	1	Incompleteness
11. Justice	7	6	5	4	3	2	1	Injustice
12. Order	7	6	5	4	3	2	1	Chaos
13. Simplicity	7	6	5	4	3	2	1	Disintegration
14. Comprehensiveness	7	6	5	4	3	2	1	Poverty
15. Effortlessness	7	6	5	4	3	2	1	Effortfulness
16. Playfulness	7	6	5	4	3	2	1	Humorlessness
17. Self-sufficiency	7	6	5	4	3	2	1	Dependence
18. Meaningfulness	7	6	5	4	3	2	1	Meaninglessness

TEST #3

VISUAL METAPHORS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

TEST #4

ACTIVITY METAPHORS

1. _____
+ 7 6 5 4 3 2 1 -

2. _____
+ 7 6 5 4 3 2 1 -

3. _____
+ 7 6 5 4 3 2 1 -

4. _____
+ 7 6 5 4 3 2 1 -

5. _____
+ 7 6 5 4 3 2 1 -

6. _____
+ 7 6 5 4 3 2 1 -

7. _____
+ 7 6 5 4 3 2 1 -

8. _____
+ 7 6 5 4 3 2 1 -

9. _____
+ 7 6 5 4 3 2 1 -

TEST #5

VISUAL METAPHORS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

Test Six, Part One

Age _____

Sex: Male _____ Female _____

Where did you grow up? Rural Area _____

Town of less than 2,500 _____

City or town of more than 2,500 _____

Classification: Fr ____ Soph ____ Jr ____ Sr ____ Other ____

Major: _____

VISUAL METAPHOR ANSWER SPACES

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

Test Six, Part Two

VISUAL METAPHORS

Building #1

1. ___ a homely person
2. ___ a big, mean, old woman
3. ___ a stately, country gentleman
4. ___ a tired and run down man
5. ___ a grandmother
6. ___ a distinguished statesman
7. ___ a beautiful older woman

Building #2

1. ___ an uncaring, cold person
2. ___ an impersonally, perfect executive
3. ___ a fashionable lady
4. ___ a wealthy business person
5. ___ a man with glasses on
6. ___ a showoff
7. ___ a sparkling, young executive

Building #3

1. ___ a person in the arts
2. ___ a crazy cousin
3. ___ a fat lady in the circus
4. ___ a short, fat man
5. ___ a confusing teacher
6. ___ a fancy actress
7. ___ a portly businessman

Building #4

1. ___ a white-collar worker
2. ___ a conservative person
3. ___ a person who thinks he is always right
4. ___ a loner who is different from the rest
5. ___ a sedate secretary
6. ___ an efficient salesman
7. ___ a level headed person

Building #5

1. ___ a person who goes by all the rules
2. ___ a domineering executive
3. ___ a sorority girl
4. ___ a strong man
5. ___ a young businessman
6. ___ a boring man
7. ___ a married man

Building #6

1. ___ a middle class man with high hopes
2. ___ a dirty, unshaven man
3. ___ a person who is not sure what he is doing
4. ___ a young, athletic person
5. ___ an old person who is always sick
6. ___ a slovenly woman
7. ___ an interesting, older man

Building #7

1. ___ a mathematics genius
2. ___ a professional person
3. ___ a good time, partying person
4. ___ a person to go to for help
5. ___ a person with long arms
6. ___ a strong businessman
7. ___ a confused and complicated person

Building #8

1. ___ a nonconformist
2. ___ a very intellectual person
3. ___ a gentle lady
4. ___ an unglamorous glamour girl
5. ___ a broad-minded person
6. ___ a fashionable lady
7. ___ a person who is set in his ways

Building #9

1. ___ an old-timey mother type
2. ___ an authority figure
3. ___ a smart, old teacher
4. ___ an old fashioned grandfather
5. ___ a middle aged father
6. ___ a very strict, old man
7. ___ a professor

Building #10

1. ___ a smart executive
2. ___ a perfectionist
3. ___ a very sociable person
4. ___ a strange looking man
5. ___ a nice woman
6. ___ a stubborn friend
7. ___ a basic, all-around happy person

Building #11

1. ___ a fashion model
2. ___ Darth Vader
3. ___ a minister
4. ___ a space cadet
5. ___ an egghead
6. ___ a wise and faithful man
7. ___ a man from Mars

Building #12

1. ___ a big talking senator
2. ___ a president of a company
3. ___ a law maker
4. ___ an old, gray-haired, big-bellied man
5. ___ an old politician
6. ___ a wise, old man
7. ___ an elegant lady

Building #13

1. ____ a college student
2. ____ a sick person
3. ____ a person with many changing moods
4. ____ a scientist
5. ____ a satisfied person
6. ____ a person who is concerned with people
7. ____ a person who is very distant

Building #14

1. ____ a worn-out, elderly woman
2. ____ a poor, lazy person
3. ____ a fat, old man
4. ____ a genuine sage
5. ____ a small town farmer
6. ____ a veteran soldier
7. ____ a hobo

APPENDIX B

RESPONSES TO TEST SIX, PART ONE

Building #1, Dwelling, Heritage Hills

grandmother-antique	old and tired
old	old with many memories
little old lady	old man or woman
fanciful	grandmother
tired and run down man	grandmother
wise grandmother	isolated
nice man, because its white	a beautiful older woman
a stately elderly mayor or	pretty
senator	older grandmother
aged	elderly person, majestic,
tired and used	classy person
my grandmother	calm and serene
an old, moralistic, respected	slob
man	rich old lady--very
dignified and old	proper but run down
stately country gentleman	a conservative senator
old	extravagant
older looking	southern belle
a feeble building	southern belle
white face	old
sweet tempered grandmother	southern statesman
grandmother	(Congress)
a homely person	elderly looking grand-
southern gentleman	mother
southern gentleman	a grandmother
homely	overgrown
my grandfather	majestic and distin-
sloppy	guished
a little old lady	an elderly stately man
style	a very religious lady
tall, old	an old maid
old person	old fashioned
grand old gentleman	old person
proud	a mean, big, old woman
not a smart man (dumb)	snug as a baby
an aging uncle	southern belle
my grandfather	sloppy
old-fashioned	an aging grandfather
sophisticated gentleman	elegant grandma
a criminal	the President
old wiseman	proud
on their last leg	Southern Belle
my grandma	preacher
street bum	grandmother
grandma	old hag
distinguished statesman	old fashioned plantation
old as a turtle	man
intelligent	mayor
easy going	great aunt
	southern lady

Building #2, Downtown Office Building

smart, uppity
 new
 youthful and advancing executive
 egotistical person
 stylish and sophisticated man
 innovative two-faced person
 an executive tycoon
 radiant
 happy and excited person
 an uncaring, old person
 a young, educated person--
 modern
 sharp, intelligent executive
 dark, cold individual
 bold man
 modernistic, nice
 a strong building
 classy-eyed
 staunch professor
 oppressing
 a showoff
 bright and sassy
 looking glass, rich playboy
 bright
 a clean person
 football player
 college student or businessman
 one of the crowd
 well-dressed, sharp
 new kid on the block
 young
 elegant
 a man with glasses on
 egotistical Hollywood star
 sparkling young executive
 modern
 young executive
 stately young man
 rich business executive
 new man on the job with all the
 answers
 one rich business executive
 male business executive
 impersonally perfect executive
 fashionable lady
 austere
 modern, flashy
 pretty daddy
 president of a company

new as a baby
 lonely
 hot, solitaire
 snobbish
 well-structured person
 young man or woman
 powerful business execu-
 tive
 sophisticated
 extroverted
 majestic
 a closed-minded person
 graceful
 full of book knowledge
 modern up-to-date, flashy
 person
 sharp-looking
 efficient
 high fashion, sophisti-
 cated
 macho man
 non-transparent, domineer-
 ing, analytical
 a cop
 chic, refined
 very modern
 modern disco freak
 (modernly dressed)
 rigid businessman, imper-
 sonal
 very rich high class per-
 son
 bright, clean child
 flashy and in style
 young aspiring businessman
 split personality
 slick
 liberal
 wealthy businessperson
 Pierre Cardin
 ornate woman
 the boss--hard, cold
 precise
 modern middle class lady
 robot
 modern woman
 business executive
 strong-willed person
 large city executive or
 doctor

Building #3, First Christian Church, Activities Building

dreamer, fantasy	unorganized
interesting	large, ungroomed
mother with child	person who has had a
ordinary	facelift
ordinary man	middle-aged fat man
peculiar child	unique
fat man	loud
someone artistic--in the arts	unusual
short and stubby	a prickly person
someone with a split person-	strange
ality	fat
an architect	unusual; fat or obese
a pregnant woman	person
broad shouldered and strong	religious
young, serious person	modern
oversized	large, chubby, happy man
oval, large	obese
short	well-rounded individual
fat around the belly	dignified
crazy cousin	different
a mixed up person	portly businessman
young	an eccentric artist,
an old eccentric	flare
ugly	a funky art student
a fat girl	scal
punk-rocker; modern	outlandish and impulsive
an artist	a heavy-set, middle-aged
loud	woman
fat awkward	fat lady in the circus
indisive	Orson Wells
an old woman	someone who needs to go
teacher	on a diet
an unusual middle-aged man	preacher
appealing	conservative administrator
eccentric person	a wide-reaching teacher
eccentric young man; hippie	well-rounded
fancy actress	a new teenager
someone who stands out in a	confusing teacher
crowd--different	studious
woman architect	flamboyant
sophisticated woman (culturally)	ruffled
the gardener	teacher
strange old man	short, fat man
textured like a crocodile	well-rounded character
bald	fat woman
active	teacher
	Oral Roberts

Building #4, Lee Way Freight Building

basically boring	plain Jane
me	egotistical
a strict, boring man	tidy
massive	banker
a little baby	idealistic
domineering	square
straight-laced, perfect	imposing, jet-set
engineer	quick doer
an efficient salesman	straight laced and proper
very clever	air-head blonde
proud	stable
different	a modern man
well dressed, but doesn't	broadminded
stand out	stuffy lady
fashionable person	unique and secluded
unique	old maid, plain
bold	dullard, square
strictly business	lonely young woman
weird	a loner, different from
conservative person (per-	the rest
fectionist)	a very studious person
massive, modern	unusual or different man
a clean cut person	grandpa
severe	a doctor
martians	a young building
white collar worker--doctor,	a loner
lawyer	stubby or stocky person
proud father, friendly,	built like a rock
easy going	very strict and punctual
an individualized person who doesn't	relaxed beauty
care for friends	technically oriented indi-
shy, timid girl	vidual
lonely	hunchback
an engineer	an exotic man in his 20s
lazy	or early 30s
architect - male	simple
another business executive	a little white boy
rich empty	clean
very plain	egotistical
college student	simple, plain
young and timid	sedate secretary
skeleton, skinny	slightly intelligent
teenager	brother
forceful, strong	beautiful
short, squat man	a "to the point" person
domineering	a level-headed person
majestic, prominent	person who thinks he is
	always right

Building #5, Downtown Office Building, Rear Elevation

artistic	very strict
tall	strict
intimidating person	person with one wrinkle
broadminded father	right down the middle
boring man	father
closed-minded	domineering
tall man	hollow
a snobbish person	large, powerful
lanky	a square parent
someone ready to face the world	noble
an ominous person	cold, impersonal
someone who goes by all the	plain Jane
rules	artistically oriented
conservative	plain--no character
domineering executive	modern--on the road to
sharp man	success
huge	the judge
a tall building	wise
shirt and tie	teacher
prim and proper	forbidding, domineering
a preppy person	strange
new kid on the block	domineering type
simple	powerful, large, leader
a football player	of a group
sorority girl	a concert band leader
an artist	tall, overpowering
inside one's self	modern--flashy
big, over-bearing	a sophisticated young
tall, strong	woman
twin brothers	a person that's wild with
a cold, calculating businessman	a little innocence be-
a shy person who can't see the	tween
world very well	a real square
boring	arrogant
younger dull person	lawyer
my parents	wino
young businessman	young man--learning, pur-
clean cut, well-informed	suing
dominant sales person	reserved
professor	a "square"
God	neat, trim businessman
jetsetter	cultural
schizophrenic	blasé
dull, unfriendly	conservatively modern
cultured	dentist
strong man	courageous leader
stubborn older brother	married

Building #6, Oklahoma Theater Center, Sheridan Street

bun	out of shape
unique	lonely
expanding and invading	accommodating
overbearing, yet distinctive	a little shy
out of shape and dirty man	laid back, relaxed
aging	person who can't see out
bald man	emotionally disturbed
someone with a carefree attitude	adult
inferior	looney
scared	a wild teenager
cold and uncaring	tired, lazy
a person with an inviting person-	odd ball
ality	roly poly
very open and inviting	poorly groomed
warm, friendly individual	ignorant
ragged	pig pen
older looking	elderly
an old building	grandparent
needs a bath	friendly, cordial
slovenly woman	intravert
sloppy	someone who was proud,
a dirty, unshaved man	but no longer cares
easygoing and carefree	relaxed mid-aged mother
sloppy	of three
a 40 year old mother	a professor
down to earth	warm and receptive
little self-improvement	a senile old woman
looks edgy, nervous	an old person that's al-
weird, strange	ways sick
older	sloppy person who doesn't
lonesome	care about himself
a Chinese man	Johnny Carson
lady in a nursing home	semi-scummy individual
interesting older man	confused
run down	nervous
older, lackluster	someone who's not sure
lazy man	where they're going
a young athletic person	made-up teenage girl
a central figure	religious
a hermit	despondent
actor	ugly, unkempt
rich pauper	psychiatric counselor
simple housewife	insecure teenager
fat, pleasant person--Santa Claus	middle class man with
	high hopes

Building #7, Murrah Federal Building

self enduring	outstanding
lonely	important
youthful	important
interesting but normal	very large and sprawling
follower	person
person with long arms	business executive
a domineering man	enterprising
boisterous	business-like
open for learning new things	very cultured
a "business-man" image	formidable teacher
a person with a lot on his	(woman)
mind--busy	a professional
hard personality with a lot	show off
of heart	medically oriented
confused and complicated	boring
person	dominating--very bossy
outstanding	the rich kid
nice looking	accommodating
interesting and different	good time, partying
sitting in a chair	type
complex personality	plain
liberal	nice, relaxed, stable
a leader	person
careful	distinguished middle-
upstanding, cultural	aged man, classical
a nice young man	a high class business-
flashy	man
a millionaire	multiple personality
sets his own pace	has it together
classy person	an efficient, prosperous
powerful	man in his 40s
complex	a royal king
tall and broad--good looking	an eagle flying
Frankenstein	mentally deformed
doctor	person who is interested
man with much power	in future developments
dominant	Howard Kirsch (an engin-
complex or wealthy person	eer I know)
easy going type of guy	interesting and delightful
well-organized secretary	a businessman, strong
someone to go to for help	organized
a modern scientist	a modern eccentric
motel clerk	unorganized professor
a math genius	showy, rich
high ranking executive	self-effacing
a step above the rest	distinguished, solemn
athletic	hospital administrator
modern man	sick, hospital
dynamic speaker	Queen of England

Building #8, Quail Springs Shopping Mall

brilliant	confusing
expensive	business-like
a playful child	friendly, open arms
scatter-brained	well clothed
not all together	a very intellectual person
busy	son
broadminded person	modern
a fashionable woman	21st century
flashy	commercial, very formal
someone who likes everyone	open minded fat person
"space-age" minded individual	grand, very proud
one who is set in his ways	someone who is casual
a workaholic	a see-through or trans-
touchy	parent person
classy	sunny
a fat building	tall
flat out for a nap	very bright, cheerful
studious	the tax collector
a different person (stand out	non-conformist
from crowd)	fat person
young upstart	up with the times
superficial	female-ish type
sophisticated	defined, headstrong person
a smart teacher	a mother
obnoxious	friendly
very business like	a down to earth, natural
smooth, low profile	basic man in his 30s
pretty	a person that is easily
open-minded--free	read--very transparent
a sleepy boy	my grandmother
an architecture student	confused, airhead
fat	energy conserver
younger, sharp-witted	spiffy
hippie	newcomer
an elegant lady	open, friendly
well liked	someone who knows where
sales person	they're going
funny	unglamorous glamor girl
different--as an unidentical twin	bold
snobby old lady	gung-ho
relaxed person	common
my closet	housewife
housewife	a pastor at church
gentle lady	empty soul

Building #9, Emerson School

common	as proud as punch
dreary	grandfather
a strict parent	nostalgic
dull and boring	old fashioned
older & set in his ways	old with much education
traditional ideas	and knowledge
old person	school-minded
an old relative or acquaintance	grandfather
an antique	teacher
someone who stands up for what	stately
they believe	looks very boring
comfortable, open-minded person	old-fashioned grand-
an old school marm with a	father
ruler	run down, over-worked
outstanding and honorable	old man
a person of "the old school,"	classic
distinguished	academic
plain	authority figure
older looking	old, very strict man
a building with character	the smart old owl
grandmother	traditional
gentle grandfather	head of a department
an old man	homey, lovable
an old person	unmoveable
stately	stately gentleman
a scholar	an old, homely woman;
wise	wealthy
a dirty young girl	an old school teacher
old fashioned	smart, old teacher
teacher	cold and cruel
middle age	a wise elderly person
old fashioned	a man with a long beard
old, but strong	and very smart
grand old lady	Mr. Big
educated	deserving respect
first grade teacher	school teacher
an older, female teacher	teacher
academically inclined	tall, but shallow
older, more conservative, old-	sturdy, reliable old man
fashioned	older
a priest	a retiring school teacher
middle aged father	sturdy old grandpa
majestic and stubborn	antique lover
a professor	of retirement age
principal of a school	old-timey, mother type
my dad	principal
old timer	grandfather
father	jail
old teacher	school teacher
	instructor at high school

Building #10, Atrium Towers Complex

husband (square)	dull
selfish	isolated
conservative	grumpy
tall and honest man	dull personality
loner	a simple housewife
strange looking person	square
someone that does their own	authoritative
thing	open-minded father
distinguished	feels fabulous
basic, all around, happy person	professional
intelligent but overbearing	skinny
a middle aged wealthy man--gen-	meek and plain
erous	isolation--lonely
straight forward and confident	dull--does the same
a blunt person	things
vague	the new guy
modernistic	perfectionist
a normal building	a leader
mom's best friend	no frills, no nonsense,
a sissy businessman	straightforward
lonely	able to conserve space
a plain person	does not stand out
a young square	young, eager person
a nice woman	a rich banker
cosmopolitan	lonesome
modern	businesslike and regi-
unchangeable	mented
domineering	a straight man in his
tall and plain	late 30s
smart, executive	someone very domineering
a fat man	and powerful
conservative businessman	the Coneheads
bright young man who can see what	an outcast
is happening in the world	very sociable person
repetitious	judge
younger, more confident person	well-ordered
my old man	college student broaden-
young career woman	ing his mind
plain, regular	cold, straight
doctor	"plain Jane"
medical doctor	symmetrical salesman
stubborn friend	modern
The President	purposeful
glowing with happiness	bulky, domineering
computer programmer	lovely grandmother
rich executive	a person who they put in
steadfast friend	a corner to work by
	himself

Building #11, First Christian Church Sanctuary

quick thinker	fashion model
heavy set	putting up a front
playful, young, creative	handicapped
obese, rotund, overweight	private
faithful man	conehead
leader in his ways	a pro-football coach
unique body	egg head
someone that tries to impress you	new wave
blimp	space cadet
someone sad or gloomy	Viking
George Jetson	mean
a sleeping baby	a character, unique
inventive, but wasteful	person
very open, but hollow emotionally	spaced out
complicated	egg-shaped
neat looking	ugly looking
a humorous building	daring--makes up his own
pregnant woman	mind
science fiction freak	Humpty Dumpty
healthy	attractive, cool
a knight in shining armour	preacher
egg head	down-to-earth, but dig-
well rounded fellow, a space	nified
warrior	strong
a queen	Man from Mars
opaque	prim and proper person
an astronaut	a priest
in his own world	a child playing dress up
highly motivated	peaceful and at ease
warrior, trojan head	an unusual person in
bald	his 20s
beautifully kept	a Star Wars character
a man from another planet	a rich man
wise and faithful man	self-appreciative
a bald preacher	person who loves to
ugly	work with computers
modernistic, liberal	a martian or alien being
cool parents	flighty--spacey
beautiful lady	astronaut
easy to talk to	closed in
space person or minister	an "egg-head"
minister	egg head
a head case	flippant
martian	out-going
strange, as a demented mind	spacey
tycoon	egg head
deceiving talker	Darth Vader
preacher	egg head

Building #12, Downtown Baptist Church

unrealistic	stately person
nice	an old, domineering man
demanding	Puritan
faithful	authoritative
a man for justice	grand, rich man
high official	uncle
president of a company	old, graceful, proud
a rich person or family	Victorian or old fash-
resistant	ioned
someone ready for action	government
distinguished person	power figure
a wise old man	old, gray-haired, big
distant, unreachable	bellied man
distinguished, scholarly individual	the law maker
enlarged	gaudy
historical	a great aunt
a small building	helpful
grandfather	unchanging
junior high principal	looks like a building
tired	informed
bright, smart	the governor
elegant lady	old and forbidding
a Greek American	experienced
authoritative	an old-fashioned woman
a king	in her 50s
the dominant grandmother	a fat, jolly person
flexible	someone in a place of
strong	honor
intellectual	legend, person from old
overpowering	times (B.C.)
a deformed man	statues, president
old politician	other-side-of-towner
a politician	The President, domineering
sophisticated	smooth
noble, well-to-do	a Greek god in modern
corrupt old man	times
Arabian	stately gentleman
dignified and proud	Presbyterian
political figure	dignified old chap
important judge	humble
popular school boy	big talking senator
shapely as a fine woman	White House
businessman	dad
has authority	man with big feet
cruel	representative
historic, but still going	Thomas Jefferson
strong	

Building #13, Baptist Hospital

economical	president of a company
helpful	ugly
loving mother and children	cold and uninviting
a busy man (businessman)	a preppy teenager
helpful	looking good
short man	caring
someone that you know nothing about	open or airy person
complex; many personalities	wild
easily adjusted person	frightened person
well-rounded	young and dumb
someone who is concerned with people	powerful
strong and healthy	lawyer or judge
a person of several moods, constantly changing	helpful, caring
satisfied person	flexible
huge, pink, ugly	ordinary, stiff
an odd building	a student
menacing	fragmented and sketchy
worldly aunt	a vivacious and prosperous man in his 30s
striking	someone very distant
person with many interests	a sleeping dog
family living	a disaster
level headed	chemist
uptight	cat
twin brothers	a growing kingdom
flair, today's woman	saint
doctor	varied personality
thrown together	proud
coordinated	businessman
powerful	healthy, clean
large	scientist
shy	a woman trying to look high class
grandfather	aloof, male, stoic
a person who is growing and willing to grow more	
a loner	
plain	
gang of evil people	
college student	
parental figure	
a cowboy in a western movie	
nurse	
a faker	
square as a nerd	
calm--pandemonium	
idealistic	
sick person	

Building #14, Arcadia Round Barn

old grandfather	tired
grouchy	my grandfather
aged grandfather	sloppy, but carefree
lazy slob	rugged
a dying man	worn-out
very wise	a poor, lazy man
old baldheaded fat man	low class
your grandparents	pioneer-like
dirty; unkempt	rustic
someone old and worn out	my grandfather (a
a bum with potential	farmer)
a wino with a lot on his mind	over worked
"bee n around"	an old story teller
a decrepit old man	stubby
feeble man	decrepit
run down	dead person
an old building with character	shabby, but happy with
old Irishman	what he has
fat, old man	age and wisdom
a person that is dead inside	country bumpkin
poor ancient person	an old war veteran
old man of the fields	kind
a conehead	dead
grandfatherly	a poor, run down
my father's old man	farmer
decrepit	lazy, relaxed
a smalltown farmer	a poor farmer
trustworthy	run down, lovable grand-
ancient, lazy	parent
old warrior, veteran	irresponsible
very old	an elderly woman who is
old, but still ready to go	worn down and tired of
a soldier	living
hick	a very poor, old person
an old farmer	my great grandfather
poor	gregarious (fun to be
historic symbol, old, experienced	around)
army war veteran	bum, run down
middle aged farmer	turtle
sloppy and lazy	middle-class person
a poor farmer in the depression	from the U.K.
saw mill worker	pioneer, old, steadfast
a genuine sage	hobo
dying old man	a retired farmer
stubby, as a big toe	over the hill aunt
bashful	old and crippled
foreign	farmer
hard head	veteran soldier
farmer	old farmer
Nazy stormtrooper	

VITA²

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